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## Title word cross-reference

$(0, 1)$ [BH96]. $(1 + \sqrt{2})$ [RS18, CP17]. $(1, L_r, L_r)$ [DD20]. $(A, B, C, D)$ [CMT09]. $(AR - LB, DR - LE) = (C, F)$ [Kåg94]. $(L_r, L_r, 1)$ [De 11, GED22]. $(L_r, n, L_r, n, 1)$ [SD15a, SDD15]. $(\lambda, \mu)$ [JKM11]. $(R, S)$ [Tre05]. $(r_1, r_2, r_3)$ [ES09]. 0 [Ho90]. 1 [BLW15, BV00, BH96, Har99, HT00, Ho90, KR02, NW14, Uhl20]. 2 [BZ98, BK89, CG15a, EK96, FFH+19, FKLR13, Hal20, HR14, LT09, Pai09, SYJ00, TT14]. $2^d \times 2^d$ [Ose10]. $2 \times 2$ [ABL94, HLW05, SSR20]. 3 [BBM02a, CO12, EK96]. $3 \times 3$ [BL91, GKL18]. $4n^2$ [HY00]. $^2$ [ABM21]. $A$ [VV89, Car94, WZ91]. $A(k)$ [Art96]. $A + \mu B$ [JKM11]. $A = UPD$ [Eir00]. $A^k b$ [Gri88]. $A^m - A^n = IJ$ [Ho90]. $A^T X \pm X^T A = B$ [Bra98]. $\alpha$ [LW20b]. $A\overline{X} - XB = C$ [BHH88]. $AX = B$ [yPWjP12]. $Ax = \lambda Bx$ [WZ91]. $AX \approx B$ [HPS+11, HPS13, VV89]. $AXB + CYD = E$ [LBL05, Özg91]. $AXB^* + CYD^* = E$ [SC03]. $AZ$ [CHMW20]. $B$ [Ste10b, WZ91]. $\beta$ [LGI21]. $BML$ [BMV18]. $BR$ [GHW99]. $BXA^T = T$ [DHZ03]. $C^p$ [FP98]. $\mathcal{G}$ [JMW96]. $\mathcal{H}_2$ [BB12]. $\chi^2$ [MH13a]. $cp$ [SMBJS13, BSU15]. $CUR$ [DMM08]. $D$ [KMS01, KMS03, GSCS15]. $\epsilon$ [JC22b]. $G$ [LT89, NSCS10]. $H$ [AYLR04, AH07, KL98b, LG06]. $H_+$ [HLT12]. $H_\infty$ [GGO13, FSV14]. $HR$ [Sle09]. $I \otimes A$ [Gre05]. $I \times J \times 2$ [SD09]. $K$ [Car94, Yas03, BT06, CSEP21, GGL04, KM16, Kon00, Pro13, Sor92]. $L$

[Stu91, Sta22]. $\lambda$ [CLS88, JKM11]. $LDL^T$ [Tům02]. $LDU$ [CKRU08]. $LR$ [Gem98, Sle09, Xu98]. $LTI$ [Ver96]. $LU$ [AP02, BFM03, BT02, DD97, DM05, EMC17, FH21, GL93, GDX11, HHP21, HT17, KDGG13, LEMCD19, Ogi10, RJ14, Ste93a, Tol97, Zha01, ZFW07, vdSBvdV93, SYJ00, DY90, JOvdD89]. $M$ [BY88, KN89, KN91, MSZ03, SB01, Zha04, Bor09, DMS09, DMS12, DMS13, Guo01b, Hel95, HHH12, JS07, KN98, LZ97, MNST96, SWYM96, Wan98b, gWcWL12, Xue96, YL00, ZQZ14]. $\mathbf{C}^n$ [EHvP04]. $\mathbf{D}$ [OP05]. $\mathbf{Q_p}$ [GSCS15]. $\mathbf{R}$ [Cho10, EHvP04]. $\mathcal{C}_\Gamma^\setminus$ [BDD14]. $\mathcal{H}^\in$ [XHC21]. $\mathcal{H}_\in$ [BGG18, ASvG17, FG15, GAB08, MZ19, VGA10]. $\mathcal{H}_\infty$ [ABMV20, MG10]. $\mathcal{L}_\infty$ [ABM+17]. $\mathbf{MR}^3$ [WL12]. $m \times n \times 2$ [SZH22]. $\mu$ [Kar11a]. $N$ [JH88, Mar91, Hel95, LB02, FMSS21, Pai09, Ste10a]. $n \equiv -1 \pmod 4$ [NW02]. $n \times n$ [TW03]. $O(N)$ [LB02, Dhi98]. $O(n^2)$ [AG91b]. $P$ [RR96, Cao00a, Cao00b, GG13, Ian06, Peñ01, Wan98b, Bar00b, GH06, HO10, Ian09, Mor22, Nou96, Smi03, ZR95]. $P_0$ [PYHK93, Ven93]. $P_1$ [MNT99]. $\Phi^t(A) = \frac{1}{n}J_n$ [Che01b, XZC99]. $p \neq 1, 2, \infty$ [HO10]. $p \times q \times 2$ [Ste08]. $q$ [DP15]. $Q0$ [MP95b]. $qd$ [BBD11, WL12, Zhl12]. $QL$ [CW96]. $QR$ [AG92, Ari00, ANT09, BFG23, BEGG07, BHP03, BBM02a, BBM02b, CR21, CI95a, CPS97, DW06, DV92a, De 94b, DD98, DV08a, DV92b, DGGX15, Fos03, GP93, GIMT95, GO95, GW92, Gul95, HJOvdD93, HIW15, Kre08, Lag91, LS06, MV14, Mas94, MV18, MP91, NP96, Ogi10, PL93, PL97, Rei91, RS94, SB92, SB05, Ste93a, Sun95a, Van10, Van11, VW12, Wat95, Wat98, Xu98, Xu20, Zha93a, vdG93, Kon00]. $QRT$ [SB05]. $QZ$ [CMV19, SCMV21, Wat00]. $R$ [He99]. $r(\mathbf{A})\mathbf{r}(\mathbf{AD})$ [Alt13]. $r(\mathbf{A^2D})$ [Alt13]. $R_1$ [DDV00b]. $R_2$ [DDV00b]. $R_N$ [DDV00b]. $s$ [CD14, CD15, Car18]. $S^+$ [SYJ00]. $\text{sep}^{-1}$ [KP92]. $\text{Sep}_\lambda$ [GO06]. $sL - M$ [SL94]. $\sum A^i X D_i = C$ [Wim92]. $T$ [BFS21]. $TA - FT = LC$ [Tsu93]. $\tan\Theta$ [AMS07]. $\theta$ [Che92]. $\text{tr}(f(A))$ [UCS17]. $U$ [NQB14]. $ULV$ [CGP06, Ste93b]. $URV$ [SV00]. $UTV$ [Fos03]. $\varphi$ [GG14, KO14]. $W$ [FHI15]. $X$ [Cap00, DHZ03]. $Y(k) = A(k)Y(k-1)$ [Art96]. $Z$ [BG19b, CNG23, MN97]. ZME [Stu88, Stu89].

**-Accurate** [JC22b]. **-Algorithm** [Van11]. **-Arnoldi** [Ste10b]. **-based** [JMW96, DV08a, SB05]. **-Bernstein** [DP15]. **-by-** [EK96, FFH+19]. **-Circulant** [LW20b]. **-Circulants** [NSCS10]. **-Conjugate** [Tre05]. **-cube** [JH88]. **-Cyclic** [Nou96]. **-Decompositions** [GED22]. **-Divergences** [LGI21]. **-Eigenpairs** [CNG23]. **-Eigenvalues** [NQB14]. **-Eigenvectors** [BG19b]. **-Even** [BFS21]. **-flow** [Lag91]. **-Functions** [GG14]. **-Group** [BT06]. **-invariant** [LT89]. **-Like** [AG92, GIMT95]. **-Linear** [EHvP04]. **-Matrices** [MSZ03, Stu91, SB01, Zha04, BY88, BH96, KN89, RR96, Stu89, AH07, BMV18, Bor09, DMS09, DMS12, DMS13, Guo01b, HHH12, LZ97, MNST96, MN97, MP95b, Peñ01, SWYM96, YL00, Yas03, JS07, Stu88]. **-Matricity** [GG13]. **-Matrix** [KN91, CLS88, HLT12, KN98, PYHK93, Sta22, Ven93, gWcWL12, Xue96, LG06]. **-Model** [BB12]. **-Norm** [BZ98, FKLR13, Hal20, HT00, LT09, Pai09, TT14, ABMV20, FSV14]. **-Norms** [HO10, ABM+17]. **-Optimal** [KMS01, KMS03, ASvG17, VGA10]. **-Parameter** [Uhl20]. **-Person** [Mar91]. **-Primitive** [Pro13]. **-Product** [ZR95]. **-Quasi-Optimal** [BGG18]. **-Radius** [Mor22]. **-Rank** [BSU15, KM16, SMBJS13]. **-Regular** [Cao00a, Cao00b]. **-Relative** [Bar00b]. **-Selfadjoint** [KL98b]. **-Similarity** [CG15a]. **-Skew** [Tre05]. **-Spectral** [CP17, RS18]. **-Stability** [OP05].

**-Step** [CD14, CD15, Car18, Sor92]. **-Symmetric** [Tre05]. **-Tensors** [CO12, ZQZ14]. **-Toeplitz** [NSCS10]. **-Type** [BBD11, WL12]. **-Unitary** [AYLR04, KL98b]. **-Values** [Kar11a]. **-variate** [GSCS15]. **-Vectors** [Pai09]. **-widths** [FMSS21].

**1-Type** [LLZ23]. **10** [HC89b]. **13** [CH93a]. **15** [Zha95]. **15023** [GI97]. **15th** [Mol92]. **17** [GI97, Ikr97].

**27** [WW08]. **2D** [FV98].

**32** [Ano11].

**70th** [GKRV90].

**90a** [HC89b]. **93a** [CH93a]. **95d** [Zha95]. **96m** [GI97]. **97g** [Ikr97].

**Aberth** [BGT05b]. **ABLE** [BDY99]. **Abscissa** [BM19, FL99, GO11, HGC00, KV14, LV17]. **Absolute** [CO99, EI98, Hla23, MSZ21]. **Absorption** [SdJL$^+$18]. **Accelerate** [RCH08]. **Accelerated** [AGQS22, LGC$^+$14, TP14]. **Accelerating** [BJM05, WZ17]. **Acceleration** [BRZ06, DH22, ENV92, KLV18, PS08, SK16, AdHN88]. **Accuracy** [CD14, CD15, CHKL01, CYA$^+$18, DMM03, GKX94, GJTP12, Gre97, GS00b, Hal22, JR08, LM18, Mat09, Pai19, Par05, HL06]. **Accurate** [AGL98, Bar02, BPE94, BV01, CGCDM13, DP15, DK88, DV92b, Dem99, DK05, DM04, DK06, DJ00, Drm00a, DV08c, DV08d, EKNX93, HB12, Hey95, Hua21, Ips06, Ips09, JC22b, Koe05, Koe07, Mas94, Mat95a, Ogi10, PM06, Ral09, SCBC21, SGX14, STT17]. **Accurately** [Fer98]. **Acquired** [OS10]. **Active** [HIS18, KP08]. **Acyclic** [CP20]. **Adaptive** [BDY99, Bar08, Car18, Dan91, DSZ14, DWWY20, GMMN21, HMWY18, KM14, Lu10, LE02, PJM23, PP92, SB92, ZPW18, Cri88]. **Adaptivity** [HS23]. **Addendum** [GI97, Ste02]. **Addition** [BT13]. **Additive** [BPS05, BW93, FS97, Zab91]. **Additivity** [BPR20, HS98]. **ADI** [CR96]. **Adjacency** [FST$^+$13]. **Adjacency-Spectral** [FST$^+$13]. **Adjoint** [Cao09, LP01, Lie08, MSZ20, Rod05, ZAK13, BP21, vdMS05]. **Adjustment** [BX05]. **Adjustments** [BG19a]. **Admissible** [KS20]. **AE}** [Pop12]. **Affine** [AGQS22, BW95, CS96c, Fay95, Gow90, Gow96, LWY19]. **Affine-Scaling** [Fay95]. **After** [BR22, Far16]. **Again** [Mac95]. **Agents** [DS23]. **Agglomerative** [IO16]. **Aggregation** [DWWY20, Not06, Pul13, SST05, HJ89]. **Aggregation-Based** [Not06, SST05]. **Aggressive** [BBM02b, KK07, Kre08, NAY12, SCMV21]. **Aggressively** [SGX14]. **Ahead** [GR00, SK95, CH92, CH93a]. **AIMD** [WSSL06]. **Algebra** [BDHS11, BSvdD95, BF93, BFP95, BCGG10, CFL17, De 06, DD98, DD99, MG92, MMW18, NV94, Rau02a, Rau02b, PS22]. **Algebraic** [BIP08, Bol90, BM02, BW99, CL17, CCB$^+$20, CKO$^+$22, CT08, DYH06, DG91b, DG91c, DLMT13, EZ95, EK17, FL02, FT14, FV98, FS97, GHR21, GGV05, dMGF14, Guo98, GL00b, GL00a, Guo01b, GH07b, GIM08, Hoo17, JL98, JOAKt10, Kap90, KP99, KM96, LwCKL13, LS17, LgS02, LX12, Lu05, MOR16, Neu00, Not06, Not16, PAP00, PS05, Pul13, SKP11, Sim16, gS98b, Sun04, VF00, VZ06, gWcWL12, XLS16, Zim17, CRR93, San88, Sch95a]. **Algebraically** [RW01]. **Algebras** [BD95, CO99, Di 09, Di 00, KHH04, MMT08, Tam99]. **Algorithm** [ALAK94, AA94, AMMS08, AMH10, ADD96, AM23, Arg15, AB01, BOCL97, BES05, BLW15, BEG$^+$09, BFS21, BP92, Bor14,

BBM02a, BBM02b, BG06b, BMU94, BKK18, CM93, CCB+20, CKO+22, Cav94, CI95a, CS96b, CGS98, CGGS99, Cha00, CGS+08, CH98, CCG+09, COV14, CG15a, CHMW20, CB00, DBW15, DW06, DH03, DDN20, Day97, DV07, DGL99, DMM03, DV08c, DV08d, EEK99, FHI15, FH19, FLM10, FLM12, FM93b, Fuh07, GVK20, GNS18, GHW99, GNP94, GHHW90, GDX11, GPS90, GLS94, GE94, GE95a, GGbCC03, GO06, GOS15, Guo02, Guo03, GIM08, GHT10, GL10, HN90, HO94, HB12, HW98, HMR01, HR95, HT00, HL11, HL13, HL21, HG14, IM13, IK06, IAV13, IM16, IO16, JR99, JS94, KK07, Kau93, KKSZ22, KL98a, KHH04, Kni08, KRU14, Kre08, KW94, LH22].
**Algorithm** [LHC16, LGC+14, LH05, LZ10, MM11, MM23, Mar11b, MLV00, MTV10, Mel01, MM09, MVV92, NRT92b, OW96, OYBV19, OYV22, OA23, PYHK93, Par99, PCK22, PO03, QXX14, RD95, RST10, RS08, SK95, Sen98, SdJL+18, Sha23a, SB05, Sle09, Smi03, ST01, Spe98, Ste01, Ste02, Ste05, Ste06, Tas15a, Tur03, Usc12, VZ91, Van11, VW12, Ven93, WZ91, gWcWL12, Wat95, Wat00, WL12, XBC22, XK94, Xu20, YP98, Yal00, ZS14, Zha17, ZBJ15, Zhl12, ZZ98b, ZS07, Zim17, Bar89, CJL96b, CH92, CH93a, CM89, CM92b, DY90, Fuh88, GIMT95, GE95b, MT89, Qia88]. **Algorithmic** [BG19a, BBGL92, EL08, GG13].
**Algorithms** [ADGH18, AMHL22, AG91b, AH16, AG92, AD98, Auc91, Bar19, BM00, BBV19, BM19, Bér09, BEGG07, BJMS17, BG13, CE02, CG03b, CDG+05, CD13, CZ02, CB90, DN08, DHST05, DGGG22, DM04, Drm00a, DK99, DK01, EAS98, FH18, Gem98, GK15, GKX94, GQ14, GR17b, GPTPV16, Gu98b, Gu98c, GCC18, GO11, Gup02, Gut92, Gut94, HM89, HR04, Hig90b, HLQ09, JH88, KW92, LUC18, LUC23, LWY19, LX06, Lu95, LV17, MV14, Meh04, Meh08, MP12, MP91, MSKC21, MMH94, Nec19, NS94, NY95, Ost10, PM06, PL18, PTC13, PGVR98, RG05, RT20, Saa06, SKP11, SDD15, ST14, Swe93, TYUC17, Vav94, VS14, WE91, Wat93, WE94, Wat98, Wat92a, WZL21, XX16, Xia12, Xu98, Yan98, YGL18, ZZS02, ZFW07, ZLN10, ZGP10, BBDS95, BDV89, KP92, Pan91, Pea88].
**algorithms** [SB88]. **All-at-Once** [LW20b, WZZ22]. **Allow** [KOSvdD07]. **Almost** [GP06, Yal00, HD97]. **almost-diagonal** [HD97]. **Along** [Ste21]. **Alternating** [BST16, CLL20, DN08, De 18, GHHW90, HXY11, KP08, STT17, Usc12, gWcWL12, WC14, WCY15, Yan20, ZN21, CSEP21]. **Alternating-directional** [gWcWL12]. **Alternative** [BES05, BE10]. **AMG** [HV19]. **Among** [BHH+08, Mat05, GPTPV16]. **Anal** [Ano11, CH93a, GI97, HC89b, WW08, Zha95]. **Anal.** [Ikr97]. **Analog** [HM90]. **analogue** [CH88]. **Analyses** [CPS97, CP98, PGVR98]. **Analysis** [Afs08, AA19, AB01, AKP08, AMR+18, BD22, Bar93a, Bar19, BH90, BH93, BGSC07, BvdG11, BDFF22, BC10, BCW12, CKL21, CG03a, CI95a, CGP09, Che01a, CL09, CLN12, CD17, CCG+09, CGH11, CS10b, CH23b, DHT01, DH22, DGR23, DSSC11, DJR+18, DMW23, EZ95, EK17, FT14, Fie96, FC01, FSS21, GSCS15, GP97, GA18, Gil13, GS06, GGV05, GS10b, GED22, Gow96, GHN18, Gul95, Guo02, HHRV99, HJOvdD93, He21, HL23, Hig90b, HHC03, HC15, HK12, HKBM08, IK06, IZ20, IS07, IO16, JJ03, Jia22b, Kåg94, KS03, KN09, KPC94, KMP01, KMN11, LVV16, Lew96, Lew99, LgS02, LX06, LSB16, LS95, LT94b, MOR16, MT15, MF20, MM09, MS03, Nap13, NOZ11, NZ16, Not03, Not14, PP05a, PP05b, PAH17, Pet21, Pul13, QCT16, RRR06, RST10, Saa97, Saa16].
**Analysis** [SS19, Sai19, SST06, Sim16, SH23, Ste05, Ste06, Ste11b, Sun95a, Sun96, Sun04, VV88, VV89, Wat92a, Wei92, Wel11, WL12, WZZ22, XE10, YC97, YLA97, Zha93a, ZZ01, ZZS02, ZLN10, CM89, CM92b, DB88,

HC89a, HC89b]. **Analytic** [AHH01, CR10, He99, LMZ03, LLZ23, Wil08]. **Analytical** [WCB22, XZ22, YXY20]. **Analyticity** [QCT15, QCT16]. **Analyzing** [CYA+18, DS23]. **Anderson** [DH22]. **Ando** [Zha04]. **angle** [Sal88]. **Angles** [BL91, CS96a, Drm00b, KA07, MSZ21, Sai19, ZQ10]. **Anisotropic** [BGK+18]. **Anti** [FMRR13, Ver96]. **Anti-Causal** [Ver96]. **Anti-Gauss** [FMRR13]. **antiferromagnetic** [CRR93]. **Antinorms** [GZ15]. **Antireflective** [BDSC11]. **Antisymmetric** [KK17]. **Antitriangular** [CLN12, MV13, PW14b]. **Any** [AKP08, BGK+18, CT99, GPS96, Pai09, TM12]. **Apart** [Rum15]. **Apocalypse** [OA23]. **Apocalypse-Free** [OA23]. **Appearing** [LW05]. **Appl** [Ano11, CH93a, GI97, HC89b, Ikr97, WW08, Zha95]. **Application** [AGQS22, AMH09, AH14, BG15, Bez12, BM01, CR96, CS01, CS10b, FMRR13, GPM03, GS06, GP16, HM04a, HR00, HT00, HIS18, HHLW13, Ian09, KS03, KMS01, KMS03, Li99, LF02b, LY03, LV10, LK95, Mai99, Mat97a, MS10, MSS19, PAP00, PL14, RBB90, Rie92, STvDD17, SWYM96, Sid95, SEM13, SS17, Sor92, SD19, TFL11, WA07, JN89, MP88]. **Applications** [AJRS13, Alt13, AG88b, Arg15, AD21, ANT19, AL98a, AB13, BO96, Bar93b, BBTT06, BSZ20, BKS08, BLO03, BBM21, BCGG10, Cap00, CCJ+00, Che98, CCZ97, CDH12, DCM08, DG91a, DJ09, EGK91, EJK09, FPST13, FFH+19, FNS08, GLS12, GMN18, GL21, GHN18, HN90, IUM14, JJ03, JW11, JKN11, KBHH13, Kni08, KA10, KH13, KS12, LLZ09, LZ05a, Lim07, LLZ23, Mat93b, Mat96, NP99, Peñ01, PGVR98, RN18, RE13, Saa06, SZ07, SA22, SB01, TL06, TH01, Tsu93, WCW10, WZL21, XPL+18, ZQZ14, ZZLY02, ZR95, ZPW18, Fuh88, GBCW89, KN94]. **Applied** [DFT92, EN08, MR97, RSS09, Wal03]. **Applying** [DS23]. **Approach** [BE07, BL94, Bor09, Bos21, BET02, BEGM05, CSX15, CL17, CG03a, CH06, Cle00, CF00, Dax08, DG91b, DG91c, DEG+99, DRV21, EEK97, EEK99, EJ23, FL18, Fri05, GL99, GHR21, GRT07, GT02, HPZ23, IUM14, IM16, KO05, KB90, KN09, Mal04, Mim00, Moa05, MS18, NNT17, Neu00, PAP00, Pil94, PR12, PS22, PJB10, SD19, TETA05, VF00, VGV09, VV10, WE90, WZ23, vdWM95, BV88]. **Approaches** [MHG17]. **Approximability** [HHSW97]. **Approximants** [BL94, CM93, Hig01, Bas89]. **Approximate** [ADD96, Beb06, BM02, BS02a, BS02b, BAMC20, Che01a, Dav08, FMFJ18, GRK17, GHL03, HO10, HM97, IKSG10, JC22b, JT98, Joh08, LC16, LUC23, LBL05, MS03, Pha01, SEM13, Ste23, gS96, Tan99, TW00, TP14, XG10, vD99, KY93]. **Approximately** [GN13]. **Approximates** [BHS23]. **Approximating** [CHKL01, DPP13, GGMO17, PS08, VV15]. **Approximation** [AKU20, Arg15, AK90, AR93, Asw16, Bai05, BG15, BRZ06, BV95, CNX22, Cap98, CS09, CRY+21, CGMM22, CGMM23, Chu91, CG98b, CP03c, CDLP05, CK20, DDV00b, DGR23, DP00, DHM19, DIKMI18, DK98, DWWY20, DL17b, ES09, ES11, ED22, ED23, FZ16, FSS21, GMN18, GG11, GG14, GCC18, GC19, GO11, GGO13, GN16, HK08, Hal22, HPS13, HPZ23, HI15, HGL05, HT17, HV19, IAVD11, IAV13, IUM14, JK15, KN00, KS15, KL07, KL10, KR02, Kol03, KO15, KJH16, KK17, Lás94, LNSU18, LFW13, LV10, Lu98b, LRSV13, Mac99, MU13, Mat93a, Mor22, MBM08, NP23, NS11, Ose10, OSS14, PK23, Qi11, Rei91, Reu02, RHE14, RS21, SD16, SS10, SDN21, Ste08, SH93, Tan94, TYUC17, Usc12, WC14, WCY15, WS12, Yan20, YGL18, ZMK02, ZG01, ZLQ12, ZXL14, Zie95]. **Approximation** [dSL08, vdV96]. **Approximations** [BYDW18, BN05, BD09, CCB+20, CG03a, CWY20, Dax08, DMR09,

DI19, FMSS21, FT07, FKLR13, GR93, GLV10, GHR95, GS23, HS23, HB12, HST19, JKN11, KS22b, LT09, MHG15, NNP04, NW14, Nie17, NST15, RP10, Sid95, Ste13, STT17, XC18, ZZS02, ZZS04]. **Arbitrarily** [Rum15, Rum91]. **Arbitrary** [AMHL22, BMOvdD04, DQV22a, FH19, FGK+22, LH22, Mas95, MBO97, PK93, PK94, SZH22]. **Arc** [GHT10]. **architectures** [JH88, JP94]. **Arising** [BM96, BMM20, BM06, CGS94, DS16, ES08, GMPS92, GTI11, GV99, GdlI08, GKL12, HV05, HLQ09, HKBM08, lLNS17, LX12, Lu05, MP11, Vog99, FGS96]. **Arithmetic** [AS93, BD93, CR16, DJ00, HK95, JR13, JMPR19, LEMCD19, Tis01a]. **Arithmetic-Geometric** [BD93]. **ARkNLS** [CSEP21]. **ARMA** [SH91b]. **Arnoldi** [AM23, BS05, BR08, BMV18, CKR05, CZ02, EG20, Emb09, FS10, FGS14b, HKV05, Huc94, JMM14, KO14, KS20, LS96, Leh01, LSB16, MR97, Mee09, Mor00, Nov11, RST01, Sor92, Ste10b, TM12, XE12, ZH17]. **Array** [MVV93, Rau02a, Rau02b, YB91]. **Arrays** [Cho10, GMBS12, LRA93, OST08, Ste08, SD09]. **Arrival** [Par94]. **Arrow** [AG92]. **Arrowhead** [BESS22]. **Aspect** [ZZTA02]. **Aspects** [Bos21, EL08, LPT10]. **Assignment** [AD98, BMU94, FP98, GP97, Mim00, NK01, Sun96, Zab91, CM89, CM92b, Zab89]. **Associated** [BD95, CFG98, DMS13, JZ99, Kir95, Li93, MMT08, CRR93, Tre88b, WE89]. **Astronomical** [BN06a]. **Asymptotic** [DH22, HDSC23, MP21, Meh08, MT00, Naj98, NSCS10, OYBV19, Ser98, SM16, Sta22]. **Asymptotically** [Li06]. **Asymptotics** [BSU15]. **Asynchronous** [ADLK01, ADV05, DGL99, SB01]. **Attainable** [CD14, CYA+18, Gre97, JR08, KS20, Lás94]. **Attempt** [OA23]. **Attention** [IS08]. **Augmentation** [SHZ12]. **Augmented** [CFT16, EG00, GGLN13, Gut14, LW20a, Mas16, Mor95, PAP00, Pai10, Saa97, WZ17, Wri97]. **Augmenting** [Rie92]. **Autocovariance** [Elt92]. **Automata** [GGJ18, GDF01]. **Automated** [EV06]. **Automorphisms** [IZ04]. **Available** [Lee96]. **Average** [TS90]. **Average-Case** [TS90]. **Averaging** [Moa02]. **Avoid** [SD09]. **Avoiding** [BBD+14, DGGX15, KDGG13, PMT23]. **Aware** [CH23a]. **axis** [Sch95a].

**Back** [IT06]. **Backtrack** [AHN21]. **Backtrack-Downweighted** [AHN21]. **Backward** [AA09, Ari00, AB01, AMVW15, AMR+18, Bor10, BKMS14, BKMS15, BX08, CGP09, CL09, CB00, CM89, CM92b, CH99, DM04, EGTP17, GNS18, GA18, GJTP12, Gu98a, Gul95, HG18, HH92, HH98, HLT08, JTP10, KZ10, LC15a, LVV16, MV21, NH12, PRS06, RJ14, Rum15, gSS97, gS98a, gS00a, Sun04, Tis03, Var94, XW07, ZS14, ADD89]. **Bad** [Pan16]. **Balance** [NW02]. **Balanced** [AK90, BMMT10, CFL07, DRV21, HMP94, HPTH19, PR88]. **Balancing** [EN08, KKS97, LV06]. **Band** [AG91b, BGKS99, CD98, HPS15, Nab99, NV02, ZZTA02]. **Banded** [BS15, BM99, CG03b, CKM22, DK08a, GLS12, HB94, IT06, JP93, Kau93, KS17, TS99]. **Bandwidth** [RS06]. **Banks** [CMPX03, HM04a, Jia01]. **Barabanov** [GZ15, Mor12]. **Bareiss** [BBDS95]. **Barycentric** [Law13]. **Based** [AT07, AG19, ABC+23, AR93, Bar08, BBV19, BB12, Bér09, BDG15, BDFF22, BK95, Bor09, BCMM95, BKK18, CKR05, CCJ+00, CGMM22, CH98, DV08a, DRV21, FGS14b, GIG22, GCC18, GR00, GZ13, HNRS22, HT17, HJP03, IAVD11, KO05, KS22a, KP08, LK22, Li16, LUC23, MMD08, MJM11, Mit21, Not06, Pul13, RSH21, SZ99, Sai16, SST05, SKP11, Sch23, SB05, TMNV10, ZYSY20, HK12, JMW96, MF20, PS22]. **Bases** [ABM21, BDD14, BdTD11, EM10,

LP17, MP12, NS94, RVV17, SV93, vdMS05]. **Basic** [DG91b, DD13a, Fer97, LF02b, MLV00, ZZS02]. **Basis** [BFP95, EZ95, EMC17, Le 19, SS17, SB95, WLD18, WLMD19]. **Basis-Kernel** [SB95]. **Bauer** [wC03]. **Bayesian** [BDR12]. **be** [Hu92, Rum15]. **Behavior** [BK15, BLO07, KS20, Naj98, Rog05, Tam97, TM12, GS92, Sun89]. **Behaviour** [Drm96]. **Being** [Mas94]. **Bellman** [AB19b]. **Benford** [BHKR11]. **Bernstein** [AK20, AK21, DP10, DP15]. **Best** [AKU20, DDV00b, DHM19, ES09, ES11, ED22, ED23, Fei94, FMSS21, GH92, GCC18, HST19, IAVD11, IAV13, JK15, KR02, Lás94, Lee96, LNSU18, LBL05, LT09, NW14, Qi11, RHE14, SS10, ZLQ12, dSL08]. **Beta** [DK08b]. **Between** [CHLW23, CG96, FNV08, KA07, Peñ98, Xu98, ANT19, BS02b, CG92, CF02, De 06, Drm00b, FN04, Lim13, PP05b, RST18, TP23, XPL$^+$18, YL16]. **Beyond** [CG19]. **Bézier** [Bez12, Fie95]. **Bezoutian** [HH93]. **BiCG** [ASvG17, Gut14, Sim97]. **BiCircle** [GW07]. **Bidiagonal** [Bar02, Fer98, GL05, GE95a, JOvdD01, JOvdD04, LGC$^+$14, Par05, WLV06]. **Bidiagonalization** [Ari13, Bjö14, BB07, CGHR07, Hal22, HPS15, JN03, JL23, Sut12]. **Bidirectional** [Wat93]. **Bifurcation** [Bea01]. **Bifurcations** [MS10]. **Bilinear** [BB12, BGG18, Cao09, Cor93, FG15, LSM22, RODS15]. **BiLQ** [MO20]. **BILUTM** [SZ99]. **Binary** [MP11]. **Biorthogonal** [Sta02]. **Bipartite** [FL02]. **Biproportion** [de 94a]. **Birkhoff** [CLN14]. **Birth** [Cla10, DQ02, GdlI08, Guo02, Guo03, HMR01]. **Birthday** [GKRV90, Mol92]. **Bisection** [AL98a, Ji92]. **Bits** [INRZ21]. **Bivariate** [MR22, NNT17]. **Björck** [BEG$^+$09]. **Black** [AV91, MH95]. **Blind** [De 11, GL21, GED22, PO03]. **Block** [AGJ14, AIM22, ABM21, AL95, BDY99, Bar19, BBT05, BEBT07, BOS16, BD98b, BDFF22, Bom00, BB07, BCN95, CSX15, CL17, CLR21, CE02, CNW08, CGS94, CD98, De 08a, De 08b, DN08, Dem23, DRSZ07, DK15, DIKMI18, Drm10, DJR$^+$18, EP94, EG20, EG15, FMRR13, FH17, FFH$^+$19, FP98, FST$^+$13, FLS20, GLS12, Gar90, GL03, GJX22, GGV05, Gov91a, GV99, GLS94, GHL03, Hal22, Har07, HLW05, HT00, HG14, HO92, HK12, HC89a, HC89b, IIM94, JMPR19, JV16, KN00, KMP01, KS20, LM02, LUC23, LW20b, MM11, MVP05, MR22, Mas16, Meu92, MT00, MN97, Nec19, NY95, Not14, OW96, OYBV19, OYV22, PJM23, Pea88, Pes14, RV12, Rog05, SZ99, SK95, Ser98, SHZ12, Sim97, SSR20, Ste12, TW03, VKDD21, Wan98b, WLMD19, Wel11, ZŠ94, KP92, SS89]. **Block** [ES92, KC94]. **Block-Circulant** [BDFF22]. **Block-Diagonal** [BOS16]. **Block-Diagonalization** [MM11]. **Block-GTH** [OW96]. **Block-Iterative** [CE02]. **Block-Jacobi** [Dem23, OYBV19, OYV22]. **Block-LU** [ES92]. **Block-Monotone** [Mas16]. **Block-Oriented** [Har07]. **Block-Parallel** [ZŠ94]. **Block-Schur** [KMP01]. **Block-sequential** [Pea88]. **Block-Similarity** [FP98]. **Block-Toeplitz** [BDFF22, CNW08, JV16, MVP05, KC94]. **Block-Toeplitz/Hankel** [MVP05]. **Block-Triangularizations** [IIM94]. **Block-Tridiagonal** [HO92]. **Block-Tridiagonality** [Bom00]. **Blocking** [PFRR17]. **Blocks** [BV90, CDGS10, CNW08, GS10b, JV16, RST18, SŠ91]. **Blockwise** [XG98]. **BLR** [ABM21]. **Blurring** [RHE14]. **Boolean** [DD99, Jia98, JH88]. **Bootstrap** [BC22]. **Border** [BDD14, CGMZ21]. **Bordered** [Gov91a]. **Bordering** [BMRZ94]. **Bottom** [PS94, RE98]. **Bottom-Up** [PS94, RE98]. **Bound** [BT92, DDY14a, DT11, EV06, FG94, Gow96, GW22, HIS18, KK14, Lás94, Lat95b, Lee95, Li99, LW05, Mat97a, RST18, SST05, Vec03, WLB05, PS88]. **Boundary**

[ASA04, ABN09, BDSC11, BL10, Che01a, JLS01, LY91, MMN22, MS99, NNP04, Vav92, VH16, JN89]. **Boundary-Layer** [MMN22]. **Bounded** [ABK+11, BE07, CGGS98, CGGS99, CGSS01, Cor93, De 18, DDD20, GGMO17, GR97, KO18, Kni00, Wat01, Yan93]. **Bounded-Input** [Cor93]. **Bounded-Input/Bounded-State** [Cor93]. **Bounded-Rank** [KO18]. **Bounded-Realness** [ABK+11]. **Bounded-State** [Cor93]. **Bounding** [DS97, FB95, Hig90a]. **Bounds** [AMPV97, AKPP08, AR93, Axe92, AW05, BT10a, Bar93b, BS15, BMF05, BH90, BSU15, CS10a, COP20, CGMM22, DS20a, DH93, DH97, EI98, EOS19a, FKLR13, GTP18, Gu98a, Hal20, HS16, HDT10, HI15, IR08, IN09, JR13, JN93, Kit95, KA10, Kre05, KW94, Lee96, Li93, Li95, LS03, Li05, Li06, LS07, Li16, Lie00, LZ05b, Liu12, LR99, LPT10, MSZ20, Mas16, Mat93c, Mat97b, Mat98, Mel99, Mön11, Nab00, RBB90, RK95, Rum97, Rum12, RJ14, Rum22, Sch23, SWYM96, Sou19, Ste91b, Sun95b, gS96, gSS97, gS98a, TVW15, Tru06, Wal03, WY17, WD00, Ye09, ZAK13, ZK17, vDHvdV00]. **Box** [AV91, MH95]. **BP** [Hua21]. **Bramble** [FAT16, SW08]. **Breakdown** [RY05]. **Breakdown-free** [RY05]. **Breakdowns** [AGJ14]. **Bregman** [DT08]. **Brent** [YB91]. **Bruhat** [OOvdD98]. **Brunovsky** [FGP00]. **Bulge** [WE94, Wat98]. **Bulge-Chasing** [WE94]. **Bulges** [Van11]. **Bunch** [DT11, JP93]. **Bures** [TP23]. **Butterfly** [PMT23]. **Byers** [CT15, KZ10].

**C** [Joh96, Zha95, LW05]. **C-Numerical** [LW05]. **Calculating** [FSV14]. **Calculation** [CGV03, Mön11]. **Calculations** [MMH94, SY98]. **Calculus** [DK13, EDK16, Rau02a, Rau02b]. **Calibrating** [GS10a]. **CALU** [GDX11]. **Can** [Emb09, Fos94, HGC00, HSC04, Rum15]. **CANDECOMP** [GMBS12, PTC13, dMGF14, Ste08, SD09, Ste12]. **CANDECOMP/PARAFAC** [GMBS12, PTC13, dMGF14, Ste08, SD09, Ste12]. **Canonical** [BDD14, DDV04, De 06, DJK17, DD13a, DD13b, DD14, DL15, DS18, ED22, EVD22, GZ15, HMT10, IT11, Sai19, SC05, SDC+12, SD15a, SDD15, SD15b, SD19, Ste11a, SL12, Ste13, Ste16a, Usc12, VD21, WCW10, ZQ10, Zim17, de 90, Hon89, WW08]. **Capizzano** [WW08]. **Carlo** [HIS23]. **Carlson** [CF00]. **Cartan** [Tam99]. **Cartesian** [HR95]. **cascade** [GKR89]. **Case** [CCG+09, DS19, FLT13, FFH+19, KK93a, LMZ03, NK01, SCBG05, Sta02, TS90, CM92b, MH95, Tis93]. **Cases** [BJ16, Fei94, So92, Zha04, BHH88]. **Cauchy** [HM90, Kil99, Rod06]. **Cauchy-Like** [Rod06, Kil99]. **Causal** [Ver96]. **Cayley** [LM98a]. **Center** [BE07]. **Centered** [GKL18]. **Centering** [Rie92]. **Central** [BD15]. **Centrality** [ABC+23, BK15, DS23, GHN18, PAH17]. **Centro** [HBW90a]. **Centro-Hermitian** [HBW90a]. **Centroid** [CF02]. **Centrosymmetric** [Bai05, TY02, Yas03]. **Certain** [ADC04, BD95, Dan93, HKG09, HLT91, IZ04, KS08, MP21, OS10, Wil08]. **Certificates** [EMC17, Mit21]. **CG** [EOS19a, NY95]. **Chain** [Bar00a, BF11, ES08, Hey95, HO98, Mat96, Mey94, OW96, ST01]. **Chain-Random** [ES08]. **Chained** [AB19b]. **Chains** [Bar93b, BHKR11, Bor09, BPS05, Buc00, BrD07, DS97, DA05, DR93, DWWY20, EHW10, IM94, Kir02, LM06a, Liu12, LLZ23, Mas16, O'C02, TVW15, XG98, Zha93b, CRR93]. **Chan** [JWX03, KO05]. **Change** [BR22, BI99, DD16]. **Change-of-Variables** [BI99]. **Changes** [AKPP08, KA07]. **Channels** [BBM21]. **Characteristic** [BDF17, FIS01, GPPT23, IR08, RI11, Xu15].

**Characteristics** [BR22, PJB10]. **Characterization** [BG19a, BZ00, CGH11, FV98, GG13, LF02a, MG10, TY02, Tre05, Wei96]. **Characterizations** [CGRVC08, CT08, CHW10, CH94, GP06, Yas03]. **Characterizing** [CPTP09a, JLZ16]. **Chart** [BGBM92, Tis03]. **Chasing** [Van11, WE91, Wat93, WE94, Xu20]. **Chebyshev** [AKU20, BE07, CR21, FLT10, GRT07, Koh99, LP17, Lu98a, MV88, NP16, TT98, ZS07]. **Checkable** [LQ16]. **Checking** [JR99]. **Cheeger** [BSS13, Wal03]. **Cheeger-Type** [Wal03]. **Chemical** [KS15]. **Choice** [MH13a]. **Choleski** [BCMM95]. **Cholesky** [AM09, BOCL97, BK89, Bér09, CP98, CH98, DHT01, DH99, DH01, DH05, DK00, DN11, DOV94, GNP94, GSS96, GMRS00, LGWX12, LC05, Lin19, LMC22, LN14, Nap13, NR99, RODS15, RJ14, Ste93a, Sun95a, XG10]. **Cholesky-Like** [RODS15]. **Choosing** [Dan93, KO01, MX98]. **Chordal** [XPL+18]. **Circle** [Guo98]. **Circuit** [CKO+22, SWYM96]. **Circulant** [AG91a, BBT05, BEBT07, BDFF22, CT99, Cha89, CNP94, CCZ97, CP03c, dMGF14, Huc92, LW20b, Mat93b, Tyr92]. **Circulant-Like** [CT99]. **Circulants** [NSCS10]. **Circular** [PSW22, Yal00]. **Circulative** [Che92]. **Class** [AG19, AM23, AKP08, Bor10, BG06a, BrD07, CGRVC08, DMS13, DS16, ESR01, EL91, FP98, Fie95, GL00b, HHSW97, HLM23, LX09, LM90, LMPT20, Loe90, LW94, MSZ03, Peñ01, Pil94, WCB22, YGM09, IM95, PR88, Rum91]. **Classes** [HMT93, Hla23, JOvdD03, Kar11a, HS88]. **Classical** [CLR21, HPS+11, Tam99]. **Classification** [GKK99, HPS+11, Pro13]. **Classifications** [HRS88]. **Classified** [KNX04]. **Close** [AD98, HGC00]. **Closed** [Guo98, RW01]. **Closed-Loop** [Guo98]. **Closest** [CP20, GP18, NP20]. **Closure** [DK14]. **Cluster** [SCBG05]. **Clustered** [BDGY20, HJP03, SD16, Wül05]. **Clustering** [MW12, OS10, Van08]. **CMV** [BDG15]. **CMV-Based** [BDG15]. **Co** [JN89]. **Co-square** [JN89]. **Coalescing** [DP09, DPP13, Uhl20]. **Coarse** [AG19, HV19]. **Coarsening** [BHS23]. **Coefficient** [Art03, BZ00, SEM13]. **Coefficients** [AG00, BES15, Beb06, CR10, Elt92, GKX94, Gre99, IS11, JV04, LS95, Mal06, Mat05, MMW22, Meu17]. **Coherence** [IW14]. **Coherent** [LW05]. **Collection** [CCS05]. **Collinearity** [FB94]. **Collocation** [DP10, DP15, HHRV99, LHHR95]. **Coloring** [MSZ15]. **Column** [CK20, DGGX15, DS10, GNP94, GG03, MM00, RSS94, ZZ01]. **Column-Partitioned** [ZZ01]. **Columns** [IW14, JNP21, VV89]. **Columnwise** [SDC+12, XBC22]. **Combination** [SW08, All89]. **Combinational** [NS94]. **Combinations** [KO14]. **Combinatorial** [ACST09, IS07]. **Combinatorics** [DS10]. **Combined** [LS07]. **Combining** [GRT07]. **Come** [HGC00]. **Comments** [Guo03, Ikr97, WW08, Zha95]. **Common** [LŠ10, NV23]. **Communicability** [AB16b, Sch23]. **Communication** [BDHS11, BBD+14, DGGX15, GDX11, GMN16, KDGG13, WSSL06]. **Communication-Avoiding** [BBD+14]. **Community** [FKZ23]. **Commutation** [GP03]. **Commutators** [BK97, LŠ10]. **commute** [Stu88]. **Commuting** [Per91]. **Commutors** [CM03]. **Comon** [GOV19, ZHQ16]. **Compact** [Ble21, HK12, KHH04, VMM15]. **Companion** [AMR+18, BDG15, BB98, DDM10, Kit95, Law13]. **Comparison** [DD21, GS21, MS02, TMNV10]. **Compartmental** [BH93, LW02a]. **Complement** [CNW08, ET10, HS95b, KS22a, LZ05b, ZXS21]. **Complement-Based** [KS22a].

**Complementarity** [Bai99, CH93c, CHLS00, Gow90, GS94, GS02, HLT12, Kan96, MP95a, MN97, MPS98, MM00, MPS00, PYHK93, QL99, Ven93, Pan91, WBP89]. **Complementation** [DV06b, Sen98]. **Complements** [ABN09, CDGS10, FR23]. **Complete** [DD12, FXG18, Fie96, Gou91, GDF01, HV97, Tsa98]. **Completed** [Gut92, Gut94]. **Completely** [Auj00, DS97, LQ16, QXX14, SMBJS13, TDV15]. **Completing** [HMP19]. **Completion** [Asw16, BJL98, BDR12, CSK95, DS10, DS19, DGGG22, Fri02, JR88, Lau00, Næv93, SC10, SD19, ZF14, BJ95]. **Completions** [CD98, Dan93, FR23]. **Complex** [BLAK91, BMV20, CHH$^+$15, COV14, CW96, DZ01, GITT96, GWZ05, GZ09, Har19, Hig92, HG21, HLM94, HV05, JLZ16, JP09, Koh99, LX12, Mar11a, MV07b, RVA05, Tam98, TT99, VNVM14, WD94, YL08, CH88, CM92b, Hon89]. **Complex-Shifted** [HG21]. **Complex-Symmetric** [HV05]. **Complexity** [DYH06, JMPR19, KKS97, LH05, PL18, PTC13, Xia12]. **Complimentarity** [CC92]. **Component** [GED22, MYA19, RST10, Yan98]. **Components** [AR93, BLO04, CI95b, JS04, MTV10, Ste08, SD09, Ste12]. **Componentwise** [CC09, Dem92, EGTP17, GK93, Pet21, RK95, Rum97, Rum03b, Rum15, Zha93a]. **Compositions** [BM01]. **Compressed** [BDG20, HS14, JKN11]. **Compressibility** [ST21]. **Compressible** [BIS12]. **Compression** [BFG23, BB20, CKO$^+$22, Spe98, YXY20]. **Compressions** [FHGJ06, MA99]. **Computable** [GI96, Jia22a, Lie00, GI97]. **Computation** [ASVM04, AMMS08, ABM$^+$17, AT98, ABF16, AMVW15, AMR$^+$18, AABK19, BL13, Bar93b, Bar00a, BL94, BL00, BKS08, BBMX02, BNP22, Bez12, BN10, BL91, BRZ06, BHM97, CJL96a, CJL96b, CR16, CWY20, CDD00, DDV04, Dhi98, DD20, DD21, DJ00, Eff13, EVD22, FH10, GL17, GT08, GC19, HP09, Hey95, HIW15, HI15, Hua21, Ian09, IS08, KS17, KL18, LC16, LB96, Mal06, Mar91, MR97, Mel04, MG10, Ost10, PLM94, RDC93, SC05, SGX14, Sut12, WZ17, WZZH21, Zen16, Fuh88, GBCW89, O'L90, WW08]. **Computational** [DMP96, KBHH13, LPT10, Mei04, Sch23]. **Computationally** [BN05, BMP20, TP22]. **Computations** [DP15, EKNX93, Gil94, GZ13, Hig93, JL23, Koe07, LNP93, LE02, Mat95a, Vog99, WY17, YB91, GS92]. **Compute** [BD98a, Cif21, GNP94, GO06, HMP94, LH22]. **Computed** [Gre97]. **Computers** [BMSV92, NY95]. **Computing** [ABL94, Ain17, AMH09, AMHL22, AH14, BO96, Bar02, BF11, BYDW18, BM19, BG19b, BHR10, BGN12, CI95a, CHZ16, CW96, DH03, DA05, DHW92, ES09, EW13, EM15, EHW10, FI18, FH18, FHL23, Fer97, FH20, GNS18, Gem98, GHHW90, GKX94, GSV00, GL13, GKL14, GOS15, Han03, HY01, Har05, HM20, HW98, HO98, HMMT04, HL21, JWN18, JKM11, JMM14, JS94, JN03, JCG14, KL98a, KM11, KM14, KV14, LW97, LP13, LV17, MV08, Mar11b, MOR04, MV17, MZ19, Mit20, Mit21, NBG10, NH12, NS11, NP20, NS94, PW90, QS06, QACT13, RI11, RK95, RST01, SdJL$^+$18, Smi03, SAGS21, VV10, Wat92b, WD95, WLV06, Xu05, Xue96, Zha17, ZH22, vDHvdV00]. **comrade** [NP16]. **Con** [HB12]. **Con-Eigenvalue** [HB12]. **Concave** [Fou18]. **Concavity** [Gro98, KN94]. **Concentration** [DG19, GVK20, Yse22]. **Concept** [Han94]. **Concerning** [Kir02, Wei95]. **Condensed** [Meh99]. **Condition** [AMH09, AW10, ABG07, ANT19, AW05, BDMS10, BDMS12, BGT14, Bis90, BLP90, BD10, Bor10, BK19, BV18, BK06, CT93, CD05, CC09, CES22, DBW15, DMC13, Dhi98, Drm96, ES05, FH21, GI00, GK93, GKX94, Grc10, GV07, Har05, HH92, HH98,

HR14, HQ16, KKT06, Kar10, KL89, KLR98, Kir02, KPM09, KW94, LX09, Li06, LS11, LW94, LP11, LT94b, Mat95b, Mor12, PP92, RVA05, SST06, SB92, gS00a, Tan94, TT14, Tur97, VT98, ZMW17, Ede88]. **Conditional** [CK00, RR08]. **Conditioned** [AB19a, KRS19, MX98, NV02, PAP00, Zen19, FGS96, Rum91]. **Conditioning** [BG11, BDGY20, Baz00, DP10, DP00, GTPI13, HMT06, HIW15, Mal03, Nap13, SS19, TCTM00]. **Conditions** [BDSC11, BM00, Cor93, DL15, ES11, GMBS12, JLS01, LŠ10, LN22, Mas16, NNP04, Pin19, RR98, ST08, SD15b, Sou19, SdA10, SL12, VH16, ZWF05, Gad88, OW88]. **Cone** [BW95, NW98, SW91]. **Cones** [GL23, Pil94, VF00]. **configured** [JH88]. **Confluent** [Hig90b, Lu94, Lu95, Lu96, Lu98a, ZZ98b]. **Congruence** [BMV20, FJ06, LN22, PR91, Hon89]. **Conic** [PJB10, See11]. **Conical** [BP21]. **Conjecture** [BTV03, CG15b, GKL18, JP09, ZHQ16, FF93]. **Conjugate** [AV91, BM00, BES98, BG06b, CFT16, Car18, CGLV11, CYA+18, DFT92, DQV22b, EG00, FAT16, GRT07, GTPTI14, GMN16, Hal20, HS10, JX20, KL08, LW20a, LH05, Saa06, SH23, Tre05, YBZC16, Zha10b, GS92]. **Conjugate-Gradient** [CFT16]. **Connection** [BSS13, GKR89]. **Connections** [FN04, MBN17, Sid95, SX11]. **Conquer** [AA94, BNP23, CK91, CKM22, FLM12, GE95a, GGbCC03, LGC+14, Sut13, XQ08, GE95b]. **Consecutive** [DD99, EG00]. **Conservation** [CG03a]. **Conservative** [OP05]. **Considerations** [DHW92]. **consimilarity** [CH88]. **Consistency** [Han94, KN89, Peñ95]. **Consistent** [BLL22, BHS23, CKL21, CPTP09a, FST+13, LWWY14, Uhl18, YGM09]. **Consistently** [Har93]. **Constant** [ABC+23, BK19, GHL03, Mit20]. **Constantly** [LW20a]. **Constants** [BT10a, Cro16, Mit21]. **Constrained** [ALP07, AE97, AEGL19, Aru92, BN06a, BMO92, Bar98, BBTT06, BOS16, BKK07, CG10, CJ21, CH99, DS16, FM93a, FT07, GW92, Gul95, Jam92, KP08, LY03, Mar11a, PSW12, SZ07, SS13, SdA10, WD00, ZHY16, FGS96, GL96]. **Constraint** [Bai05, BNW09, Cao02, Dol07, KGW00, Log17, yPWjP12, ZH03]. **Constraint-Style** [Dol07]. **Constraints** [AW00, CG98b, EAS98, GS10a, HS10, LGI21, LMPT20, LJW22, See11, VBW98]. **Constructed** [AG19, Cap98]. **Constructing** [Chu95, DHST05, KU13, LP17]. **Construction** [AG91b, CS10b, GZ15, LHC16, Mae98, Tur03, VF00, XHC21]. **Constructive** [AR93, BLW15]. **containment** [BF89]. **Continuation** [BT10b, CH93c, Kan96, Ple00]. **Continuity** [de 90]. **Continuous** [BET02, BZ00, CH94, WBP89]. **Contour** [LXSdH20, YXC+17]. **Contour-Integral** [YXC+17]. **Contractibility** [AhS98]. **Contraction** [BRR00, CG15a, MV23]. **Contractions** [Næv93, JR88]. **Contribution** [BG11, SC05, WW08]. **Control** [BSZ20, BB12, BOS16, BGG18, BM06, DS16, GPM03, HL23, HS10, HDSC23, LS95, TFL11, Yan93, Cri88, DK88, Meh88]. **Control-Constrained** [DS16]. **Controllability** [Car94, EJK09, JMO93, Tsa98, Wim88b]. **Controlled** [MM11]. **Controlling** [FGM91, HN09]. **Controls** [BF06]. **Convection** [BWQ06, BGSC07, Ern00, LG06, MMN22, RP10, de 92]. **Convection-Diffusion** [BWQ06, BGSC07, Ern00, RP10, de 92]. **Convection-Dominated** [LG06]. **Convenient** [TP22]. **Convergence** [AMMS08, Ano11, ADC04, Bai99, BMfY03, BLL22, BJM05, BER04, BGV10, Ble21, Bor09, BrD07, CKL21, Cao00a, Cao08,

CPZ11, CD17, CLL20, CCG+09, CG15b, DGMR00, DH22, DR93, DIKMI18, Drm10, Elt92, FNS08, FGS14a, GH92, GJX22, GPS96, Guo01a, Guo02, GR97, GP04, Har07, Har19, HKV05, HMT93, IK06, Jia95, JZ99, Kni08, KN09, Kre08, KS20, LWXZ06, LUC23, Lie00, LS04, LX06, LWWY14, MNR15, MS02, Mas95, Meh08, MH15, NOZ11, NZ16, Not03, Not16, Not19, OYBV19, OYV22, RT20, RS08, SS19, SST05, SWZ11, SEM13, Sim00, SH91a, Sou19, SU94, SB01, Usc12, WC14, WCY15, WZ17, Wu17, Wül05, XZ22, XE10, Yan98, YGM09, Yan20, Bas89, KN89, SS89]. **Convergent** [ASVM04, Auc91, CRS99, CRS01, GR17b, LUC18, MV23, QS06, ZZ98a, AdHN88]. **Converges** [Ste21]. **Convex** [BL21, Cif21, FJBd15, FS01, HM04b, Lew96, LP11, Lu20, Pin19, PPLG20]. **Convexity** [BDMS10, BDMS12, BLO07, HS00, KN94, KNX04, LP00, LS11]. **Cooley** [SKP11]. **Coordinate** [BDE+20, LUC23]. **Coordinates** [Mac99]. **Copositivity** [Bom00]. **Coprime** [OV99]. **Core** [Bér09, HPS13, HPS15, HPS16, HPZ23, PS05, Xu20]. **Core-Chasing** [Xu20]. **Correction** [JWN18, LS17, Sta02, ZXS21]. **Corrections** [PL14, XLS16]. **Corrector** [HS23]. **Correlated** [Par94, WA07]. **Correlation** [BHR10, CdS90, HS16, Hol91, LP96, LT94a, QS06, SCPW12, TP22, FF93, GP88]. **Corresponding** [AT98, GR93, QACT13, QCT15]. **Corrupted** [HNRS22]. **Coseparable** [PN23]. **Cosine** [AMHL22, CDD00]. **Cosine-Sine** [CDD00]. **Cost** [RT93]. **Counterexample** [BTV03, HS00, Kol03]. **Counterexamples** [JP09]. **Counting** [DLT15, Fer98]. **Counts** [COP20, GNP94]. **Coupled** [CH97, DK15, LJS19, SŠ91, SD15a, SDD15]. **Coupling** [DS97, FNV08]. **Covariance** [BMfY03, BN06a, BKK07, BX05, CS10b, Fuh07, Lu10, MSM21, RD95, SCA12, Ste91a, TP23, VP93, dBG08]. **Covariance-Preconditioned** [BN06a]. **CP** [BBK18, FZ16, ZN21, ZF14]. **CP-Matrix** [ZF14, FZ16]. **Cramer** [DTGVL05]. **Crawford** [KLV18]. **Crayons** [FGK+22]. **Cream** [SW91]. **Criss** [BM19, LV17]. **Criss-Cross** [BM19, LV17]. **Criteria** [AM09, ADR92, Ari13, AM05, AB16b, CPTP09b, COV17, EL91, BF89]. **Criterion** [AH07, FM93b, Li02, SNC02]. **Critical** [AAB10, BJL98, CCG+09, DLT15, O'N05]. **Cross** [AIM22, BM19, LV17, GBCW89]. **Cross-Interactive** [AIM22]. **cross-validation** [GBCW89]. **Crossing** [Uhl20]. **Crouzeix** [CGL18, CG15b, GKL18, RS18]. **Crystals** [HHLW13]. **CS** [GNS18, Ste16a, Sut12, Sut13]. **Cubature** [Sch95b, Xu15]. **cube** [JH88]. **Cubes** [NS09]. **Cubic** [JLSZ22]. **Cubically** [ASVM04, ZZ98a]. **CUR** [HH21, MMD08]. **Curl** [CHH+15, CZ03, HHLW13]. **Curl-Related** [CZ03]. **Curve** [GPS96, KS12]. **Curves** [Bez12]. **Cutpoint** [KN99]. **Cuts** [GN13]. **Cycle** [Gri88, ADC04]. **Cyclic** [BG94, Drm10, GH92, Ger92, Guo03, Har07, HMR01, Mar91, Nou96, RT99, SS89]. **Cyclically** [GV99].

**D** [Zha95, SYJ00]. **D.** [Ikr97]. **DAE** [BL02]. **Damped** [Lan07, PTC13, Tas15b, ZL23]. **Damper** [TV09]. **Damping** [Tas15a]. **Dangerous** [HN22]. **Dangling** [IS08]. **Darcy** [FAT16]. **Data** [ADGH18, AM09, AG91b, ADHM19, AKP08, BKKL91, CGGS98, CGP09, CDLP05, EL97, EGK91, GG11, HJP03, IO16, MMD08, MU13, MW12, RK95, SNC02, Wat01, fX96]. **Datasets** [CNX22]. **Davidson** [HP02, HKP05, HN09, Not05, SvdV96, Sta02, SX11, ZS07]. **DCT** [PL18]. **Death** [Cla10, DQ02, GdlI08, Guo02, Guo03, HMR01]. **Deblurring**

[BDSC11, BBTK08, GL21]. **Decay** [BES15, BS15, FSZ14, MNT10, Nab99]. **Decaying** [FSS21]. **Decision** [AGQS22, LP89]. **Decisions** [Ste16c]. **Decomposability** [GDF01, SL94]. **Decomposable** [DS97, Li91, MHG15]. **Decompose** [FT16]. **Decomposing** [BLW15]. **Decomposition** [AG88b, AL98a, BB08, BOCL97, Bar02, BDD14, BBK18, BOS13, BBV19, BD95, BX08, CS01, CM92a, CG92, CGP06, CL09, CLN12, CLL20, CFG97, CDD00, CF02, CK00, DDV00a, DDV04, De 06, De 11, DG91a, DD98, DD12, DD13a, DD13b, DD14, DL15, DD20, DGGG22, Drm00a, Eir00, EVD22, Fri05, GMN18, GL17, GNS18, GI96, dMGF14, Gra10, GE95c, GOS15, GW92, HMP94, Hem95, HMMT04, HMT10, HIW15, HV97, HJP03, JS94, JN03, JW11, Kap90, KGD23, KL92, KZ10, Kol03, Kon00, LK22, LRA93, LF02b, LS17, Lin19, MV07b, Mat93c, Mat95b, MVV92, MHG17, NBG10, NH12, O'N05, OOvdD98, Ose10, PS94, PE95, PP05a, Pet21, QCBZ21, Rei91, Rob16, RS94, Sai16, SST05, SS06, SK20, SDC$^+$12, SD15b, SD19, Ste10a, Ste11a, Ste12, Ste93b]. **Decomposition** [SV00, Sun95b, gS00a, SV15, Sut12, Sut13, Tol97, Tům02, Van10, VD21, VKDD21, VNVM14, WE94, WCW10, WCB22, XC20, Xu05, YB91, YL08, ZN21, Zha91, Zha93a, ZHQ16, vdSBvdV93, CS89, CG90, GI97, IM95, WE89]. **Decompositions** [BES05, BNP22, BG15, BvdMR$^+$97, BL10, BV18, BMP20, CGCDM13, CD00, CHH$^+$15, CD13, CF02, De 08a, De 08b, DN08, DCM08, DV92a, De 94b, Dem99, Di 00, DE99, DD21, DIS15, DMM08, FB95, Fie96, GP06, GED22, HH21, HY01, Her90, Her96, KS22b, Kol01, LC16, LS07, MMD08, MV08, NY19, NY20, SCPW12, SŠ91, SCBC21, SD15a, SDD15, SdA10, SL12, Ste16c, VD21, VKDD21, ZMK02, ZŠ94, vdMRR01, Gad88]. **Deconvolution** [MLV00, PO03, Yal00]. **Decouple** [CNG23]. **Decoupling** [CH06, CMT09, DIS15, KN99, vdWM95]. **Decreasing** [Pan93]. **Dedication** [Bru88, GKRV90, Mol92]. **Deduce** [SCBG05]. **Defective** [Zen16]. **Defectivity** [BGMN15]. **Deferred** [vdG93]. **Deficiency** [Ste18]. **Deficient** [Cif21, EG15, Fos03, HS13, KGD23, Men12, MH15]. **Defined** [IS11, Kar11a, PT18, Tam97]. **Definite** [ADGH18, AFPA07, BGN03, BW95, BJL98, BDR12, BD05, BS16, Cha00, CG98b, DHT01, EG00, ED23, FMFJ18, GI00, GIK00, Gru06, GLV10, GHT10, HO94, HMT09, HP02, Hu92, JH02, Joh08, JSG15, KN91, LNTX11, LNTX13, LS11, Lin19, Lu98b, MV97, Mat92, Mat97b, Mel04, Moa05, Nie10, NY95, NV02, OR93, Pha01, Ple00, Reu02, SAGS21, VGV09, WZ91, Whi90, XG10, XHC21, Ye09, ZWF05, Zha17, Zha10b, AG88a, FM88]. **Definiteness** [CCL09, Roh94, XC18]. **Definitions** [De 08b]. **Deflated** [AGJ14, CGLV11, EEG11, GGLN13, Gut14, RN18]. **Deflating** [BBMX02]. **Deflation** [BESS22, BBM02b, Dax08, EN08, KK07, Kre08, LS96, NAY12, PR12, RKN20, SEM13, SCMV21, TMNV10]. **Deflations** [MV14]. **Deformations** [EEK97, GPM03]. **Deformed** [GHN18]. **Degeneracies** [BP21, DPP22]. **Degeneracy** [CC92]. **Degenerate** [CGSS01, DSSC11, Mat05]. **Degree** [ADD96, BS90, HM04b, Lie08, Mor94, Mur98, OV99, Che92]. **Delay** [AM23, DLMT13, MG10, MBN17, MZ19, Yan93, MJM11, MF20]. **Delocalization** [KMS15]. **Demmel** [DMC13]. **denominator** [Nov11]. **Dense** [CGHR07, For03]. **Density** [BKS08, LWWY14]. **Departure** [Lee95, Lee96]. **Dependent** [BLL22, BK15, CZBL18, GMBS12, MMW17, PSW12, SK16, SS17, SdA10, SL12]. **Depending** [DPP22]. **Derivation** [BLd93]. **Derivative** [AMH09, AMHL22, BGMN92, CCH98, GL17, HL21, Koh99, KLX04, Nof17]. **Derivative-Free** [HL21]. **Derivatives**

[ACL93, AT98, BE03, HL13, HR14, OW95, QACT13, Seb96, Sen06]. **Derived** [KC94]. **Descent** [KL08, LUC23, Pan91]. **Described** [KLX07]. **Description** [De 18, FV98, Hla08, Krä19, Pop12, Ste16b]. **Descriptions** [SZK95]. **Descriptor** [BGMN92, CT91, CH06, CFL07, CT08, KLX04, MMW18, MV21, Mim15, RE13]. **Design** [BIS12, DDN20, DK99, GL99, GMS92, Kau06, KB90, RD95, SNC02]. **Designs** [KMS01, KMS03, LP13, NW02]. **Desingularization** [KO18]. **Detecting** [GHT09, GHT10]. **Detection** [BV92, Bom00, DD12, FKZ23, MS10]. **Determinant** [ASA04, BLdP97, BM01, CT88, FSV14, HKG09, JOvdD03, Reu02, VBW98, MP88]. **Determinantal** [LZ05b]. **Determinants** [FH93, IR08, Stu91, MV88, MOvdDW89]. **Determine** [LM18]. **Determines** [Par05]. **Deterministic** [BIS12, CNX22, DGR23, Sha23a]. **Development** [PGVR98]. **DG** [BGK+18]. **Diagonal** [ALN07, BV90, BESS22, BOS16, Bor14, CDGS10, CNW08, Chu95, DHST05, DQV22a, DK99, DK01, GGV05, Gre92, HIS23, Har05, Hig97, KB93, KKSZ22, SCPW12, Tho94, Tis04, Uhl18, Wal95, ZFW07, HD97, HRS88, MV88]. **Diagonal-Plus-Rank-One** [BESS22]. **Diagonal-Plus-Semiseparable** [Har05]. **Diagonalisation** [Bin90]. **Diagonalizable** [FJ06, LM06b]. **Diagonalization** [Afs08, BAMC20, BGBM93, BMV20, CSX15, CL17, CS96a, Dav08, De 06, DK15, ELN22, Joh08, LN22, LUC18, LUC23, MM11, MR22, Pha01]. **Diagonalizing** [BS96, Dan91]. **Diagonally** [AB19b, CE02, CESC20, DDY14a, DDY14b, For96, Hu92, Li02, LZ05b, Mat09, NV94, SWYM96, Sle09, ST14, Ye09]. **Diagonals** [HHC03]. **Dichotomy** [MS97]. **Difference** [BDE+20, Bor03, GKK99, GT99, LNT18, MT15, SCA12]. **Differenced** [VP93]. **Differences** [AMPV97, CP03b, CT93, SvdVM00, Zha00]. **Different** [TP23, YL16, Whi89]. **Differentiable** [ANT19, LS01]. **Differential** [AEGL19, BGMN15, DLMT13, EK17, GHR21, Gre92, HHRV99, KM96, Moa05, PPLG20, RE13, Zhl12, JN89]. **Differential-Algebraic** [DLMT13, EK17, GHR21, KM96]. **Differentiating** [GTPTI14]. **Diffusion** [BWQ06, BGK+18, BGSC07, ES18, Ern00, KNW20, lLNS17, MMN22, RP10, de 92]. **Digital** [SWYM96, DB88]. **Digraph** [Sev03]. **Digraphs** [AB16b, COP20, MOvdDW89]. **Dilations** [GCL16, MA99]. **Dimension** [BGK+18, HJP03, Ost10, Yse22]. **Dimensional** [BvdMR+97, CNX22, CHH+15, GV99, Gre99, HHLW13, Ji92, JLS01, Kil99, LXSdH20, OST08, RHE14, Sch95b]. **Dimensionality** [NBS10, OST08]. **Dimensions** [WLD18, YL16]. **Diophantine** [BT92]. **Direct** [Bjö14, CKL21, GK06, Hig93, Xia13]. **Directed** [DN11, Fit19, SS23]. **Direction** [GLV10, HXY11, Par94]. **Direction-of-Arrival** [Par94]. **Direction-Preserving** [GLV10]. **directional** [gWcWL12]. **Disc** [LZ05b]. **Discrepancy** [CS10b]. **Discrete** [ASA04, BF06, BF93, Bor03, BD95, CF02, CFL07, CZ03, Cor93, DL17a, DS18, For03, Guo98, HHLW13, JLS01, JOAKt10, KO05, KH13, KLX04, Kuz15, LF02a, LgS02, Lin11, Mas16, RT93, Sun04, TCTM00, Tur97, Van08, ZZS04, LP89, Meh88]. **Discrete-Time** [CFL07, Cor93, JOAKt10, KLX04, LF02a, LgS02, Mas16, Sun04, TCTM00, BF06]. **Discrete-Trigonometric-Transform** [KO05]. **Discretization** [BGK+18, DGMR00]. **Discretizations** [Beb06, Ern00]. **Discretized** [CDGS10].

**Discriminant** [CGH11, PP05a, PP05b, ZLN10]. **Disjoint** [LGI21]. **Disjunct** [CdS90]. **Disk** [Baz00]. **Disks** [LO20]. **Displacement** [BT17, BJMS17, BD95, CK91, CLG93, CSK95, Di 00, KC94, KO05, Pan93, PW03, RD95, DS95, GKR89]. **Dissection** [BV90, BHL+93, BT02, CCB+20, GTW00, HR95, SV93, Ten97]. **Dissipation** [MMS16]. **Dissipative** [MMW18]. **Distance** [ABK+11, Bar00b, BS16, BLO04, Dem92, DLT15, Fio11, GHHW90, Gu00, GMO+06, HW98, HS16, JSG15, KMS15, Lau00, LOvdD02, Men08, Men18, Mit21, Qi13, Rum97, BJ95, Pow88]. **distance-regular** [Pow88]. **Distances** [KNS97, LM06b, Lim13, PS22, Rum03a, Rum03b, YL16]. **Distinct** [Far16]. **Distributed** [ADLK01, ADV05, IO16, KP92, Vog99]. **Distribution** [AW10, AW05, BF11, DQ02, DD10, DK08a, FFH+19, GN03, Har99, HM20, HDSC23, Mey94, WA07, ZZTA02]. **Distributions** [BMfY03, Cap00, DMC13, DK08b, ES05, KS15, Liu12]. **Disturbance** [vdWM95]. **Div** [CZ03]. **Div-** [CZ03]. **Divergence** [CG03a]. **Divergences** [DT08, LGI21]. **Diverging** [Ste08, SD09, Ste12]. **Divide** [AA94, BNP23, CK91, CKM22, FLM12, GE95a, GGbCC03, LGC+14, Sut13, XQ08, GE95b]. **Divide-and-Conquer** [BNP23, CK91, CKM22, GE95a, LGC+14, XQ08, GE95b]. **Division** [BDD13]. **Divisor** [DB20, NV23]. **Do** [DI19]. **Domain** [CM92a, CG92, Hem95, LS17, MS99, Par99, PGVR98, SZ99, SST05, TT99, Özg91]. **Domain-Based** [SZ99]. **Domains** [GLS12]. **Dominance** [LM98b, Wal95]. **Dominant** [AB19b, CGV03, CESC20, CNG23, DDY14a, DDY14b, DIKMI18, For96, Li02, LZ05b, MTV10, Mat09, NV94, RS08, SWYM96, ST14, Ye09]. **Dominated** [LG06, Mor22]. **Dooren** [ADHM19]. **Double** [BFM03, BB18, HHLW13, JKM11]. **Double-Curl** [HHLW13]. **Doubling** [CCG+09, GIM08, GL10, LwCKL13, LX06, MP12, gWcWL12]. **Doubly** [Fie95, GITT96, Tis03, YBZC16]. **Downdating** [BPE94, CP98, EP94, EGK91, GE95c, LLZ09, LZ05a, PE95, Sun95a]. **Downsizing** [MTV10]. **Downweighted** [AHN21]. **DQDS** [AMMS08, NAY12]. **Drazin** [CCS05, CGRVC08, HLW05, Wei96, WLB05, XSW10]. **Drift** [Mas16]. **Dropping** [Nap13]. **DSTU** [PM06]. **Dual** [GL23, Mal04, Pil94, SB88, Zha01, Per88]. **Duality** [MH95, OW88]. **Dulmage** [AL98a, IM95]. **Dynamic** [ADLK01, AP94, BRR00, LT97, OS09, OYV22, RBB90, Tan94]. **Dynamical** [BG19b, DSZ14, FL18, FL19, GAB08, HS23, HMP94, KL07, KL10, LRSV13]. **Dynamics** [Art96, GL13, SWYM96].

**E-optimal** [NW02]. **Early** [BBM02b, KK07, Kre08, NAY12, SCMV21]. **Easily** [LQ16]. **Eckart** [VNVM14, Kol03, Lin11]. **Economic** [BMV18]. **Edge** [ABC+23, AB16b, BHS23]. **Effect** [CH93b, CYA+18, IW14, Kre08, Yse22]. **Effective** [BM99, BW99, COV17, Fit19, LRN06, Mar91, SS23, Tan99, XX17]. **Effects** [SvdVM00]. **Efficient** [AG19, Bar98, BNP22, BDG20, BMSV92, BN05, BMP20, CGS98, CGGS99, Cha00, CH97, DW06, Day97, DK05, EMC17, FGS14b, GL03, GNP94, GE94, Gu98c, GOS15, KS22a, KNW20, LHC16, LGWX12, MSKC21, RG05, RDC93, SYJ00, SX11, TV09, TETA05, XHC21, YGL18]. **Efficiently** [EM15]. **Ehrlich** [BGT05b]. **Eidson** [HN90]. **Eigencurves** [Uhl20]. **Eigendecomposition** [HHLW13]. **Eigendecompositions** [AB05, DK06]. **Eigenpair** [WZ17]. **Eigenpairs** [CE94, CNG23, Eff13, FP20, JWN18, KM11, KM14, SAGS21, HL06]. **Eigenpolynomials**

[Men99]. **Eigenproblem** [Bai05, BJ16, CD15, DHT01, DMM03, GE94, GGbCC03, HB94, Pai19, RBB90, gS96, GE95b]. **Eigenproblems** [AGP19, AA19, Auc91, GLS94, GL05, Gui99, HLT08, Jia95, SK16, Ste01, Ste02, Tas15a, ZS07]. **Eigensensitivity** [DS23]. **Eigensolver** [BDG15, BC22, HHLW13, TP14, XXC14, YXC+17]. **Eigensolvers** [KN09, NZ16, Tis01b]. **Eigenspace** [EVD22, Li98b, NS94, XK94]. **Eigenspaces** [CZ03]. **Eigenstructure** [CKL04, DQV22a, Mim00, NK01, TDV15]. **Eigensystem** [Mat95a, MSKC21]. **Eigensystems** [LS07]. **Eigenvalue** [AA94, Ano11, AM23, AHS00, AB19a, AD98, AL95, BDY99, BS05, BL12, BL13, BLL22, BR19, Bar93a, BESS22, BF00, BFS21, BMS06, Bet09, BT10b, BB98, BH13, BD90, BGT05b, BEGG07, BBGF00, Bol90, Bor10, BKMS14, BKMS15, BEGM05, BGBM92, BW93, CZBL18, Cha00, CPZ11, CKL04, CG06, CKP11, DBW15, DW06, DG91c, DD10, DLM04, DW15, DD14, DYY16, DK08a, Eff13, EGGR99, EW13, Emb09, FGL21, FFH+19, Fri92, GHW99, GITT96, GT17, GA18, GKL18, GK06, GT02, GR93, Gru06, GKL97, GHT09, GL10, GZ13, HB12, HH98, HP02, HKP05, HMP19, HGL05, HLQ09, Ips06, Ips09, IM16, JKM11, JMM14, Ji92, Jia22a, JS04, JLS01, KMMM18, KKT06, Kar10, KKM14, Kau93, Kau06, KKSZ22, Kir92, Kni04, KLV18, KW92, KLX07, LZ14, LX09, LC15a, LVV16]. **Eigenvalue** [Li98a, LNTX11, LNTX13, LM03, LKK97, LE02, MV97, Mac95, MMMM06a, MV17, Mat98, Mee09, Meh04, MBN17, Miy14, MMH94, Mor21, NOZ11, NQZ10, Ors06, PM06, Ple00, Ple06, QACT13, QCCT17, RJ21, RSS09, RW01, Saa16, See11, SCBG05, SHY10, Sid95, SvdV96, SY98, SW94, SB11, Tis01a, TH01, Tis03, Tro90, VMM15, VGV09, Voo12, VYH11, WZ95, WE91, Wat93, WE94, WS00, fX96, Xue96, XE12, YGM09, YBZC16, ZS14, Zen16, ZZ98a, ZWF05, Zha10a, ZXL14, ZSYJ18, ZYSY20, ZBJ15, ZL23, ZZTA02, All89, GIMT95, Ove88, San88, Tre88a, Tre89]. **Eigenvalue-Based** [ZYSY20]. **Eigenvalues** [AS93, AAB10, ACL93, AT98, Axe92, BNS13, BS96, BGH07, BS16, Cao09, CFJKS13, CHZ16, Chu95, wC03, CZ03, CGS94, CDN14, CW96, DGMR00, DPP13, DH97, DK08b, Ede88, EI98, Elm97, EW13, EM15, FL02, Far16, Fer98, FG94, GN03, GM00, Guo98, HO94, Har99, HDT10, HN22, HC15, Hua21, HL02, IN09, JH02, KKM14, Koe05, KPM09, KW94, Kui00, LNV92, LGC08, LPS08, LY91, Mal06, MR97, MS10, MV21, Mel99, Mel04, MYK14, MBN17, Miy14, MBO97, Nab00, Naj98, NQB14, NS09, NST15, OW92, OW95, Peñ01, Peñ05, Pes14, QACT13, QCT15, QCT16, RS96, Ral09, Ral11, RVA05, RI11, Roh93, RST18, Rum22, SHJ09, SM16, SMM20, Ste91b, Tru06, Uhl20, Wal03, Wat00, Wil08, Ye09, Zha05, vDHvdV00, Auc89, HM89, Sun89]. **Eigenvector** [BLL22, CZBL18, CJMU22, Del97, EGGR99, Fer97, GR93, Gru06, Har98, JS04, Lat95b, Lu20, Mat97a, Men99, PDF16, Stu89]. **Eigenvector-Dependent** [BLL22, CZBL18]. **Eigenvector-Eigenvalue** [EGGR99]. **Eigenvectors** [AMS07, ACL93, AT98, BG19b, BdTD11, DP04, JK95b, Kuz15, Mor95, MRU22, Pes14, Pow88, QACT13, QCT15, Rum22, PSL90]. **Either** [Ito96, ZvSD20]. **Elasticity** [KNOX02, KNX04, CS89]. **Electrical** [HV05]. **Element** [ACST09, Beb06, HLM23, RW94, RP10, ST08, Ten97]. **Elementary** [BTV03, DB20, JOvdD01, JOvdD04]. **Elements** [BW95, FSZ14, Tam98]. **Elementwise** [ABN09]. **Elimination** [BZ98, BDD13, BS90, CH99, DGL99, EL05, EL08, Fos94, Gar09, GP93, GT04, GL93, GG03, Gou91, Gov91a, GGC09, HP09,

Hig90a, KU13, Liu90, QXX14, TS90, YC97, HH89]. **Ellipses** [EW20]. **Ellipsoid** [CG10, SCPW12]. **Ellipsoid-Constrained** [CG10]. **Ellipsoids** [DN11]. **Elliptic** [ACST09, Beb06, CDGS10, GKL18, Gre92, GV99, Gre99, HHRV99, HL23, MS97, PS04, KCT90]. **elliptical** [LT89]. **Elman** [BGT05a]. **Embedded** [Bry17]. **Embedding** [QCCT17, ZL23, BV88]. **Embeddings** [BKW22, BGH07, GM00, INRZ21]. **Empirical** [DS18]. **EMS** [Lat95a]. **Enclosure** [Miy14]. **Enclosures** [DN11, FH20]. **Endpoint** [Bry17]. **Energy** [HV19]. **Enhanced** [EEK99, RCH08]. **Enhancing** [AB16b]. **Enlarged** [GMN16]. **Enough** [HN22]. **Ensemble** [CES22, KMN11, JH88]. **Entanglement** [NQB14]. **Entries** [Chu95, DK99, DK01, Har99, Zha05, JOvdD89]. **Entropy** [BW95, Le 96]. **Entrywise** [TVW15]. **Envelope** [GP97]. **Environment** [DG91b, DG91c]. **EP** [MR18]. **Episodic** [HN97]. **Epsilon** [SŠ91, Yan20, ZŠ94]. **Epsilon-Alternating** [Yan20]. **Equality** [CH99, FM93a, GS10a, HS88, LGI21, LJW22, So92, ZH03, Zha04]. **Equality-Constrained** [FM93a]. **Equation** [AGL98, BGK+18, BGSC07, BM96, BIP08, Bor03, Che01b, DL92, FP17, Guo01a, GH07b, GIM08, GKL12, HK01, Ho90, Kåg94, KB90, KO15, LŠ10, Li99, LBL05, LgS02, LXSdH20, LLZ23, LB02, Lu05, MOR16, MX09, MP11, OL99, yPWjP12, RN18, SC03, Sta02, Sun04, TV09, Tsu93, Wim92, XZC99, de 92, BHH88, BC88, KP92, Özg91, Sch95a, Tsa94]. **Equations** [AEGL19, AB19b, BWQ06, BD05, BMM20, BK95, BT92, Bra98, BGMN15, CGRV20, CI95b, CS98, CG03b, CGS+08, Che01a, CHH+15, CCG+09, CFL07, CH97, CGI10, CR10, DTGVL05, DK15, DSSC11, DLMT13, EGTP17, ESR01, EK17, Ern00, FAT16, FHS09, Gar90, GHR21, GKK99, GH07a, GV99, Gre99, Gu98c, Guo98, GL00b, GL00a, Guo01b, HNRS22, HHRV99, Han94, Hla23, HS95a, HP92b, HM97, HO92, HDSC23, Jou92, JL98, JOAKt10, KP99, LHHR95, LW02b, LwCKL13, Lim07, LX06, lLNS17, LNT18, LX12, LW20b, LY91, MPR18, MT15, Mor00, Neu00, Pai19, PR12, Pop15, PPLG20, RW94, RRR06, RDC93, Roh03, RP10, Sch95b, SS13, SWZ11, Sim16, SH23, SS17, gS98b, VV10, VD21, VKDD21, Vav92, gWcWL12, Wri95, XCGL10, ZHZ05, von93, BMO92, GL96, Wim88b]. **Equilibria** [WSSL06]. **Equilibrium** [BL02, DD10, DK08a, Mar91, PW90, Vav94]. **Equivalence** [HLT91, HLM94, IIM94, Tho94, HRS88]. **Equivalences** [GPTPV16]. **Equivalent** [Kni00, LN22, WE89]. **Ergodicity** [AG00, Art03, Ger92, IS11]. **Erratum** [Ano11, CH93a, CRS01, EDK16, HC89b, JOvdD04, LNTX13, PU14]. **Error** [Ari00, AB01, AMR+18, Bar93a, Bar93b, BEBT07, Bor10, BCW12, CP03a, CH93b, CL09, CGMM22, CH23b, CYA+18, DH93, DMR09, DMM08, EGTP17, EMC17, EOS19a, EOS19c, EOS19b, FKLR13, Gow96, GJTP12, Gul95, HL08, HG18, Hal20, Hig90a, HH92, HH98, HLT08, IZ20, JR13, JTP10, KA10, KMN11, LW02a, LC15a, LVV16, LEMCD19, LMC22, LPT10, MM11, Mas16, MO20, PP05b, RBB90, RJ14, Rum22, Ste05, Ste06, gS00a, Urs21, Van10, Var94, WY17, ZZS02, ZK17, ADD89, CM89, CM92b, Tsa94, VV89]. **Error-Controlled** [MM11]. **Errors** [AA09, BKMS14, BKMS15, CGGS99, CGSS01, DM04, MV21, Rum15, SvdVM00, gS98a, Tis03, XW07]. **Errors-in-Variables** [CGGS99, CGSS01]. **ESPRIT** [AC18, Par94]. **Essentially** [SGX14]. **Estimate** [BGT05a, CP03a, CH93b, GJTP12, KMN11]. **Estimates** [AL95, BKK07, Bol90, DMR09, FKLR13, Gru06, GKL95, GKL97, Kni04, LW02a,

Lat95a, SHY10, Urs21, Var94, Zul11, KL89]. **Estimating** [Bol90, Del97, Gre97, Gu00, GMO+06, HIS23, JTP10, KW92, LC15b, SK20, SW97, SG21, TV09]. **Estimation** [AMH09, BL21, BLL22, BEBT07, Bis90, BLP90, BKK07, BK21, CS01, CGGS98, CH23a, FSS21, GTP18, HL08, HT00, KLR98, LX09, Mat95b, Men08, MSM21, Par94, PCK22, PP92, PS22, SB92, SES95, Tan94, UCS17, Woź93, XK94, YLA97, Pea88]. **Estimators** [TT14, KP92]. **Euclidean** [BJ95, Bry17, DS17, Drm00b, EOS19a, GHHW90, HN98, Lau00, Par99, Qi13, Xie23]. **Euclidean-Norm** [EOS19a]. **Euler** [BL91]. **Evaluating** [GTJ13, Hig01, MP88]. **Evaluation** [WLMD19, BN88]. **Even** [BFS21, Mel01, Mel04, Yse22, BFS21]. **Even-IRA** [BFS21]. **Even-Mode** [LF02b]. **Even-Odd** [Mel01]. **Events** [EHW10]. **Eventually** [JS07]. **Every** [Ito96]. **Evolution** [Tre90]. **Evolutionary** [WZZ22]. **Evolving** [DL03, FH17, Saa16]. **Exact** [AW10, BGT14, Emb09, GK15, GGC09, HK01, HI15, LEMCD19, OSS14, RK95, ZZLY02]. **Exactly** [LMC22]. **Exactness** [Sch05]. **Exchanges** [Wat98]. **Exclusion** [HL02, Peñ05, SHJ09]. **Executed** [MSZ15]. **Exhibit** [HV19]. **Existence** [BB95, ED22, FMX02, HQ16, Lat95a, ZWF05, Gad88]. **Exit** [GN13]. **Expansion** [BRR00, MV23, Rau02a, Rau02b, Vac94]. **Expansion-Contraction** [BRR00, MV23]. **Expansions** [DM05, HR93, HKG09, Jia22a, SM16]. **Expectation** [Fuh07]. **Expectation-Maximization** [Fuh07]. **Expected** [EHW10]. **Experimental** [LP13]. **Explained** [EM00]. **Explanatory** [CH93b]. **Explicit** [KK12, Kuz15, MX09, MBN17, Pop12, ST01, Ste91a, Wel11, Wim92, XPL+18]. **Exploitation** [HKBM08]. **Exploiting** [EL92]. **Exploring** [FT16]. **Exponent** [Han03, Mor22]. **Exponential** [ASA04, AMH09, AMH10, AH14, BBS15, De 11, Elt92, FH19, FH20, GG14, GN16, Hig05, KL98a, KL18, LNT18, NS11, Nov11, PS08, So92, SW91, SD12, WZZH21, ZMK02]. **Exponentials** [GED22, SGX14, WY17, Ber88]. **Exponents** [DL03]. **Expressed** [LP17]. **Expression** [XPL+18]. **Expressions** [CHW10, TL06]. **Extended** [BM19, CGRV20, DK98, MNR15, MV14, MP95a, QL99, ZF13]. **Extension** [BB96, BvdMR+97, Bom00, Jia01, Kol03, MSS19, Pál11, Tre90, Zhe96, Zhe98]. **Extensions** [CGL18, FR23, HN90, JMW96, Bar89]. **External** [SZK95]. **Extrema** [Nie10]. **Extremal** [GZ09, GL13, GKL14, HLW94, KW94, TL06, Wim88a, Zha05, HPR89]. **Extremality** [GWZ05, JP09]. **Extreme** [BGN12, CHLW23, DK08b, LC15b, LT94a, Mel99, Nie10, ZSYJ18, vDHvdV00]. **Extrinsic** [FL19]. **Eye** [LM06a].

**Facial** [LP96]. **Factor** [BHR10, CS10b, DD13a, DT11, Gem98, GGL04, Li95, NNF14, SDC+12, SdA10, Wat92a, BK89, Zab89]. **Factored** [BS02a, BS02b]. **Factoring** [CB90, Gil13, JP94]. **Factorisations** [CI94]. **Factorization** [AP02, Ari00, AL95, BBD+14, BF11, BFM03, Bér09, BHP03, BMMT10, CKRU08, CPS97, CH98, CSEP21, Cle00, CH23b, DDY14a, DD97, DH99, DH01, DH05, DGGX15, DPP22, DGSW06, DOV94, DT11, EL92, FH21, FP16, GP93, GH91, GT04, GTW00, GNP94, GSS96, GO95, GK15, GR23, GD22, GMRS00, GDX11, Gul95, Guo01b, Gup02, HY01, HJOvdD93, HHP21, HT17, IUM14, JMM14, JTZ20, JOvdD01, JOvdD04, JP93, KDGG13, KP08, LH22, LRG23, Le 19, LRN06, LGWX12, Liu90, LEMCD19, LN14, MV13, Miz22, NS18, NP96, NR99, OV99, Ogi10, PK93, PK94, PN18, PN23, PM06, PW14b, PL97, PSW22, QXX14, RR94, RODS15, SYJ00, SV97, SV05, VP93,

WLMD19, Woź93, WT11, XXC14, XG10, XX17, XBC22, XQ08, Zha01, ZFW07, BBDS95, CH88, DY90, Liu88, Naz89]. **Factorizations** [ADGH18, ANT09, Bez12, BCMM95, CS10a, CMPX03, CK12, DK00, DN11, DM05, EJ23, EMC17, rFO06, Fos03, JMPR19, KK21, LC05, LMC22, MMT05, MW01, Nap13, Ogi10, RJ14, STvDD17, SMBJS13, SB92, Ste93a, WL12, CF89, JOvdD89, Wri97]. **Factorized** [KY93, MNR18]. **Factors** [GL93, dMGF14, LS03, Li05, LB96, PMT23, PR01, SST06, Woź93, ZZS02, ZZS04, HH89]. **Fail** [Emb09, Fos94]. **Failures** [EM00]. **Falk** [SH91a]. **Families** [GWZ05, GZ09, Mai99]. **Family** [GdlI08, Ian09, KMS01, KMS03, Mae98]. **Fan** [FHLS13, LM98b]. **Far** [Rum15]. **Farenick** [Ikr97]. **Fast** [AP94, AMVW15, AMR+18, BB08, BDSC11, BIS12, BES15, BBD+16, BOCL97, BBTK08, BL94, BEG+09, BEGG07, BIP08, BK95, CNX22, CS98, CG03b, CDG+05, CGP06, CDG+07, CRY+21, Di 09, DV08c, DV08d, FGK+22, GIG22, GR17a, GS03, Gu98b, GMO+06, GO11, GGO13, HB12, HP09, HR00, HR04, HG14, HLQ09, HHLW13, JNP21, JMPR19, KKSZ22, KS17, KL18, LX09, Law13, LHC16, LW20b, Lu94, Lu95, Mar11b, MLV00, MTV10, Mit21, Miy14, Mön11, Mor22, NRT92a, NP02, OST09, PK93, PK94, PP92, PPLG20, Rei91, Rod06, STvDD17, SCBC21, SB03, Ten97, UCS17, VS14, VP93, XXC14, XXCB15, XK94, XE12, YXC+17, ZFW07, ZLN10, ZZ98b]. **Faster** [AB13, ACW17, BJMS17, Nec19, Not05]. **FastMap** [Ost10]. **Fat** [HHC03]. **Fault** [BBGL92]. **Fausett** [Zha95]. **FE** [BGK+18]. **Feasibility** [AM09, CE02, FM93b]. **Feasible** [Krä19, LH22]. **FEAST** [TP14]. **Features** [NSCS10]. **Feedback** [BGMN92, CCH98, CMT09, KLX04, RE13, Yan93, Zab89]. **FEM** [GSCS15, KA10]. **Fenchel** [Zha10b]. **Few** [EW13, GVK20, LC15b, STT17]. **Fewer** [INRZ21]. **Fiber** [Kau06, SD19]. **Fiedler** [AB18, BdTD11, DDM10, NP16]. **Fiedler-comrade** [NP16]. **Field** [BLL22, LWWY14, LM18, RW01, YGM09]. **Fields** [Fay95, LO20, SZH22]. **Fifty** [EJ23]. **Fike** [wC03]. **Fill** [BFM03, HP09, ZFW07]. **Fill-In** [BFM03]. **Filter** [CMPX03, GRT07, GW00, HM04a, KMN11, SCA12, DB88]. **Filtered** [BKS08, Saa06]. **Filtering** [ET10, MBM08, dKV10, KCT90]. **Filters** [Sor92]. **Finding** [BBTT06, BBTK08, Bor14, CG15a, DYY16, FGL21, Fei94, GPS90, GZ09, HLM23, LNP93, LGL16, NQZ10, OW96, Pil94, SD12]. **Finer** [ZZTA02]. **Finite** [ACST09, BF11, BLW15, Beb06, BHKR11, BvdMR+97, CP03b, CD15, CT93, DHST05, GIKT95, HK95, JL23, LF02a, PP11, RW94, Rog05, RP10, ST08, Sil03, Ten97, GS92]. **Finite-Dimensional** [BvdMR+97]. **Finite-Element** [ACST09, ST08]. **Finite-Precision** [PP11]. **Finite-state** [BHKR11]. **Finitely** [GI96, GI97]. **Finiteness** [BTV03]. **First** [DA05, DIS15, Hem95, KN99, Lu10, OA23, SM16, SMM20, WZZ22, dBG08]. **First-Order** [DIS15, Hem95, Lu10, OA23, WZZ22, dBG08]. **Fischer** [Zha04]. **Fisher** [BV07, LH05, VJ07]. **Fitting** [EGK91, SCPW12, Wat01, GBCW89]. **Five** [MV88, TS99]. **Five-diagonal** [MV88]. **Five-Point** [TS99]. **Fixed** [AGQS22, BS10, DH22, DD08, DDD20, Hal22, HNT99, LRG23, MA20, SSR20, YGL18, Zab91]. **Fixed-Accuracy** [Hal22]. **Fixed-Point** [DH22, SSR20]. **Fixed-Precision** [YGL18]. **Fixed-Rank** [MA20]. **Fixing** [Hel00]. **Flat** [BU21]. **Fletcher** [YBZC16]. **Flexible** [CGLV11]. **Flipped** [MP21]. **Floating** [DJ00, JR13, Tis01a, Rum91]. **Floating-Point** [DJ00, JR13, Rum91]. **FLOPs** [LN14]. **Flow** [AL98a, BL02, KN09, Lag91]. **Flows** [DRTW91, KLS16, LX12, Mat05, Uhl20,

WE90, WE89]. **Fluid** [CGS94, DLLT22, LX12]. **Focused** [BBM02a]. **Foley** [ZLN10]. **Following** [LM18]. **FOM** [FLS20, Meu11, Meu17]. **Form** [Bea01, BT12, BT13, BDG20, Gei91, GL03, GK06, IT11, Lu05, Pai09, Par92, SC05, Ste11a, Ste13, VVM05, de 90, Hon89, WW08, LK95, Mur91, Mur93]. **formal** [Tre88b]. **Format** [ABM21, DK13, EDK16, Krä19, LC15b]. **Formats** [MK20]. **Forms** [Ain17, BD93, Cao09, COV17, EM00, GG02, GITT96, KMP01, LS11, Mai99, Meh99, NTTZ18, Nie10, RODS15, SZK95, TMV18, TU91, Zha10b, LT89]. **Formula** [AG91a, BI99, CFG98, MBN17, Nof17, ST01, Tro90, ZZLY02]. **Formulae** [Ste91a]. **Formulas** [Sch95b, Wel11]. **Formulation** [CFG97, DS18, PS04, RPG96, VZ91]. **Formulations** [FH17]. **Forward** [PL93, Wat95]. **Found** [Kui00]. **Four** [BZ00]. **Four-Coefficient** [BZ00]. **Fourier** [BIS12, BDGY20, CM03, DL17a, He21, HHC03, HK12, Kuz15, Pul13]. **Fraction** [BL00]. **Fraction-Free** [BL00]. **Fractional** [BBTT06, HL11, HL13, IM13, KNW20, lLNS17, PPLG20]. **Framelet** [HM04a]. **Frames** [BD22]. **Framework** [ABMV20, CSEP21, GGLN13, Gut14, He21, HPZ23, Jia22b, KBHH13, RVV17, VD21, VKDD21, XZ22]. **Fréchet** [AMH09, AMHL22, GL17, HL13, HR14, KL98a, Nof17]. **Free** [BL00, EMC17, HL21, LEMCD19, LMC22, OA23, RY05]. **Frequency** [BB20, PGVR98, SES95, LXSdH20, MP88]. **Frobenius** [CHLW23, CK20, DG19, GTH19a, GTH19b, GGMO17, HNT99, NNF14, YY10, YY11]. **Frobenius-Norm** [GGMO17]. **Full** [BD10, DD07, Grc10, TP22]. **Full-Rank** [TP22]. **Fully** [ADLK01, MP95b]. **Fulton** [Zha95]. **Function** [AH14, BD98a, Bar94, BHM97, CGMM22, CGMM23, CS10b, FHI15, FN04, FP16, Gow96, Gro98, Han03, KL91, KL92, Le 19, Lie08, LWW15, LW94, Nof17, NNPQ23, Sch23, WLD18, OW88]. **Function-GA** [Le 19]. **Functional** [BKS08, Le 96, LWWY14, Mei04]. **functionals** [Per88]. **Functions** [ALAK94, AB16a, AB18, ACL93, AH16, ABF16, AD21, Auj00, AABK19, AHH01, BIS12, BKS18, BS15, BV00, BH08, BD05, BZ00, CH94, CKM22, DH03, DMS09, DMS12, DMR09, DK98, EEG11, FKLR13, FGS14a, FGS14b, FLSS17, FLS20, FSS21, GTJ13, GG14, GMRS00, GS21, GS23, HK08, HMMT05, HR14, HL21, JRZ99, KB93, KO14, Kra95, KH13, LMZ03, Le 19, LS01, MR22, MNT10, Mat93a, Mat95b, Mat96, MYK14, MS18, PP05a, PK23, PT18, QY04, QCT15, QCT16, RST01, Sen06, Ser96, VFGM05, BN88, GBCW89, KL89]. **Fundamental** [Bar00a, Hey95, HO98, ST01]. **Fundamental/Group** [ST01]. **Further** [Djo08, YY10, YY11, Zhe96, Zhe98]. **Fuzzy** [GLP01].

**G** [LLZ23]. **G.** [KO05]. **GA** [Le 19]. **Galerkin** [PU14, CG96, EU10, PU10]. **Galton** [HM20]. **Game** [MOC91, Tro90]. **Games** [Mar91, RE13]. **Gap** [BD09, DI19]. **Gaps** [DP04, HSC04]. **Gauss** [CRY+21, FMRR13, Kau92, MNR15, PTC13, SB03]. **Gaussian** [AW10, AW05, BT10a, BZ98, BS90, CD05, DGL99, Fos94, FM93b, Gar09, Gou91, Gov91b, GGC09, HH89, Hig90a, Le 19, LF02a, SCBC21, TS90, WA07, Wan15, Xu15, YC97]. **GCDs** [BL00]. **GCR** [JRG09]. **Gene** [Mol92]. **General** [AC18, BAMC20, CSX15, CL17, Cao08, CK00, DS19, Gei91, GIKT95, GSV00, JOAKt10, Lu10, MS02, MPS01, NY95, SZ99, SWZ11, TT99, XX17, Zha04, ZXS21, CLS88, DY90]. **Generalization** [Ben09, EM10, Fay95, HPS15, JDS03, VW12, Zhe96, Zhe98]. **Generalizations** [DV92a, LM98b, Tis93]. **Generalized**

[ASA04, AGP19, AB18, Ari13, ABF16, AG00, AABK19, AV91, BD22, Ben99, BNP22, BG04, BG15, BMS06, Bet09, BB98, BD05, BD90, BJMS17, BEGM05, BdTD11, BJ16, CGLV11, CS96b, Cha00, Che98, CL09, CFG97, CG98b, CG06, CFL07, CHZ03, CLG93, CHMW20, CS96c, CHLS00, CDH12, DBW15, DHT01, DDV04, De 94b, DK05, DHST05, DW15, Djo08, DG19, DD14, EW13, Fie95, FF99, FH93, Fri05, FT07, GS94, GLS94, GOS15, HL08, He21, HH98, HMT10, HPS15, HMP19, HJP03, Hua21, IM16, Jia95, JN21, JC22b, Kåg94, KC94, Kau93, KGD23, KN98, KM14, KH13, KM96, LP89, Law13, LGC08, LM98a, Li93, Li02, LNTX11, LNTX13, Lu95, Lu98a, Meh04, Mim00, Miy14, MN97, Mor22, ND06, Nof17, PAP00, PP05a, PP05b, Sen06, SHS03, SV00, Sun95b]. **Generalized** [SW98, gS00a, TY02, Tis01a, Uhl18, VGV09, WE94, Xu15, XPL+18, XNB22, XE12, ZMK02, ZHZ05, ZLN10, CJL96a, GBCW89, VV89]. **Generalizing** [DTGVL05]. **Generate** [JOvdD03]. **Generated** [IZ04, Tre88a]. **Generating** [AKP08, HHP21, Ser96, vdMS05]. **Generators** [Pil94]. **Generic** [CO12, COV14, Cho10, DD08, DD16, DDD20, DL15, Ste08, SD09, VNVM14, WC14, IM95]. **Geodesically** [MSM21]. **Geodesics** [Bry17, MA20, TP23]. **Geometric** [AFPA07, BD93, BS10, CR16, CF00, DQ02, De 18, DL02, EEK97, EEK99, FI18, FL18, JK95b, KN09, Krä19, Lim13, Moa05, ML89, MGS20, NQB14, Xie23, XNB22, ZPW18]. **Geometries** [TP22]. **Geometry** [BDD13, BF06, EAS98, FL19, Lin19, MA20, QCL16]. **GI** [LLZ23]. **GI/G/1** [LLZ23]. **GI/G/1-Type** [LLZ23]. **Ginibre** [CES22]. **Give** [Nie10]. **Given** [BHH+08, CPTP09a, HP09, Næv93, Peñ95, Whi00, fX96, YB91, dF05, BN88, HPR89]. **Givens** [DV08b, GO95]. **Givens-Weight** [DV08b]. **Global** [AIM22, BBT05, BBTT06, BBTK08, BM01, CG03a, Drm10, FP98, Gow96, Har19, Men18, WC14, WCY15, WZL21, Yan20]. **Globality** [Mit21]. **Globally** [Auc91, LUC18]. **Glued** [PV09]. **GMRES** [AGJ14, BJM05, BGT05a, BR08, Ble21, BW97, CG15b, ES12, FLT13, GSTPT22, GPS96, HYI10, JC22a, JRG09, Kni00, KS20, Lie00, LS04, Meu11, Meu17, Mor95, Mor00, MH15, MR18, NRT92b, PRS06, RY05, SS19, SEM13, TM12, Toh97, YXS21]. **GMRES-Equivalent** [Kni00]. **Goal** [BvdG11]. **Goal-Oriented** [BvdG11]. **Gohberg** [AG91a]. **Golden** [Lim07]. **Golub** [Ari13, HPS15, Mol92]. **Good** [MMMM06a]. **Google** [WW08, LM06a, SC05, WI09]. **GP** [MR18]. **GPMR** [MO23]. **Grade** [DDD20]. **Graded** [Li05]. **Gradient** [AV91, BM00, BES98, BG06b, CFT16, Car18, CYA+18, DFT92, EG00, FAT16, GRT07, GMN16, Hal20, HS10, JX20, KL08, KN09, LW20a, LUC23, LH05, MMH94, NOZ11, SH23, YBZC16, GS92]. **Gradient-Based** [LUC23]. **Gradients** [CG03a, GTPTI14]. **Gram** [PRS06, Bar19, BP92, CLR21, Di 09, GGL04, GMRS00, HI15, Ste05]. **Graph** [AEGL19, AR93, AL98a, BSS13, BGH+06, BHH+08, Bor09, DS23, FT14, Fit19, FV98, FC01, GPS90, GHN18, GMS90, GM00, GW22, KA07, MP12, PV17, Van08, dF05, vdWM95]. **Graph-Theoretic** [vdWM95]. **Graphs** [BJL98, DMW23, Fie00, FT16, GTJ13, KN99, Lew91, Peñ98, SS23, PSL90, Pow88]. **Grassman** [Mac99]. **Grassmann** [BBBT20, CDH12, ES09, LE02, QZL05, XPL+18, XNB22]. **Grassmannian** [LWY19]. **Greatest** [NV23]. **Greedy** [ABM+17, CB00, MHG17, NR99]. **Green** [HK08, Nab01]. **Greville** [ZZLY02]. **Grid** [DFT92, PV17, XZ22]. **Grids** [AC18, BHL+93, RW94]. **Gröbner** [BDD14]. **Ground** [Bar08]. **Ground-Based** [Bar08]. **Group** [BT06, BAMC20, DS17, DJ09,

FKZ23, GdlI08, Jia98, JTZ20, Kir95, KNS97, KN98, Lew96, Moa02, ST01]. **Groups** [DL03, HMMT04, HMMT05]. **Growth** [BZ98, DT11, Gou91, HHP21, KNX04, KMS01, KMS03, PMT23, Ran07, SST06, HH89]. **Growth-Factor** [DT11]. **GSVD** [EW20, JL23, WXZ16]. **GTH** [OW96, Sen98]. **Guarantee** [FM93b]. **Guarantees** [ED22, WCCL16]. **guide** [AdHN88]. **Guyan** [BB96]. **Gyroscopic** [JW11].

**H** [KZ10, Mol92]. **Hadamard** [BZ07, BG13, CDP94, DMS09, DMS12, FM88, GG02, HM90, MS91, Mat93b, MP98, Sen06, WZ95, Zha97, ZY93]. **Hall** [BS94b]. **Halley** [NBG10]. **Hamilton** [Mac95]. **Hamiltonian** [ABK+11, AM23, BBMX02, CKO+22, FGL21, GHR21, JL98, KMP01, Kre05, LW97, Meh99, MMS16, MMW18, MV20, MV21, PLM94, Tis01b, ZHZ05, vdMRR01]. **Hamiltonian-like** [JL98]. **Hamiltonian/Hamiltonian** [BBMX02, Meh99]. **Hand** [AIM22, GRT07, HPS13, HPS16, KS92, MB10]. **Hankel** [Bez12, CM93, FPST13, GP03, HH93, HR04, MVP05, NY19, PK94]. **Hard** [GG11, HO10, RK95]. **Hardness** [LRG23]. **Harmonic** [VD21, VKDD21, Wu17]. **Hartley** [BF93, HR00]. **Hartwig** [BV07, LH05, VJ07]. **Having** [CMPX03, Har99]. **Heisenberg** [CRR93, Per88]. **Helmholtz** [LXSdH20, OL99, RN18]. **her** [GKRV90]. **Hermite** [ASA04, BFZ07, CJL96a, CJL96b, Kuz15, LHHR95, Per88]. **Hermite-type** [Kuz15]. **Hermitian** [LNTX13, AG88b, AKPP08, Ash91, BDY99, BGN03, Ben09, BS15, Bin90, BLAK91, BKMS14, BS16, BDF17, Cao00b, CE12, Cha89, CPS00, Chu95, DHST05, DPP13, DH97, ENV92, ESS+12, FNS08, Gro97, GHT10, GS21, HD97, HBW90a, HBW90b, Hon89, Huh02, IN09, JS04, Joh08, LN22, LT89, LM06b, LNTX11, MV97, Mat92, Mat98, Meh04, MMW17, MMW22, MYK14, MT00, NY20, Nie10, Pai10, PK93, Pha01, PR88, PR91, RSS09, RP10, Ser96, SB04, SK16, Ste91b, SH93, Tis93, Tre89, Tre94, Tru06, WZ95, Wim06, Yas03, YXC+17, ZZ98a, ZHZ05, dF05]. **Hermitian-Generalized** [ZHZ05]. **Hessenberg** [BEG+09, BDG20, BEGG07, BKK18, BGH95, DV07, GL03, GR17a, Kni04, PP11, Ste06, Stu91]. **Hessenberg-Triangular** [BKK18]. **Hessian** [CRY+21, Mön11]. **Heuristic** [GK15, Sal88]. **Heuristics** [AR93, NR99]. **Hidden** [MN97, ML89]. **Hierarchical** [ADGH18, CKM22, DHM19, EZ95, GD22, Gra10, Le 06, LRSV13, QXX14, XX16, Xia12]. **Hierarchically** [CGP06, HG14, LHC16, Mar11b, XC18]. **Hierarchies** [DK14]. **High** [AB19b, BB20, CNX22, DMM03, GL18, HLW94, LXSdH20, LM18, WLD18, WZZH21, Yse22, ZG01, JP94]. **High-Frequency** [BB20, LXSdH20]. **High-Order** [GL18]. **High-Performance** [WZZH21, JP94]. **Higher** [BFG23, BE03, CG03a, CGMZ21, DDV00b, De 08a, De 08b, DN08, DSD17, GLPS11, HR14, IAVD11, KGD23, KR02, Men08, PSW22, Sai16, SK20, SQ13, VGA10, VD21, VKDD21, Yse22, Zab89]. **Higher-Order** [BFG23, CG03a, DDV00b, De 08a, De 08b, DN08, DSD17, IAVD11, KGD23, KR02, SK20, VGA10, VKDD21, VD21, Zab89]. **Highly** [Men12]. **Hilbert** [Lu98a, Sta22]. **Hitting** [PCB16]. **HOID** [Sai16]. **Holdability** [NT08]. **Hölder** [KPM09, Wim88a]. **Holds** [GKL18]. **Hollow** [CFJKS13]. **Hollowization** [DF20]. **Homogeneous** [SQ13, von93]. **homotopies** [WBP89]. **Homotopy** [CHZ16, CLS88, DYY16, LKK97]. **Hopf** [Guo01b, MS10]. **Horizon** [OS09].

**Hottopixx** [Gil13, Miz22]. **Householder** [BKK18, CH23b, CB90, Dub00, GBCW89, RS88, Sha23b]. **Householder-Based** [BKK18]. **HSS** [CDG+07, LGWX12, XHC21]. **Hungarian** [HPTH19]. **Hurwitz** [WZ23]. **Hutch** [PCK22]. **Hybrid** [AGP19, BB20, Cav94, GRT07, HO94, LMPT20, MV23, NRT92b]. **Hyperbolic** [AH16, BHP03, CB90, DS17, GHT09, Par05, Ple06, RS88, SS98, SV05, PS88]. **hypercube** [CG90]. **Hyperrectangles** [Mön11]. **HZ** [Har19].

**Ice** [SW91]. **Ideal** [Toh97, Özg91]. **Idempotent** [Lew91, Pat00]. **Identifiability** [CO12, COV14, COV17, DDL14, GR23]. **Identification** [FPST13, FGM91, LV10, PGVR98, SH91b, Ver96, Vog99]. **Identity** [FHL23, Rie92, MP88]. **IDR** [GZ13]. **If** [HO10]. **II** [AMR+18, BL13, Bap89, BDMS12, BG19a, BBM02b, CJL96b, Car94, CM92b, De 08b, DG91c, DD13b, DV08d, EEK99, FLS20, Gut94, Ito96, KMS03, LLZ09, Li98b, Mur93, PL18, Rum03b, SDD15, VKDD21, YY11, ZZS04]. **II/III** [PL18]. **III** [DN08, PL18]. **Ill** [BGT14, ES12, Fos03, Kil99, KO01, NV02, PAP00, SS19, Zen19, dSL08, DK88, FGS96, Rum91]. **Ill-Conditioned** [NV02, PAP00, Zen19, FGS96, Rum91]. **Ill-Conditioning** [SS19]. **Ill-Posed** [BGT14, ES12, Kil99, KO01, Fos03, DK88]. **Ill-Posedness** [dSL08]. **ILU** [BW99]. **ILUs** [BS02b]. **ILUT** [SZ99]. **Image** [BBTK08, NNP04, RHE14, ZGP10]. **Images** [CR96]. **Imaginary** [MS10, Sch95a]. **Imaging** [BN06a, GMN18, HKBM08, KBHH13]. **Immanant** [CL99]. **Immitance** [BLAK91]. **Immitance-Type** [BLAK91]. **Implementation** [DW06, DDN20, Day97, GMS92, JNP21]. **Implementations** [Bér09, Fuh07]. **Implications** [LT97]. **Implicit** [DGSW06, DSSC11, FSV14, Jam92, MT15, MP91, PJM21, Sor92, SZK95]. **Implicit-Factorization** [DGSW06]. **Implicitly** [BF00, JK97, JN03, LS96, Leh01, Mor00, XE12]. **Imply** [EI98]. **Improve** [Swe93]. **Improved** [BT10a, BV90, BM19, BG13, BMMT10, DH93, DGR23, For03, GTP18, GHT10, Gup02, HL13, JR13, Nab00, PCK22, RJ14, SST05, SL12, Ste03]. **Improvement** [AL98a, LZ97, OS09, ZY93]. **Improving** [BBD+16, CD14, JMPR19]. **Inclusion** [BRR00, HL02, NW98, Peñ05, SHJ09]. **Incomplete** [AL95, BCMM95, BMMT10, CHMW20, DK00, HT17, LRN06, LS06, Nap13, WT11, XX17, Zha01, ZFW07]. **Incremental** [Bis90, BLP90, CT93, IO16, TT14, ZN21]. **Indefinite** [AGL98, BNW09, BBD+14, BHP03, BvdMR+97, CNX22, Cao02, CGS98, CH98, Cle00, DP05, DP07, FXG18, GMPS92, GS10b, HS14, IT06, JP93, KGW00, Meh04, NP23, RT93, RS02, RODS15, SZ07, SvdVM00, Tis04, Zha01, CH92, CH93a, JP94, Liu88]. **Independence** [Ste10a, Wan98b]. **Index** [ADHM19, BCN95, CC92, IT18, Kra95, KH13, RR08]. **Indexing** [VS14, ZZ99]. **Indices** [BFZ07, DDM10, DS10, PT18]. **INDSCAL** [DL15]. **Induced** [Bea01, GL05, SQ13]. **Induction** [SKP11]. **Inductive** [PS94]. **Inequalities** [AJRS13, Auj00, BSvdD95, Ber88, BK97, CL99, Dri06, GHR95, HLS97, HLM23, Li91, LM02, Mat92, MP98, Pop15, So92, Tam99, TFL11, WZ95, YL00, Zha97, Zha99, Zha04, ZQ10, CT88, GP88]. **Inequality** [BSS13, BD93, DGIM15, Fou18, GG02, GS10a, GLT96, HM90, LZ97, yPWjP12, Sch05, VBW98, ZY93, Sch95a]. **Inertia** [BS91, BS94a, CHW10, FGM91, HS90, Loe90, TU91, PR88]. **Inertia-Controlling** [FGM91].

**Inertia-Preserving** [BS91, BS94a]. **Inertial** [Wim06]. **Inertias** [CD98, Dan93]. **Inexact** [AGJ14, BMS06, BF05, FHS09, GL21, GTI11, GSTPT22, JR08, LM98a, LZ10, Not03, RSS09, SX11, XNB22, XZ22, XE10, XE12, vdES04]. **Infinite** [AM23, GLP01, GP04, JMM14, JC22a, KMS01, KMS03, Mae98, OS09, SA22, Wat00, vdMS05]. **Infinite-Horizon** [OS09]. **Infinity** [BET02, FH21]. **Infinity-Norm** [FH21]. **Inflation** [Stu88, Stu89]. **Influence** [DS23]. **Information** [BR05, DIS15, CT88]. **Inherited** [JOvdD89]. **Inner** [AV91, CGLV11, DS18, GSTPT22, HN09, IZ20, JR13, MH13b, MH15, Rod05, Sha23b, SX11, Wan98b, ZHY16, CF89]. **Inner-Iteration** [MH13b, MH15]. **inner-outer** [CF89]. **Input** [AD98, BMU94, LSM22, MX98, Mim15, HJ89, Meh88]. **input-output** [HJ89]. **Input-Tailored** [LSM22]. **Input/Bounded** [Cor93]. **Inputs** [AB19a, BOS16]. **Insights** [RS21, RST18]. **Instability** [HW98, HO98, Men18, PL93]. **Instances** [Lau00]. **Integer** [CG10, Lin11]. **Integral** [Che01a, HK08, LY91, Vav92, YXC+17]. **Integration** [DL02, LXSdH20]. **Integrators** [GG14, Nov11]. **interaction** [GBCW89]. **Interactions** [RST18]. **Interactive** [AIM22]. **Interface** [CM92a, GL99]. **Interior** [CH93c, FS01, KS22a, LV10, LP13, Més08, Wri95, FGS96, Wri97]. **Interior-Point** [LV10, Wri95, Wri97]. **Interlacing** [BO96, HP92a, HS95b, Tam99, dF05]. **Interleaved** [LRN06]. **Interpolants** [BL00, Law13, LC15a]. **Interpolation** [AT07, AABK19, BB12, DS18, DSZ14, FG15, GVV04, JSG15, MV97, Mit21, VZ06, MH95]. **Interpolation-Based** [BB12, Mit21]. **Interpolative** [XC20]. **Interpolatory** [Sai16]. **Interpretation** [FV98]. **Intersection** [BW95]. **Interval** [AM95, AM09, AM05, FM93b, Gar90, Gar09, GP04, HDT10, JR99, LF02a, Neu00, Pop15, RR98, Roh93, Roh94, RK95, RR96, Roh03, Zha05]. **Intervals** [HS90, Peñ05, SHJ09]. **Introduction** [MG92, NP99]. **Invariance** [DDL14, Lew96]. **Invariant** [ASVM04, AKPP08, BD98a, BER04, BKS08, BT10b, BHM97, BK06, DS20a, DHW92, DLT15, DLMT13, FMX02, GS03, GP16, HM90, KK14, Kre05, Miy14, PLM94, QZL05, RR08, Rod05, SS19, Sai19, VF00, VJ07, WLB05, Zab89, Zha99, dSV01, LT89]. **Invariants** [AJRS13, GPPT23]. **Inverse** [AH16, AHS00, Bai05, Beb06, BMS06, BS02a, BW93, CCS05, CGRVC08, Che01a, CLNW20, CG98a, CKL04, CC17, CHMW20, DBW15, DMS09, DMS12, DMS13, DLM04, EW13, FI18, FF99, FSZ14, FMFJ18, Fri92, FHS+94, GG02, GN13, GITT96, Gov91b, GTI11, Gre05, GHL03, GH06, HLW05, JS07, KM16, Kau92, KK12, KNW20, KOSvdD07, Kir95, KNS97, KN98, Kni04, KN91, KLX07, Lan07, LZ14, LGL16, LM03, Lu10, MMS94, MSZ03, MH13a, MS10, Meu92, NV94, Nab99, Ogi10, Ors06, PDF16, Pat00, RSS09, RW01, ST01, SW98, Tan99, TW00, Uhl18, Vec03, wVjBqJ11, Wan98b, Wei96, WLB05, fX96, XSW10, YBZC16, ZWF05, vD99, FM88, KY93]. **Inverses** [BMF05, BM02, BS02b, CLG93, Djo08, DG19, ES08, Elt92, HH93, HR00, JC22b, KM96, MNST96, SHS03, LP89]. **Inversion** [AK20, AK21, AHH01, BLNT13, BC10, CM93, GR17b, HH94, PK93, PK94, PW03, RS92, Ste91a, XXCB15, ZZ98b, CJL96a, DV06a]. **Invert** [AM23, FS10, HL06]. **Invertible** [WCW10]. **Inverting** [FP16]. **Involutory** [IZ04]. **Involving** [Ain17, AG91a, FF94, SD12, ZZ98b, Zha95]. **Ion** [BBM21]. **IRA** [BFS21]. **Irreducible** [Art96, FGJ00, FG94, GR93, Kir95, LGL16]. **Irregular** [GLS12, RW94]. **Isometric** [FNV08, HKV05]. **Isometries** [BvdMR+97]. **Isometry** [BT10a]. **Isotropic** [Kre05, MS18]. **Isotypic** [MOR04]. **Issue**

[DCM08, Ips06, Ips09]. **Issues** [Ari00, Mei04, Més08, SV97]. **Iteration** [AGQS22, BLL22, Ben09, BMS06, BX08, Dan91, ESR01, EW13, Emb09, KZ10, KO14, LS96, Leh01, LWWY14, LGL16, Lu05, MOR04, MOR16, MS10, MP11, MH13b, MH15, NBG10, Not03, Nou96, OA23, RSS09, RS08, Saa16, Sai19, SvdV96, SY98, SX11, TP14, XE10, YGM09, YLA97, ZHY16, de 92, AdHN88, BF89, Lag91, San88]. **Iterations** [ASVM04, AV91, BKS08, Bor09, BPS05, CKL21, CNP94, GVK20, Gaw19, HMMT05, HN09, Ian09, IKSG10, NS07, NRT92a, NH12, NOZ11, STT17, ZZS04]. **Iterative** [AH07, ADR92, AG00, BN06a, BB18, BN06b, BGSC07, BV01, CGRV20, CR96, Cao00a, Cao08, CE02, CPTP09b, CG96, DHT01, DGSW06, ET10, EOS19c, EOS19b, EL91, FS10, FNS08, GLS12, GL17, GR15, GV09, GRK17, GL00b, Guo01a, GH07b, HNRS22, HHRV99, HLT12, Han94, HO92, HV05, HZ01, Jam92, JC22b, KKSZ22, KL91, KS99, KO01, LHHR95, LWXZ06, Li02, MNR18, MG92, MS02, MR97, MO20, MO23, NP02, NY95, Not19, OL99, PAP00, Pan91, PJM21, RW92, SWZ11, Tis01a, Wei95, Woź93, XE10, dKV10, AdHN88, BY88]. **iteratively** [O'L90].

**J** [Ano11, CH93a, GI97, HC89b, WW08, Zha95, Ikr97]. **Jacobi** [CS96a, DV92b, Dem23, Drm96, DV08c, DV08d, Drm10, DK08b, Hac93, Har07, HM89, HPS15, HP02, HKP05, HN09, IAV13, KHH04, Kni04, LUC18, LR05, Mac95, MV08, Mas94, Mas95, Mat09, Mat95a, Meh04, Meh08, Not05, Nou96, OYBV19, OYV22, SS89, SvdV96, Sta02, SX11, fX96]. **Jacobi-like** [Meh04]. **Jacobi-Type** [LUC18, MV08]. **Jacobians** [HKG09]. **Johnson** [BKW22]. **Join** [BV18]. **Joint** [Afs08, BN05, BN10, BAMC20, CSX15, CL17, DF20, FKZ23, JL23, Joh08, JCG14, LP00, LUC23, Pha01, PJB10, WA07].

**Jordan** [WW08, BFZ07, MMT08, MV17, MBO97, MD03, SC05, Ste13, Wel11].

**Kaczmarz** [MNR15, MM23, Nec19, Sha23a, Ste21, ZF13]. **Kahan** [Zhe98, Ari13, HPS15, Zhe96]. **Kähler** [JV16]. **Kalman** [KMN11]. **Karcher** [Zha17]. **Karlson** [GJTP12]. **Karmarkar** [MT89]. **Kaufman** [DT11, JP93]. **Kawasaki** [FP17]. **Kemeny** [ABC$^+$23, BK19]. **Kerdock** [FGK$^+$22]. **Kernel** [AC20, ACW17, BWQ06, BU21, CNX22, MTV10, PP05a, SCBC21, SB95, WLMD19, XC20]. **Kernels** [WLD18]. **Kinematic** [GKK99]. **Kinematics** [DS17]. **KKT** [FJ97, IKSG10]. **Kleinman** [FHS09]. **Knopp** [Kni08]. **Known** [AD02, CHMW20]. **Kohn** [LWWY14]. **Kolmogorov** [FMSS21]. **Kreiss** [Mit20, Mit21, TT99]. **Kron** [SS23]. **Kronecker** [BT13, HC89b, Zha95, BKW22, Bar98, Bea01, BS15, BT12, CNG23, DD07, DD08, EK96, FF94, FGP00, GP98, GMN18, Gre05, HL17, HC89a, IT11, KN00, MV07a, NNP04, RHE14, SB03, de 90]. **Krupnik** [Ikr97]. **Krylov** [Ste02, BER04, BG15, BR05, BF05, CFT16, CH23a, CGMM23, DMR09, DIKMI18, DK98, DSZ14, ESS$^+$12, EN08, Ern00, FGS14a, FLS20, FKST23, GGLN13, GMN20, GL21, GG14, GOR14, GTI11, GPTPV16, GMN16, GS00b, Gut14, GS21, GS23, HPZ23, HS95a, JK97, KO15, KJH16, KT10b, KT11, LM98a, LY03, MJM11, MH13b, NZ16, RS02, Saa97, SS13, Sid95, Sim00, Sim16, SvdVM00, SSR20, Ste01, VMM15, WY17, ZH17, vdES04]. **Krylov-Aware** [CH23a]. **Krylov-Based** [MJM11]. **Krylov-Subspace** [CFT16]. **Kublanovskaya** [GKRV90]. **Ky** [FHLS13, LM98b].

**Lagrange** [AT07, Law13, LC15a, Nie10]. **Lagrangian** [AW00, FMX02, GSCS15, LW97, MP12, RR08]. **Lambert** [FHI15]. **Lanczos** [AIM22, BDY99, BKS08, BF00,

BES98, BBGL92, CD15, CGMM22, CZ02, Day97, FKLR13, FLSS17, GVK20, GS92, GLS94, Gut92, Gut94, GR00, HL06, Huh02, Jia95, JN03, JLSZ22, Jou92, KW92, KW94, Kui00, MOR04, MB10, Pai10, PP11, Pai19, SdJL+18, UCS17, Urs21, WS00, Wül05, XK94, ZSYJ18, vDHvdV00]. **Lanczos-Based** [CGMM22]. **Lanczos-Type** [AIM22, GR00]. **Landscape** [CLL20]. **Langemeyer** [SH91a]. **Langville** [IK06]. **Laplace** [FKST23, KK12, RN18]. **Laplacian** [BSS13, FA23, Gre92, GHN18, GMS90, GM00, HO15, KNS97, KA07, LY91, PV17, STvDD17, TS99]. **Laplacians** [CL99]. **Large** [ABM+17, BMfY03, BSFM10, BYDW18, BKS08, BHM00, BGKS99, BrD07, DK99, DK01, ES92, EW13, FI18, FF94, FM93a, GIG22, GH07a, GAB08, GHL03, GS23, HXY11, HH89, HHP21, HP92b, IO16, JK95a, Jia95, JL23, KMMM18, LC15b, LC16, LS06, LwCKL13, LKK97, MS10, Men18, MZ19, NY95, OS09, PR12, Reu02, SS13, Sim16, SK16, SY98, SCA12, Ste01, Ste02, WZ17, WS00, WZZH21, XCGL10, Zha95, ZSYJ18, ZS07, HC89a, HC89b]. **Large-Scale** [ABM+17, BYDW18, ES92, FI18, FM93a, GAB08, GS23, HXY11, KMMM18, LC15b, LwCKL13, MS10, Men18, OS09, PR12, SS13, Sim16, SK16, WZ17, ZSYJ18, MZ19, HC89a, HC89b]. **Largest** [Ano11, CPZ11, DSD17, GR93, JN91, KW92, NQZ10, OW92]. **Latent** [Elt92, VS14, ZZ99]. **Latouche** [Guo02]. **Lattice** [LK95]. **Lattices** [PAH17]. **Laurent** [HM04a, Tre88b]. **Law** [BZ07, CG03a, Djo08, BHKR11]. **Layer** [MMN22]. **Layered** [BKKL91, KT10a]. **LCM** [Wan98a]. **LCP** [Mor94]. **LDL** [XXC14]. **LDU** [DDY14a]. **Leading** [EG15, GS10b, JV04]. **Learning** [MM23, PSS19, Yan98]. **Least** [ABG07, Aru92, ANT09, BG11, Bar98, BBT05, BBTT06, BBTK08, BE10, BST16, Ben99, BN06b, BPE94, BES98, BHM00, Bjö14, BV01, BHP03, BX05, BV95, CGCDM13, CNP94, CGS98, CPTP09b, CGP09, CG10, CH93b, CLL20, CJ21, Chu91, CG98b, CSEP21, CK91, CHMW20, CC92, CH99, DN08, DHZ03, EL97, EP94, EOS19c, EOS19b, FF94, FB94, For96, FS01, GS10a, GHO99, GJTP12, GTPI13, Grc10, Gu98a, Gu98b, GW92, Gul95, HG18, HYI10, HXY11, HPS+11, HG14, HM97, HV97, HLM23, IW14, INRZ21, Jam92, KS92, KLR98, KP08, KT10a, LY03, LS06, LW20a, LJW22, LPT10, Mal04, Mal03, MVP05, Mar11a, MLV00, MH13b, MH15, PRS06, PO03, Rei91, RG05, Rod06, RPG96, RPG98, Rum12, Sha95, SC03, STT17, TETA05, Usc12, VZ91, Van92, WC14, WCY15, Wei92, WD00]. **Least** [XXCB14, Yan20, ZH03, ZHY16, ZMW17, ZZLY02, ZF13, O'L90, Qia88, VV88, VV89, Zha95]. **Least-Index** [CC92]. **Least-Norm** [EOS19b]. **Least-Squares** [ANT09, BG11, Ben99, BX05, CGS98, CK91, EL97, EOS19c, For96, FS01, HG18, HM97, LS06, Mal04, Rod06]. **Lee** [Ikr97]. **Leffler** [AD21]. **Left** [KOSvdD07, LEMCD19]. **Left-Looking** [LEMCD19]. **Legendre** [Zha10b]. **Lemma** [LJS19]. **Lemmas** [De 08a]. **Length** [AKP08, JN93]. **lengths** [Gri88]. **Leslie** [Kir92, KN94]. **Less** [HM04b, OP05]. **Letters** [JH02]. **Level** [Bor09, BBM02a, DQ02, DK13, EDK16, HR14, Not16, TMNV10, WT11, LSB16, Sou19]. **Level-** [HR14]. **Level-Geometric** [DQ02]. **Leverage** [HIW15, Hoo17, LK22, SG21]. **Leverage-Based** [LK22]. **Leverrier** [Bar89]. **Levinson** [CH93a, BLAK91, CH92, FLM10, Mel01]. **Liapunov** [KB93]. **Lidskii** [Lew99, MBO97]. **Lie** [BW93, KHH04, MMT08, Tam99]. **Lifted** [JCG14]. **Like** [AG92, CT99, FLM10, GL00a, KRS19, lLNS17, MSZ03, May12, Rod06, RODS15, ZZS04, ZZ98b, FLM12, GIMT95, Hig90b, JL98, Kil99, Lu96, Meh04, Rei91, SK95, wVjBqJ11, Xu05]. **Likelihood**

[BE10, YLA97]. **Limit** [BU21, Ste13]. **Limitations** [ABM21]. **Limited** [EM15, GS21, Sal88]. **Limited-Memory** [EM15, GS21]. **Limiting** [BK15, DD10, DK08a]. **Lindenstrauss** [BKW22]. **Line** [HHRV99, HK01, RCH08]. **Linear** [AGP19, AIM22, ADC04, ABG07, Art96, AGL98, ANT09, Bai99, BGN03, BL12, BL13, BDHS11, BFZ07, BSFM10, BEBT07, BF06, BGT14, BES98, Ble21, Bom00, BM06, Bor03, BT92, BAMC20, BF05, BCW12, CT91, CP03a, Cao08, Cap98, CP03b, CE02, CI95b, CS98, CGS98, CG03b, CGS$^+$08, CPTP09b, CH93c, CFL17, CRR93, CGH11, CC92, CHLS00, CG96, DGMR00, DH22, DK05, DTGVL05, DD12, Din98, DS16, DS95, DLMT13, ENV92, EHvP04, EGTP17, ES12, ES92, EG00, EOS19c, EL91, FXG18, FM93a, For96, FS01, FHLS13, FL99, FNS08, FKLR13, FGK$^+$22, Gar90, GL03, GHR21, GPPT23, Gil13, GJX22, GLT96, GKK99, GRT07, Gow90, GS94, GS02, GR15, GMMN21, GTI11, GJTP12, Grc10, GCL16, GV09, Gu98a, Gu98b, Gu98c, GAB08, GHL03, GHR95, GW92]. **Linear** [Gul95, HNRS22, HLT12, HL08, Han94, Har05, HH92, HPS13, HG21, HLT91, HLM94, HJ89, JC22a, JT98, Jou92, Kan96, Kar11a, KGW00, KLR98, KC09, KS08, KO14, KJH16, KT10b, KT11, KLX04, LW02a, LWXZ06, lLNS17, LNT18, LJW22, Loe90, LEMCD19, LMC22, Lu94, Lu95, LT94b, MNR18, Mal03, MP95a, MG92, MV07b, Mat92, MR97, Mee03, MB10, MMS16, MMW18, MV21, Men12, Mim15, MN97, MO20, MO23, Mor21, MPS98, MPS00, NV94, NRT92b, Naj98, Neu00, NY95, Not19, OST08, PS05, PYHK93, PP05b, PJM21, PJM23, PFRR17, PR88, Pop12, Pop15, PS22, QL99, RT93, RT20, RK95, Roh03, Rum12, STvDD17, Sch05, SŠ91, Sha23a, SWZ11, SA22, SH23, SvdV96, SvdVM00, ST14, Ste10a, Ste23, SJ92, Tig91, TV09, TETA05, VBW98, Ven93]. **Linear** [Wei95, Wim88b, Wri95, XCGL10, XXG12, ZvSD20, Zen19, ZHZ05, ZXL14, ZXS21, vdES04, All89, ADD89, Ash91, BDV89, Cri88, MT89, Pan91, Qia88, WBP89, Wim88a]. **Linear-algebraic** [CRR93]. **Linear-Time** [Bom00, DD12]. **Linearizable** [CJMU22]. **Linearization** [HLT08, HMT09, LC15a, LVV16, MBN17, SB11]. **Linearizations** [AB16a, ADMZ18, BdTD11, BDF17, DDM10, DQV22b, HMT06, HMMT07, LP17, MMMM06a, MMMM06b, NNT17, RVV17]. **Linearized** [HKBM08]. **Linearly** [CH97, GR17b, GMBS12, SdA10, SL12]. **Lines** [LF02b]. **Link** [De 06]. **Liouville** [Mal06]. **Lipschitz** [BD22, BLO07]. **Lipschitzian** [MNT99]. **List** [Ano97]. **LNLQ** [EOS19b]. **Loadings** [GMBS12, SdA10, SL12]. **Local** [ALN07, Art03, CYA$^+$18, FGM91, FP16, GS03, He21, Usc12, WZL21, Gad88, Sun89]. **Locality** [Tol97]. **Localization** [BF89, BH13, BBM21, CE12, CKP11, Peñ01]. **Localized** [SS19]. **Locally** [AG19, Cap00]. **Locating** [BP21, BNS13, DPP22]. **Location** [GVK20, Lin03]. **Locations** [BB98]. **Log** [DGIM15]. **Log-Det** [DGIM15]. **Logarithm** [CR16, CHKL01, DP00, FH18, Hig01, KL98a, Zim17, ZH22]. **Logarithmic** [BE03, HGC99, HGC00, IM13, Koh99, NNF14]. **Logarithms** [DMP96]. **Look** [AD98, GR00, SK95, CH92, CH93a]. **Look-Ahead** [GR00, SK95, CH92, CH93a]. **Looking** [LEMCD19]. **Loop** [Bér09, Guo98, CLL20]. **Loop-Based** [Bér09]. **Lorentz** [AYLR04, ZSYJ18]. **Loss** [BP92]. **Lossless** [RD95]. **Low** [ADGH18, AG88b, ABM21, Asw16, BL21, BR19, BYDW18, BKS18, BDG20, CCB$^+$20, CWY20, CS09, CGMM23, COV14, CP03c, CDLP05, CK20, CKM22, Dax08, DD07, DD16, DGR23, DI19, DWWY20, DL17b, ES18, ED22, ED23, FHL23, FMSS21, Fou18, GMN20, GG11, GQ14, GC19, GL13, Hal22, HS23, HM20, IAVD11, IAV13, IUM14, JMPR19, JKN11, KK12, KB90, KL07,

Kol03, KO15, KK17, KT11, LK22, LC16, LW02b, LS17, Lie08, MU13, MK20, MD03, NP23, NS11, Nie17, OA23, OSS14, PK23, PTC13, SCPW12, SS10, SC10, SDN21, Ste08, Ste13, STT17, Tas15a, TYUC17, VV10, VYH11, WCY15, WCCL16, XLS16, Xie23, Yan20, YXY20, YGL18, ZZ99, ZZS02, ZZS04, ZXS21, dSL08, dTDM08, vdV96]. **Low-Memory** [CGMM23]. **Low-Nonnegative-Rank** [DWWY20]. **Low-Order** [KB90]. **Low-Rank** [ADGH18, ABM21, Asw16, BL21, BYDW18, BKS18, CCB+20, COV14, CDLP05, CK20, CKM22, Dax08, DD16, DGR23, DI19, DL17b, ES18, ED22, FHL23, Fou18, GMN20, GG11, GQ14, GC19, GL13, Hal22, HS23, HM20, IUM14, JMPR19, KK12, KL07, Kol03, KO15, KT11, LK22, LC16, LS17, MU13, NP23, NS11, OA23, OSS14, PK23, SCPW12, SC10, Ste08, Ste13, STT17, TYUC17, VV10, XLS16, Xie23, Yan20, YXY20, YGL18, ZZS02, ZZS04, ZXS21, dSL08, vdV96, FMSS21, MK20]. **Low-Rank-Plus-Shift** [ZZ99]. **Lower** [AR93, AW05, BSU15, DS97, GW22, INRZ21, Lás94, LW05, Li06, MBM08, RST18, Vec03]. **Lower-Bounding** [DS97]. **Lower-Rank** [MBM08]. **Lowest** [PL18]. **LSLQ** [EOS19c]. **LSMB** [HG18]. **LSQR** [Ben99, Hal20, JTP10]. **LU** [ES92]. **Luk** [YB91]. **Lumpability** [DS97]. **Lur'e** [PR12]. **Lyapunov** [CT15, BES15, BH90, BD05, BC88, BN87, CFL07, CH97, DL03, EW13, HS95a, HP92b, KO15, LŠ10, LW02b, MPR18, MZ19, Mor22, RDC93, SS17, TCTM00, TV09, VV10]. **Lyusternik** [MBO97].

**M** [GL03]. **M-Matrix** [GL03]. **M.** [Ikr97]. **Machines** [SYJ00]. **Magnitudes** [Nie10]. **Maintaining** [BBM02a]. **Majorization** [Bap89, KA07, KA10, MSZ20, Zha17, ZK17]. **Majorization-Minimization** [Zha17]. **Make** [JRG09]. **Management** [GJX22]. **Manifold** [Bry17, DL02, Din98, Fio11, LE02, MA20, Zim17, ZH22]. **Manifolds** [ANT19, CDH12, GL18, LWW15]. **Manufacturing** [CCZ97]. **Map** [ANT19]. **Mapping** [MMT08]. **Mappings** [GTH19a, Gow90, VZ06]. **Maps** [CS96c, FHLS13, FGK+22, GTH19b, Loe90]. **Marginals** [SH91b]. **Markov** [AGQS22, Bar93b, Bar00a, BF11, BHKR11, Bor09, BPS05, Buc00, BrD07, CCZ97, DS97, DA05, DLLT22, DR93, DWWY20, ES08, EHW10, Ger92, Hey95, HO98, IM94, Kir02, LP89, LM06a, LFW13, LX12, Liu12, LLZ23, Mas16, Mey94, O'C02, OW96, ST01, TVW15, XG98, Zha93b]. **Markov-Modulated** [CCZ97]. **Markovian** [MP11]. **Markowitz** [ALN07, ALP07, DDN20]. **Masks** [JZ99]. **Mass** [AK20, BB96]. **Matching** [KO14]. **Matchings** [HS13]. **MATLAB** [GMS92]. **Matrices** [ABL94, ADGH18, AB05, ABK+11, AH07, AG91a, ADMZ18, AC20, ADHM19, AG88b, AG92, AD02, Arg15, AM05, AFPA07, Art96, AL98b, ABM21, AKP08, AYLR04, AB13, Axe92, BBS15, BDE+20, BT10a, BMfY03, Bai05, BNW09, BIS12, BW95, BRR00, BO96, BOCL97, BV92, BZ98, BU21, BDGY20, BYDW18, Baz00, BBT05, BR08, BT17, BMV18, BOS13, BT06, BNP23, BS15, BMF05, BP21, BS91, BS94a, BBD11, BDG15, BDG20, BB98, BH08, BE03, Bin90, BD90, BEGG07, BLP90, BS96, BLAK91, BN10, BCR11, BKK07, BD98b, BD10, Bom00, BS10, BHH+08, Bor09, BJMS17, BW99, BGKS99, BET02, BV07, BCN95, BS94b, BD15, BMP20, BGH95, BBM21, BMV20, BCGG10, CM93, CNX22, CCS05, CKRU08, CS01, Cao02, Cao09, CT99, Cap00, CE12, CCJ+00, CGRVC08, Cav94]. **Matrices** [CO99, CDG+07, CPTP09a, CFJKS13, Che98, CD05, CC09, CG15b, Chu91, CE94, CFG98, CK91, CS10b, CC17, CM03, CGS94, CRS99, CRS01, CLG93, CKM22, CC92,

CHLS00, CW96, CKP11, CP20, CB90, DDY14a, DDY14b, Dan93, DS97, De 08a, DL02, DP10, DP15, DMS09, DMS12, DMS13, DG91b, DG91c, DV07, DV08a, DV08b, DD10, Dem99, DHST05, Di 09, DD12, DMP96, DE99, DPP13, DPP22, DZ01, DK06, DQV22b, DGIM15, DY10, DK99, DK08a, DK08b, DL17b, EEK97, EEK99, EL05, EL08, ES08, ESS+12, EN08, EU10, EM15, FLT10, FGJ00, FHGJ06, FLV04, rFO06, FKKL96, FI18, FH21, Fer98, FP20, Fie95, Fie00, FF99, Fio11, FA23, FSZ14, For96, FHLS13, FNV08, FMFJ18, FC01, Fri92, FHS+94, FG94, Fri02, FT16, FR23, FGS14a]. **Matrices** [FLS20, FIS01, FJ06, GLS12, GP98, GSCS15, GP06, GT04, GLPS11, GR17a, GHNV03, GITT96, GI00, GIK00, GGJ18, GW07, GMS92, Gil13, GKL18, GD22, GS06, GKX94, GN03, GT08, GS10b, GL23, GK06, GCL16, GPTPV16, GR93, Gro97, GP03, GLV10, GWZ05, GZ09, GZ15, GP16, GW00, Guo01b, Gup02, GR97, GS21, GLP01, GP04, Hac93, HNT99, HB94, Har05, Har93, Har98, HR93, HH93, HH94, HR04, HLW94, HKG09, HMT93, HS90, Her96, HHSW97, Hig92, HHP21, HBW90a, HBW90b, HDT10, HPS15, HG14, HS13, Hol91, HLT91, HLM94, HLS97, HHH12, HC15, Huc92, Huc94, Huh01, Huh02, IM13, IN09, IW14, IT06, IZ04, IIM94, JR99, JV16, Jia98, JN93, JT98, JOvdD03, JS04, JS07, Joh08, JP93, JL98, JSG15, KC94, KN00, KK14]. **Matrices** [KU13, KGD23, KBHH13, KSH02, Kir92, KNS97, Kit95, KS03, Koe05, Koe07, KN91, Kre05, KS17, KK93b, KK93a, KRS19, LLŠ09, LŠ10, Lat95b, LP96, LN22, Le 06, LC15b, LC16, Lew91, LGPS90, LO20, Li91, LT94a, Li02, LM02, LF02b, LW05, Li05, LPS08, LGWX12, LUC23, LS04, LT09, LW97, LOvdD02, LC05, Lin11, Lin19, LZ97, LZ05b, LW94, LB96, Lu98b, MMT08, MM11, Mae98, Mai99, MS02, MMS94, MSZ03, MA20, MR22, MSZ20, MNT10, MV13, Mat09, Mat92, Mat97b, MOvdDW89, MP21, MNST96, Mel99, Meu92, MZ19, MPS01, MT00, Moa05, MN97, MP98, Mön11, MBO97, Mor22, Mur91, Mur93, Mur98, MP95b, MNT99, Nab99, Nab00, Nab01, Næv93, NP23, NS96, ND06, NP99, NNPQ23, Nou96, OV99, OR93, Ors06, OST09, Ose10, OW95, PK93, PK94, Pan16, PDF16, PLM94]. **Matrices** [Pat00, PMT23, PM06, Peñ95, Peñ98, Peñ01, Peñ05, Per91, PW14b, Pes14, PW15, Pes19, PT05, Pha01, PR91, PW90, PSW22, PJB10, Pro13, PL14, Pul13, RN18, RKN20, RVA05, RD95, Rei91, Reu02, RR98, Rie92, RS92, RW95, Rod05, Roh93, Roh94, RSS94, RODS15, RST18, SZ99, Saa16, SST06, SCPW12, SK95, Sen98, Ser98, SHS03, SGX14, SHJ09, SHY10, SWYM96, ST08, SB05, SEM13, SAGS21, SDN21, SM16, SMM20, Spe98, SCA12, Ste91a, SV97, Ste16b, Stu91, SB01, SB95, Swe93, TY02, TP22, TP23, Tig91, Tre94, Tre05, Tru06, Tům02, VFGM05, VV15, VH16, VP93, VT98, VJ07, Wal03, WZ95, Wan98a, WA07, WCB22, WD94, Wil08, Wim06, WT11, XLS16, XG10, XX17, Xie23, XC20, XHC21, XSW10, YL00, YL08, Yas03, Ye09, YXC+17, Yse22, ZZ99, Zha00]. **Matrices** [Zha05, ZY93, Zha01, ZZ01, Zha04, ZFW07, Zha17, Zhl12, ZZ98b, Zie95, ZZTA02, dF05, dSV01, vDHvdV00, vD99, vdMS05, All89, Auc89, BY88, BH96, CJL96a, CF89, Che92, DGIM06, DS95, Ede88, FF93, GP88, Hav89, HM89, HPR89, HRS88, HS88, Hon89, HC89a, HC89b, Ikr97, IM95, JN89, JP94, KN89, KN94, MP88, ML89, Per88, PR88, PSL90, RR96, Rum91, Stu88, Stu89, Tre88a, Tre89, Wim88a]. **Matricity** [GG13, BG19a]. **Matrix** [AS93, ALAK94, AA09, Afs08, AAB10, AMH09, AMH10, AMHL22, AB16a, AB18, AMPV97, AK20, AK21, AG91b, AW10, AEGL19, ACL93, AT98, Ano11, AW00, AH14, AH16, AKPP08, ABF16, ANT19, AG00, Art03, AMR+18, AABK19, AHH01,

AW05, BL21, BD98a, BB95, BD22, BBD+16, BR19, BR22, Bar00a, Bar94, BLdP97, BL94, BL00, BKS18, BI99, BT12, BT13, BV00, Bez12, BB96, BD93, BM94, BF93, BM96, BNS13, BMM20, BMSV92, BL91, BM06, BKMS14, BKMS15, BS16, BB20, BHR10, Bor14, Bos21, BW99, BL10, BF05, BG13, BX05, BD95, BZ00, BC92, BdTD11, BDF17, BGN12, BHM97, CSX15, CGHR07, Cao00b, CR16, Car94, CG03a, CH93a, CS10a, CT93, CMPX03, CRY+21, CGMM22, CGMM23, CHKL01, CD00, CCG+09, Chu95, wC03, CH06, CHW10, CSEP21, Cif21]. **Matrix** [Cla10, CD98, CGI10, CR10, DB20, DH03, Dax08, De 06, DD99, DD08, DD16, De 18, DDD20, Dem92, DGR23, DRSZ07, Dhi98, DT08, Di 00, DP00, DMR09, DK14, DK15, DS10, DS19, DS20b, DG19, DHM19, DD13a, DJ09, DMM08, DI19, DH97, Drm00a, DK98, DLT15, DK01, EEK97, EEK99, EJ23, EEG11, EI98, ESR01, EK96, Elt92, EK17, FL02, FZ16, Far16, FHI15, FH18, FH19, FHL23, Fay95, FPST13, FH17, FL19, Fer97, FFH+19, For03, FV98, FP16, FT07, FH10, FKLR13, FGS14b, FLSS17, FH20, FSS21, FKST23, GPM03, GH91, GL18, Gaw19, Gei91, GL03, GIKT95, GI97, GL99, GT17, GPPT23, Gil94, GG11, GK15, GR23, GTJ13, GHHW90, GSV00, GMRS00, Gov91b, GR17b, GTI11, Gro98, GdlI08, GKL95, GO11, GKL14]. **Matrix** [GLM17, GP18, Guo98, Guo01a, GH06, GKL12, GR05, GN16, GS23, HLT12, Hal22, HIS23, HM04a, Har99, HLW05, He99, He21, HR00, HO10, Hey95, HO98, Hig92, Hig93, HK95, HT00, Hig01, HK01, Hig03, HMMT04, HMMT05, Hig05, HMT06, HMMT07, HMT09, HL11, HL13, HR14, HS16, HL21, HGC99, HGC00, Hla23, Ho90, HS95a, HI15, Hu92, Huc92, HSC04, HL02, HKBM08, HC89b, Ian06, Ian09, Ikr97, Ito96, IM16, IS07, IT11, JMPR19, JS94, Jia22a, Jia01, JTZ20, JMO93, JOvdD03, JKN11, JOAKt10, KKS97, Kau93, KB90, KL91, KL92, KL98a, KO18, KS22b, KP08, Kir95, KN98, KNOX02, KRU14, Koh99, KN91, KPC94, KMS15, Kra95, KH13, KL18, KK21, KL98b, KLS16, LP01, LMZ03, LP05, LNV92, Lau00, LH22, Law13, LP17, LRG23, LT97]. **Matrix** [LV06, Lew96, LR94, LY03, Li06, LBL05, Lie08, LT09, Lim07, LX06, LNP93, LWW15, LLZ23, LM18, Lu98a, Mac99, MV97, MMMM06b, Mar11b, Mat93a, Mat95b, Mat96, Mat97a, MSZ15, MMW22, Mei04, Mel04, MYK14, Mit20, Miz22, Mor21, Mor22, MGS20, NV94, NRT92a, NBG10, NNT17, NTTZ18, NS11, NP20, NS18, NK01, NS09, NST15, Nof17, NV23, Nou96, Ogi10, Ost10, OW92, PAP00, Pai09, Pai10, PP11, PW14a, Pál11, Pan93, PN18, PN23, PYHK93, Par05, PV09, Peñ01, yPWjP12, PK23, Pet21, Pil94, PSW22, PS08, PT18, PS22, PL14, QS06, Qi13, QCT15, QCT16, RS96, RR94, Rau02a, Rau02b, RE13, RS06, RVV17, RE98, Rum97, Rum22, SCPW12, SD16, STvDD17, Sch05, Sch95b, Sch23, Seb96, SC05, Sev03, SCBC21, SMBJS13, SC03, Sid95]. **Matrix** [SH23, SC10, Smi03, So92, ST01, SDC+12, Sta22, SU94, Ste91b, Ste16c, Ste18, SH93, SV15, SD12, Tam98, TFL11, Tas15b, TDV15, Tho94, TL06, Tis93, TZ13, TT98, TT99, Tre90, TW03, TYUC17, Tro90, TU91, Tsu93, Uhl20, Uhl18, VVM05, VBW98, Vec03, Ven93, Vog99, Wan98b, gWcWL12, WY17, WLB05, WS12, WCCL16, Whi90, WD95, Wim92, WZZH21, WZ23, XX16, Xia12, XBC22, XC18, fX96, XPL+18, XNB22, Xue96, YLA97, YGL18, ZMK02, Zha91, Zha95, ZHZ05, ZGP10, Zhe96, Zhe98, Zim17, vdV96, von93, AdHN88, BJ95, BMO92, BK89, Bas89, BV88, Ber88, BHH88, BN88, CS89, CLS88, DV06a, FM88, Gad88, GL96, HD97, JMW96, JJ88, JN89, JOvdD89, JH88, KL89, LG06, Liu88, Naz89, Ove88, OW88, Stu88, Wim88b, WW08, EW20, ZF14]. **Matrix-Algebraic** [Zim17]. **Matrix-Analytic** [LLZ23]. **Matrix-Matrix** [MSZ15]. **Matrix-Sequences** [FFH+19].

**Matrix-Stencils** [He21]. **Matrix-type** [BL94]. **Matrix-Valued** [ALAK94, Cla10, Kra95, KH13, Mat93a, QCT15, QCT16]. **Matrix-Vector** [BF05, GTI11, HR00]. **Matroids** [Mor94]. **Max** [BSvdD95, BCGG10, BJ16, DD98, HT17, Hoo17, HPTH19, MV23]. **Max-Algebra** [BCGG10]. **Max-Balanced** [HPTH19]. **Max-Plus** [BJ16, DD98, HT17, Hoo17]. **Maxima** [RSS94]. **Maximal** [CYA+18, CP20, Lat95b, SZH22]. **Maximally** [EG15]. **Maximization** [Fuh07, LWW15, Men18, VBW98, WZL21]. **maximizing** [All89]. **Maximum** [BW95, BE10, Bor03, CD14, JR08, OR93, YLA97, Ove88]. **Maxwell** [CHH+15]. **May** [ZvSD20]. **Mean** [BEBT07, BD93, BS10, CR16, FI18, HL08, JV16, Lim07, Moa05, Zha17]. **Mean-Square** [HL08]. **Mean-Squared** [BEBT07]. **Means** [AMPV97, AFPA07, DDV04, Dri06, Gem98, Lim13, Moa02, Pál11, PT05, PT18]. **Measure** [ABC+23, NQB14, Yse22]. **Measurement** [CH93b]. **Measures** [BK15, BGMN15, DRSZ07, Sch23]. **Measuring** [DMW23]. **Mechanics** [CGS94]. **Media** [BKKL91, CHH+15]. **Meet** [Mac95]. **memoriam** [Joh96]. **Memory** [ADV05, CGMM23, EM15, INRZ21, LHC16, GS21, KP92]. **Mendelsohn** [AL98a, IM95]. **Meromorphic** [ALAK94]. **Mesh** [vdSBvdV93]. **Meshes** [Ten97]. **Metabolic** [LS95]. **Metamorphosis** [Van11]. **Method** [AGJ14, Ain17, AT07, AM09, ABM+17, Ano11, BBS15, BDY99, BS05, BV90, BBTK08, BST16, BMV18, BF00, BNP23, BGSC07, BGT05b, BIP08, BR05, BBGL92, Bos21, BMRZ94, BHM97, CMV19, CS01, CFT16, CD15, Car18, CGLV11, CPZ11, CH93c, CD17, CESC20, CG98a, CYA+18, Dan91, DHT01, DD97, Del97, DV92b, DYY16, Drm96, DS18, ESR01, ES09, ES18, EG20, EG00, EOS19c, EOS19b, FJKM96, FAT16, FKZ23, FHS09, FS10, FSV14, FLSS17, GLS12, GTJ13, GG14, GH07a, GTPTI14, GRK17, Guo98, GL00a, Guo01a, GH06, Hac93, Hal20, Hal22, Har07, Har19, Hem95, HMT93, HS10, Hig92, Hig97, HK01, Hig05, HP02, HKP05, HN09, HGL05, HDSC23, HV05, Hu92, HZ01, HMWY18, Huc94, Huh02, Ian06, IT06, JNP21, JMM14, Ji92, JN03, JN21, JLSZ22, JL23, Joh08, KMMM18, KL92]. **Method** [KP08, KM11, KM14, KO15, Kui00, LLZ09, LM98a, LY03, LZ05a, LW20a, LV10, LMPT20, LM18, LR05, Lu98b, LP13, LKK97, LE02, MV08, Mas95, MOR16, Mat09, MR97, Mee09, MB10, Miz22, MO20, MO23, Mor95, Mor21, MM00, Nov11, OL99, PW15, Ple00, QL99, QS06, Qi13, RCH08, RST01, RT99, RP10, RW92, SGX14, Sim16, SH23, SH91a, SvdV96, SS17, Sor92, Sta02, SCMV21, SD09, Ste10b, SX11, Tis01a, TV09, Urs21, wVjBqJ11, Wal95, WC14, WCY15, WS00, Wül05, XCGL10, Xu05, XQ08, XNB22, XE12, YBZC16, ZŠ94, ZN21, ZZ98a, ZH03, Zha10a, ZSYJ18, ZYSY20, ZH17, de 92, vDHvdV00, vdMS05, vdV96, CS89, CLS88, HL06, KN89, Meh88, SS89]. **Methods** [AL95, Bai99, BGN03, BWQ06, BN06a, Bar08, BV92, Bar93a, BB18, BN06b, BBD11, BM99, BES98, BHM00, Bjö14, BV01, BM02, BDFF22, BF05, BrD07, BGBM92, BGBM93, BCW12, CR96, Cao00a, Cao08, CG92, CHZ16, CGMM23, CGI10, CKM22, CH99, CG96, DFT92, Drm10, ENV92, EHvP04, ESS+12, EN08, Ern00, EL91, FJ97, FGM91, FM93a, FS01, FS97, FNS08, FGS14a, FLS20, Gar90, GGLN13, GMN20, GL21, GOR14, GR15, Gre97, GV99, GMN16, GS03, Gu00, GMO+06, GR00, Gut14, GS21, HNRS22, HHRV99, HIS23, HJ07, HYI10, He99, HXY11, HL23, HS95a, HO92, HK12, INRZ21, JWN18, JK95a, JK97, Jam92, Jia95, Jou92, JCG14, Kan96, KS22a, KL91, KO01, KL08, KT10b, KT11, KV14, LWXZ06, Leh01, LS17, LLZ23, Lu10, Lu20, MNR15, MNR18, MG92].

**Methods** [MS02, Mat95a, Més08, Mor00, MH13b, MH15, NP02, Not19, Ors06, PW90, Ple06, PPLG20, RSH21, RS02, Saa97, Sch23, SS13, SWZ11, Sid95, Sim00, SG21, SV15, SJ92, VMM15, WY17, Wei95, Whi00, Woź93, Wri95, XZ22, ZZS04, ZHY16, ZH22, dBG08, vdG93, vdES04, AdHN88, BY88, FGS96, GL96, Wri97]. **Metric** [Bar00b, BD10, BS10, BDST08, XPL+18, Zim17]. **Metrics** [QZL05, ZH22]. **Meyer** [IK06]. **MGS** [PRS06]. **MGS-GMRES** [PRS06]. **Midranges** [MGS20]. **MIMO** [DSZ14, GVV04]. **Minc** [Lat95b]. **Minimal** [BEGM05, BMOvdD04, BdTD11, DDM10, DS10, DS19, DQV22b, FJKM96, Fio11, HP09, IM16, JN21, OV99, Par92, PR01, Pey01, Sch95b, SMBJS13]. **Minimal-Distance** [Fio11]. **Minimax** [Ash91, IM95]. **Minimization** [ABMV20, BL12, BL13, CKL21, EOS19c, EOS19b, FPST13, FM93a, HN98, Lu20, NNF14, SAGS21, ZN21, Zha17]. **Minimizer** [CS10b]. **Minimizers** [FGM91]. **Minimizing** [BDHS11, CG96, Ern00, GV07, HG18, LP11, TP23, Ove88, OW88]. **Minimum** [ADD96, BS90, BHH+08, Dax08, GJX22, HJ07, LN14, MV97, Mat05, MO20, PP05b, Wat92a, WS12, All89]. **Minimum-Residual** [HJ07]. **Minkowski** [ML89]. **Minors** [KMS01, KMS03]. **MINRES** [HDSC23, KS99, PW15]. **MIQR** [LS06]. **Mirrorsymmetric** [LF02b]. **Mirsky** [Fou18]. **Missing** [GG11, MU13]. **Mittag** [AD21]. **Mittag-Leffler** [AD21]. **Mixed** [DP07, GK93, IT11, MR22, Mur98, PS04, Ver96, fX96, ZK17]. **Mode** [LF02b, Ste10a, GMBS12]. **Model** [ASvG17, BB12, BGG18, CGGS99, CGSS01, CD17, CCL09, DRV21, FL18, FST+13, FG15, GVV04, Gil13, GAB08, JK95a, JLSZ22, JX20, LFW13, LSM22, MJM11, SS17, Ste08, SD09, VGA10, Ver96, ZPW18, KN94, Liu88, Tsa94]. **Modeling** [BH93, HV05]. **Models** [BCR11, GQ14, KNX04, PL14, SH91b, GBCW89, HJ89, Sal88]. **modes** [Sch95a]. **Modewise** [INRZ21]. **Modification** [AB16b, GE94, RBB90, VYH11]. **Modifications** [CFG98, DH01, DH05, GV07, BK89]. **Modified** [AG88b, Bar19, BP92, CH98, FLS20, GGL04, JX20, LZ10, PAH17, RDC93, Sil03, PRS06]. **Modifying** [DH99, GW92, HV19]. **Modular** [BvdG11]. **Modularity** [FT14]. **Modulated** [CCZ97, DLLT22, LX12]. **Modulus** [GR93, ZHY16]. **Modulus-Type** [ZHY16]. **Moment** [BH93, KO14, Tis93]. **Moment-Matching** [KO14]. **Moments** [Ain17, DA05, Hel95, SK20]. **Monotone** [Auj00, CdS90, CS96c, Kra95, KH13, Mas16, PK23, Tig91]. **Monotonic** [GLV10]. **Monotonicity** [Bor03, CHLS00, DRTW91, HHH12, Lag91]. **Monte** [HIS23]. **Moore** [BC10, FF99, HH93, HH94, Pat00]. **Morrison** [Rie92]. **Most** [OA23, WD95]. **Movable** [GT02]. **MR** [CH93a, GI97, HC89b, Zha95, Ikr97]. **MR2179674** [WW08]. **MSOR** [HMT93]. **Multiband** [MNT10]. **Multicoloring** [Har93]. **Multiconductor** [LF02b]. **Multidimensional** [AC18, HK08, LJW22, VD21, VKDD21, ZMW17]. **Multifilter** [Jia01]. **Multifrontal** [ADLK01, AP02, ADV05, DD97, LB96, PL97, XCGL10]. **Multigrid** [BWQ06, BDFF22, BC22, CD17, CESC20, DYH06, DSSC11, ES18, GH07a, HL23, HG21, HK12, Pul13, RKN20, Sou19, TW00, TMNV10, VZ06]. **Multihomogeneous** [GTH19a, GTH19b]. **Multilayer** [CRY+21]. **Multilevel** [ADC04, BM02, BW99, Buc00, BrD07, CT99, DK00, EV06, FMFJ18, GTW00, KCT90, Le 06, LS06, MP21, Not06, Pes19, SZ99, XLS16, Zha01]. **Multilinear** [BB08, BLNT13, BFP95, CWY20, DDV00a, De 06, DSD17, DD20, ES09, ES11, GLY15, HPZ23,

IAVD11, IAV13, KK17, SD15a, SDD15]. **Multiparameter** [DYY16, GA18]. **Multiple** [AAB10, AIM22, BM00, BSZ20, DH01, GRT07, HPS13, HPS16, JRZ99, KS92, KPM09, LMPT20, MB10, MBN17, PCB16, SH91b, VV15, VZ06, WLV06, Sun89]. **Multiple-Rank** [DH01]. **Multiplication** [BBD+16, BMSV92, HR00]. **Multiplications** [Hig92]. **Multiplicative** [DM04, LGI21, RW01]. **Multiplicatively** [SM16]. **Multiplicities** [DD16, JK95b, JS04]. **Multiplicity** [FL02]. **Multipliers** [CDP94, Nie10]. **Multiply** [AGQS22]. **Multiplying** [Hig92]. **Multipoint** [ASA04, FG15]. **Multipole** [SCMV21]. **Multiprecision** [FH18, HL21]. **Multipreconditioned** [BG06b]. **multiprocessor** [CG90]. **Multiresolution** [AKP08, MK20]. **Multisection** [AL98b]. **Multishift** [ASvG17, BBM02a, BBM02b, DW06, Gem98, KK07, SCMV21, VW12]. **Multisplitting** [Bai99, BCMM95, FS97, SB01, SJ92, Whi89, Whi90, Whi00, KN89]. **Multisplittings** [MPS01]. **Multistage** [ET10]. **Multistochastic** [CLN14]. **Multivariable** [Pál11]. **Multivariate** [BDD13, Bos21, CMPX03, DIS15, GMRS00, Han03, JLZ16, Zha10a]. **Multiwavelets** [Tur03]. **Multiway** [MBM08]. **MUSIC** [SES95].

**N** [GKRV90]. **N.** [Ikr97]. **Nano** [GKL12]. **Nash** [CT15]. **Navier** [WT11, Elm97]. **Navier-** [WT11]. **Near** [CJL96a, GCL16, GDF01, Har99, KKSZ22, BL02]. **Near-Diagonal** [KKSZ22]. **Nearest** [BHR10, Cif21, DB20, Dem92, FGL21, GHHW90, GLM17, HS16, Men12, QS06, Qi13, Rum97]. **Nearly** [BR08, BW97, DS97, Dem23, ESS+12, MHG15, ST14, WD95, Zha93b, GL96, Hav89]. **Nearness** [BDST08, DT08, GKL14, KMS15, SV15]. **Necessary** [Cor93, Gad88, HQ16, Pin19, Sou19, ZWF05]. **Need** [DI19, FH21]. **Nested** [BOS13, BHL+93, BT02, CCB+20, Cao00a, HR95, JLSZ22, SŠ91, SV93, Ten97]. **Nested-Dissection** [BT02]. **Network** [AD21, AL98a, BYDW18, BK15, GHN18, PT18, Sch23, vdSBvdV93]. **Networks** [BDR12, DS23, FMRR13, FH17, GDF01, IO16, KS15, WSSL06]. **Neumann** [CLN14, MOC91]. **Neville** [GP93, GT04]. **Newton** [KZ10, BIP08, BX08, CRY+21, DS16, ES09, EM15, FHS09, FM93a, GR17b, Guo98, GL00a, GH06, HK01, HMWY18, Ian06, JWN18, Joh08, KL92, LE02, PTC13, QL99, QS06, Qi13, San88, Tis01a, XNB22, ZŠ94, ZZS04, Zha10a, ZBJ15]. **Newton-Like** [GL00a, ZZS04]. **Next** [Mar91]. **Nilpotent** [LW05]. **Nine** [ZFW07]. **Nine-Diagonal** [ZFW07]. **NMF** [LGI21]. **No** [CCL09, FH21, QCCT17, ZL23, CH93a, GI97, HC89b, Ikr97, WW08, Zha95]. **No-Spillover** [ZL23, QCCT17]. **Node** [GPS90, RE98]. **Nodes** [BDGY20, Baz00, IS08]. **Noise** [BE07, DF20, Par94, Wan15]. **Noiseless** [Pin19]. **Noisy** [CR96, ED22, HL08, Miz22]. **Non** [BDY99, BGN03, CE12, CH93c, CESC20, ENV92, IN09, RSS09, YXC+17]. **Non-Diagonally** [CESC20]. **Non-Hermitian** [BDY99, BGN03, CE12, ENV92, IN09, RSS09, YXC+17]. **Non-Interior-Point** [CH93c]. **Nonadditivity** [CGMZ21]. **Noncommutative** [HM04b]. **Nonconvex** [BST16, TFL11]. **Nondefinite** [CPS00, Ser96]. **Nonderogatory** [Kar10, MH95]. **nondeterministic** [DY90]. **Nondiagonalizable** [LM06b]. **Nonexistence** [VNVM14]. **Nonfull** [Fei94]. **Nonfull-Rank** [Fei94]. **Nongeneric** [Van92, VV88]. **Nonhomogeneous** [Ger92]. **Nonincreasing** [GPS96]. **Noninterior** [Kan96]. **Nonlinear** [AA19, AG00, BLL22, BSFM10, BH13,

BM96, CZBL18, CCG+09, Eff13, ESR01, FL19, Gui99, Guo01a, GKL12, JMM14, KKM14, KS92, LM90, LZ10, Lu20, MOC91, MH13a, MBN17, PP05a, RRR06, RPG98, VMM15, VYH11, YGM09, ZBJ15, ZPW18]. **Nonlinearities** [CJMU22]. **Nonlinearizing** [RJ21]. **Nonlocal** [CD17, CESC20, KPC94]. **Nonmaximal** [FG94, Nab00, Wal03]. **Nonmonic** [GH91]. **Nonnegative** [Ano11, Art03, BN10, BCR11, CHLW23, CPZ11, CFJKS13, CK12, CSEP21, DWWY20, FGJ00, FHS+94, FG94, GTH19b, GGJ18, Gil13, GK15, GR23, GR93, Gru06, GP18, HNT99, Har98, HHSW97, HST19, HLM23, JZ99, JMO93, KOSvdD07, KP08, Kir95, KNOX02, Koe05, Koe07, KK21, LLŠ09, Lew91, LGL16, Miz22, Nab00, NP20, NS18, NQZ10, NT08, Ors06, PN18, PN23, PL14, QXX14, QCL16, SGX14, TFL11, WZ23, YY10, YY11, ZY93, ZHY16, AdHN88, HRS88, LH22]. **Nonnegatively** [BN06a]. **Nonnegativity** [BH08, KP08, NS94, SW91]. **Nonnormal** [BES15, GCL16, SCBG05]. **Nonorthogonal** [CL17, LUC23]. **Nonoverlapping** [CG92]. **Nonpassive** [FGL21]. **Nonpolyhedral** [ZvSD20]. **Nonpositive** [CKRU08, CFJKS13, HC15]. **Nonseparable** [Mae98]. **Nonsingular** [BC92, CKRU08, EG15, NK01]. **Nonsingularity** [GT99]. **Nonsmooth** [Beb06, DS23, Lew99]. **Nonspherical** [SS10]. **Nonsquare** [BEGM05, CG06, IM16, LGC08, Mor21]. **Nonstandard** [RT99, Sha23b, Zul11]. **Nonstationary** [Mat05, MPS01, SWZ11]. **Nonsymmetric** [AA94, BMS06, BGT05b, BIP08, BG06a, Cao02, CS98, CZ02, Day97, EN08, GV99, GL00b, Guo01b, GH07b, GIM08, Jou92, JL98, JOAKt10, KK93a, LwCKL13, LX12, Lu05, LKK97, Meh08, MO20, Mor00, Nab99, NRT92a, NRT92b, PW15, RKN20, SHY10, SB05, SSR20, SW94, VHK01, Auc89, OW88, AGQS22]. **Nonuniform** [BDGY20, GS03]. **NonUniformly** [RS21]. **Norm** [ABMV20, Auj00, BZ98, BE03, BK21, CK20, CG96, Dax08, DG19, EOS19a, EOS19b, FH21, FKLR13, GJX22, GGO13, GGMO17, HN98, Hal20, HNT99, HJ07, HT00, HGC00, HV19, Koh99, Li16, LT09, LV10, Mat93b, Mat05, Meu11, NS11, Pai09, PN18, PO03, RPG96, RPG98, TT14, WS12, FSV14, HC89a, HC89b]. **Norm-Minimizing** [CG96]. **Normal** [Bea01, CGRV20, Chu91, FKKL96, Fri02, GLPS11, GCL16, Huc94, Huh01, HL02, Huh02, Ikr97, Ito96, Lás94, LK95, Mai99, Mur91, Mur93, TMV18]. **Normality** [LJS19, Lee95, Lee96]. **Normalized** [GN13, PW14a]. **Norms** [BK97, BGKS99, BV07, CHLW23, CDP94, FHLS13, GKL95, GZ09, GZ15, HO10, HHSW97, HGC99, HM90, HLS97, IS11, MG10, MZ19, Mor12, NNF14, PR91, Sai19, VJ07, Zha99, Zul11, LT89, Wim88a, ABM+17]. **Normwise** [FLV04, Rum03a, XW07]. **Note** [BHL+93, Cao00b, Cao02, Cao09, CL09, CT15, DD08, DM04, FH93, GG03, GSTPT22, Gro97, KZ10, KP99, LT94a, LM03, Log17, LR99, Mas94, MNT99, Tům02, Zhe98, BM88, San88, Sun89]. **Novel** [AFPA07, GRK17, RCH08]. **NP** [GG11, HO10, LRG23, RK95]. **NP-Hard** [RK95, GG11, HO10]. **NP-Hardness** [LRG23]. **NQZ** [Ano11, CPZ11]. **Nuclear** [Li16, LV10, PN18]. **Null** [AD02, AB01, Bar93b, FJ97, GT08, GOS15, Guo02, KSH02, PR16]. **Null-Space** [FJ97, PR16]. **Null-Spaces** [KSH02]. **Nullspace** [IKSG10, Jam92, PW90, SV93]. **Number** [AMH09, AW10, ABG07, ANT19, AW05, BDMS10, BDMS12, BGT14, Bor10, BK19, BV18, CT93, CES22, Dhi98, ES05, Far16, FH21, GV07, Har05, HR14, KLV18, KW94, Li06, LP11, LT94b, gS00a]. **Numbers** [BK06, CD05, CC09, DMC13, GK93, Grc10,

KKT06, Kir02, KPM09, NW98, PT05, RVA05, SST06, VT98, ZMW17, Ede88]. **Numerical** [BDHS11, BBD+16, BDD14, BLd93, BBMX02, Bos21, BGBM92, BGBM93, CDGS10, CH93b, CG15a, Cho10, CG98a, Cro16, CP17, CG19, DBW15, DF20, DHW92, GLPS11, GL96, GKL18, GPTPV16, GC19, Gup02, HB94, KM16, LP01, LN22, LO20, Li91, LR94, LP00, LW05, LWY19, Lin03, LR05, Lu20, MG92, MA99, MYK14, Més08, MMH94, OOvdD98, Ors06, Ple06, PSW22, RS18, RD95, Ste03, Ste11b, Ste18, Swe93, Tre88a, Tre89, TW03, TU91, Tur97, Vav94, WLD18, Xu05, CJL96a, CJL96b]. **Numerically** [Fuh07]. **Nyström** [FTU23].

**Obey** [BHKR11]. **Object** [GL99]. **Object-Oriented** [GL99]. **Objects** [NW02]. **Oblique** [BMP20, CE02, DL02, GT99, JK95a, Ste11b]. **Oblivious** [INRZ21]. **Observability** [Bar94, CT91, EJK09, Wim88b]. **Observations** [CHZ03]. **Observed** [CH93b]. **Obtained** [Pai09, PW14a]. **occasion** [Mol92]. **Odd** [DDD20, LF02b, Mel01, Mel04]. **Odd/Even** [LF02b]. **Odd/Even-Mode** [LF02b]. **ODEs** [KJH16]. **Oettli** [May12]. **Off** [CDGS10]. **Off-Diagonal** [CDGS10]. **Ohta** [FP17]. **Once** [LW20b, WZZ22]. **One** [Arg15, BL21, BR22, BV90, BESS22, BEGG07, Bor09, BB07, CLL20, DS20b, DD13a, GTW00, GT17, GE94, HST19, JK15, JLS01, LNSU18, MMW17, MSS19, MHG15, OA23, PL14, Qi11, SB92, Sle09, Ste10a, Tre90, WC14, Wei92, ZG01, AKU20, BK21, MH95]. **One-Dimensional** [JLS01]. **One-loop** [CLL20]. **One-Parameter** [Tre90]. **One-Sided** [BB07]. **One-Way** [BV90, GTW00]. **Online** [ZPW18]. **onto** [Bor14, Din98]. **Operations** [LB02]. **Operator** [CT15, Dri06, HHLW13, JJ03, KK12, Mat93b, Nou96, PS08, RRR06, RHE14, TCTM00, TW03, BM88, BN87]. **Operators** [AMT90, Beb06, BK90, BJMS17, BET02, CHH+15, CZ03, Elm97, Gre92, GCL16, Gru06, HK08, HN98, HLT91, HLM94, JLS01, KBHH13, Kni00, KM96, PW03, Rog05, Sil03, SQ13, Tig91, ZAK13, DS95]. **Oppenheim** [LZ97, YL00, Zha04]. **Optic** [Kau06]. **Optical** [HKBM08, SdJL+18]. **Optics** [Bar08]. **Optimal** [ASvG17, ADC04, BB95, BBTT06, BSZ20, BOS16, BGG18, Bet09, BGH07, Bor14, CS09, CGMM23, CC17, DP10, Dem23, DS16, FG15, FL99, GH92, GLS12, GDX11, HB12, HL23, HS10, HG21, HS13, HDSC23, Jia22a, KN00, KMS01, KMS03, Li06, LC05, LP13, MM23, MV20, PS04, gSS97, TS99, TV09, Tyr92, VGA10, Whi00, Meh88, NW02]. **Optimal-Order** [DS16]. **Optimality** [CB00, ES11, EMC17, WZL21, OW88]. **Optimally** [KRS19, SES95]. **Optimization** [BL21, BAMC20, BM01, BLO03, CLL20, CDH12, FGL21, GHNV03, GMPS92, GGO13, HL08, Hig93, HMWY18, KMMM18, KLV18, LMPT20, MYK14, MV23, NBS10, OA23, PN18, PSW12, PFRR17, PPLG20, SZ07, SAGS21, TFL11, VV10, WCCL16, ZLQ12, FGS96]. **Optimized** [DK13, EDK16]. **Optimizing** [FNV08, HO94, NBG10, NP13, OW95]. **Optimum** [Woź93]. **Orbit** [DZ01, DK14]. **Orbits** [DD08, LPS08]. **Order** [AB19b, BFG23, BGG18, BB96, BE03, CG03a, CGMZ21, DDV00b, De 08a, De 08b, DN08, Djo08, DD13a, DD13b, DD14, DSD17, DRV21, DS16, DIS15, FLV04, FL18, GL18, GS94, Hem95, HR14, IAVD11, JX20, KB90, KGD23, KBHH13, KR02, LSM22, LNT18, LGL16, Lu10, Men08, MJM11, OA23, OL99, Peñ95, PS04, QCBZ21, Sai16, SK20, SS17, SQ13, SD15b, SM16, SMM20, SH91b, Ste10a, SW98, Vac94, VGA10, VKDD21, WZZ22, ZG01, dBG08, BS05, VD21, Zab89]. **Ordered** [Har93, JOvdD01, JOvdD04]. **Ordering** [Alt13, ADD96, ALP07, AL98b,

BFM03, BS90, DFT92, GO95, Gro97, HP09, LRN06, NR99, OYV22, RS94, RE98, YL08]. **Orderings** [BT02, Har93, Mas95, Pey01, SS89]. **Orders** [He99, JMW96]. **Ordinal** [WI09]. **Ordinary** [WZ95]. **Ore** [FR23]. **Oriented** [BvdG11, GL99, Har07, Mor94]. **Origin** [AHH01, ZvSD20]. **Orthogonal** [BZ98, BV95, CS09, Cla10, DDL14, DP04, DMM03, EM00, EGK91, FKZ23, FB95, Fie96, FR23, GW07, GGL04, GD22, Grc10, GdlI08, GC19, HLM94, HV97, Jia01, Kol01, Kol03, LUC18, LNSU18, LB96, LSB16, MV08, MHG17, Nap13, OST09, PN18, Rob16, Ste16b, SB95, Tur03, VFGM05, VVM05, WCY15, WZL21, Yan20, CH88, CG90, DGIM06, Hon89, Meh88, SB88]. **Orthogonality** [BP92, EAS98, HS98]. **Orthogonalization** [CGLV11, Dax08, RODS15, Sha23b]. **Orthogonally** [CCJ+00, DLT15, MHG15]. **Orthonormal** [BLW15, IW14, SDC+12]. **orthotropic** [CS89]. **Oscillation** [KH13]. **Oscillators** [FL99]. **Other** [Gre92]. **Out-of-Core** [Bér09]. **Out-of-Sample** [MSS19]. **Outer** [ZHY16, CF89]. **Output** [CCH98, GVK20, HJ89, Meh88]. **Overall** [DD13b]. **Overcoming** [HO98]. **Overdetermined** [HM97]. **Overlap** [Whi00]. **Overlapping** [CG92, SŠ91, ZŠ94]. **Overrelaxation** [GH92].

**P** [BG19a]. **P-matricity** [BG19a]. **Package** [GL99]. **Packets** [HL17]. **Padé** [Bas89, BL94, CM93, CJL96a, CJL96b, DP00, GN16, Hig01, HL11, HL13, Lu98b]. **PageRank** [WW08, BRZ06, GLY15, IK06, IS08, LM06a, SC05, WI09]. **Pair** [LŠ10, LM06b, LGL16, Ste16a, XNB22]. **Pairs** [BC92, Car94, EJK09, FV98, GPM03, GHT10, Hua21, JKM11, KS12, KLS16, Law13, LM06b, Tis04, XPL+18, HD97]. **Palencia** [CGL18, RS18]. **Palindromic** [BKMS15, De 18, HLQ09]. **Panel** [KDGG13]. **Parabolic** [DSSC11, MS97]. **PARAFAC** [dMGF14, GMBS12, PTC13, RCH08, Ste08, SD09, Ste12]. **Parallel** [BO96, BOCL97, BB07, Bos21, CGHR07, Cri88, DDN20, DYH06, DGL99, DP07, HR95, HP92b, JS94, Kon00, LC05, LR05, NY95, OYBV19, SYJ00, SJ92, Wal95, ZŠ94, ZGP10, de 92, vD99, vdG93, vdSBvdV93, DY90, KN89, SS89, Tsa94]. **Parallelizable** [ZZ98a]. **Parameter** [BK15, BKK07, CS01, CGGS98, DP09, HP02, HKP05, Ji92, LZ10, MH13a, MMW17, Ple00, SK16, SS17, Tre90, Uhl20, Vog99, RJ21]. **Parameter-Dependent** [BK15, MMW17, SK16, SS17]. **Parameterization** [KJH16]. **Parameterized** [BT10b, BCW12, CGI10, DBW15, JC22a, MB10, MSM21, NS09]. **Parameters** [DPP13, DPP22, FST+13, HG21, HZ01, KO01]. **Parametric** [BP21, GS06, Pop12, Pop15, SS17]. **Parametrization** [DJ09, DY10, FMX02, Jia01]. **Parametrized** [KT11, Mee03]. **Parareal** [Sou19]. **Paraunitary** [Jia01]. **Parlett** [DH03, HL21]. **Part** [BM94, FG94, Mat92, Nab00, AMR+18, BM00, BBM02a, BBM02b, De 08a, De 08b, DN08, DG91b, DG91c, DD13a, DD13b, EEK97, EEK99, Fer97, Gut92, Gut94, Ho90, LLZ09, MMT08, Rau02a, Rau02b, Rum03a, Rum03b, SD15a, SDD15, VD21, VKDD21]. **Parter** [JDS03]. **Partial** [ABG07, BDGY20, Bjö14, BT02, DD16, DEG+99, Fos94, GR23, GJX22, GKR89, GGC09, Gro97, GMBS12, HHRV99, He99, Hig97, JK97, JMM14, JN03, LO20, MSS19, RW95, Tam98, Tol97, Woź93, YL08, ZZ99, JMW96, JR88]. **Partially** [CKL04, Dan93, GOV19, KLX07, Næv93]. **Partition** [Wal95]. **Partitioned** [De 08a, IIM94, LNTX11, LNTX13, MO23, ZZ01, IM95]. **Partitioning** [AEGL19, AR93, FST+13, PV17, PSL90, YP98]. **Partitions** [Li16]. **Parts** [MMW22]. **Pasciak**

[FAT16, SW08]. **Pasciak-Type** [FAT16]. **Passage** [DA05, KN99]. **Passive** [FGL21, MV23]. **Passivity** [DRV21]. **Passivity-Based** [DRV21]. **Path** [GTJ13, JS07, LM18]. **Path-Following** [LM18]. **Path-Sums** [GTJ13]. **Paths** [PSS19]. **Pathways** [LS95]. **Pattern** [BSvdD95, DD97, Her90, LS95, HPR89]. **Patterns** [BMOvdD04, HLW94, KOSvdD07, LOvdD02, SHS03, Tsa98, JJ88]. **PDE** [CLNW20, DSSC11, PSW12, SZ07]. **PDE-Constrained** [PSW12, SZ07]. **PDEs** [BOS16, CDGS10, GLS12, Hem95]. **Penalized** [YLA97, ZZS04]. **Penalty** [LMPT20]. **Pencil** [AMR+18, BBV19, Bos21, CH06, DS10, DS19, GLM17, HGC00, JOAKt10, Naj98, SL94, BV88]. **Pencil-Based** [BBV19]. **Pencils** [AA09, AAB10, AB18, AT98, BR19, BR22, BBMX02, BT12, BT13, Bol90, BM06, BKMS14, BKMS15, BS16, BEGM05, CG98b, CG06, DD08, DD16, De 18, DK14, DJK17, DS20b, DQV22a, EEK97, EEK99, EK96, EK17, GPM03, GT17, GPPT23, HO94, HMT09, HGC99, IM16, IS07, IT11, KL98b, LGC08, LV06, LW97, Meh99, MMW17, MMW22, Mor21, PS22, TU91, NP16]. **Penrose** [BC10, FF99, HH93, HH94, Pat00]. **Per-Hermitian** [HBW90b]. **Perceptron** [CRY+21]. **Pereyra** [BEG+09]. **Pereyra-Type** [BEG+09]. **Perfect** [MV18]. **Performance** [BS90, BH90, BBM02a, NR99, Swe93, Wat00, WZZH21, ZH22, JP94]. **Periodic** [BT06, CCS05, CFL07, GKK99, GK06, Kir95, KLX04, LgS02, Sun04, Tam97, BC88, MF20]. **Periodicity** [CD00, DP09]. **Permanental** [GP88]. **permanents** [FF93]. **Permutation** [FJBd15, Stu88]. **Permuted** [MP12]. **Permuting** [DK99, DK01]. **Perron** [EKNX93, GTH19a, GTH19b, HQ16, KN94, KNOX02, LGL16, MP11, NS94, YY10, YY11]. **Person** [Mar91]. **Perspective** [DGR23, Mei04]. **Persymmetric** [AKM97, CLG93]. **Perturbation** [ABK+11, BCR11, BBGF00, BM06, BEGM05, CGRVC08, CPS97, CP98, CGP09, CS10a, CLN12, wC03, DDY14a, DDY14b, DD07, Din98, DM05, DOV94, EEK97, EEK99, EI98, ES11, Elm97, Far16, FHL23, Fie96, FJ06, GA18, Gu98a, HY00, Hig03, HMP19, HC15, IR08, IN09, IM16, JK15, Kåg94, Kar11a, KK14, KPC94, KP99, KMP01, Kre05, LMZ03, LNV92, Li95, Li98a, Li98b, Li99, LS03, Li05, LS07, LNTX11, LNTX13, LgS02, Liu12, LR99, LT94b, MOC91, Mat93c, Mat97a, Mat97b, MBO97, MD03, NNPQ23, Pet21, Ral09, RRR06, SMM20, Ste93a, Sun95a, Sun95b, Sun96, gSS97, gS98b, Sun04, TVW15, Vac94, Wan15, WD00, WLB05, Wel11, XSW10, XG98, Ye09, Zha93a, ZZ01, dTDM08]. **Perturbations** [AG88b, BR19, BR22, BEGG07, Ble21, BW93, DS20a, DD16, DS20b, EK96, GT17, GGMO17, HH21, HNT99, Kar11b, Li93, MMS16, MMW17, MT15, RS96, RW95, Rum03a, Rum03b, SW94, WD94, WD95, Zab91]. **Perturbed** [AKPP08, ANT09, BBS15, BFZ07, DLLT22, HHH12, MMN22, Naj98, SEM13, SM16]. **Phase** [BD22, CFL17, Mar11a]. **Phenomenon** [Hig03]. **Photonic** [HHLW13]. **Pieces** [CdS90]. **Piecewise** [BET02, Gow96]. **Pierce** [FF93]. **Pipelined** [CYA+18]. **Pivot** [Gar09]. **Pivoting** [BFG23, BS02a, BT02, CCJ+00, DEG+99, DGGX15, DP05, DP07, FH21, FXG18, Fos94, Gou91, GGC09, Hig97, HHP21, HS14, IT06, KDGG13, MM00, PMT23, SS98, Swe93, Tol97, YC97, HH89]. **Placement** [BR19, GT17, MX98, Mim15, vdWM95]. **Plane** [AP94, BMM20, PS88]. **Plus** [BESS22, BDG20, BJ16, CG03b, CESC20, DD98, Har05, HR04, HT17, Hoo17, ZZ99]. **POD** [CFT16]. **POD-Augmented** [CFT16]. **Point** [AGQS22, BSZ20, BB18, BG04, BG06a, CH93c, CHZ03, DH22, Din98, DGSW06,

Dol07, DJ00, DJR+18, EG15, GGV05, GS10b, GOR14, HZ01, JR13, JR08, KS22a, KC09, LV10, LZ10, LP13, Mar91, Més08, Not14, Not19, OS10, PW14b, PR16, PU10, PU14, RS02, RST18, SZ07, SHY10, SHZ12, SB04, SSR20, Tis01a, TS99, Tům02, Wri95, WT11, XW07, YXY20, Zul11, Rum91, Wri97].
**Points** [AAB10, BGN12, DPP13, DLT15, GL13, GKL14, O'N05, XC20, de 90].
**Pointwise** [CRS99, CRS01]. **Poisson** [CCZ97, LLZ23]. **Polak** [JX20]. **Polar** [BNP22, BvdMR+97, BX08, Eir00, GL17, GNS18, GI96, HMMT04, HMT10, Kap90, KL92, KZ10, Li95, LS03, Li05, Mat93c, NBG10, NH12, NNF14, Pil94, YL08, ZMK02, vdMRR01, GI97]. **Pole** [BMU94, FP98, MX98, Mim15, RS08, Sun96, Zab91, vdWM95, CM89, CM92b, GKR89].
**Poles** [GG14, MX98, VGA10]. **Policy** [OS09]. **Polyadic** [DD13a, DD13b, DD14, DL15, DGGG22, ED22, EVD22, SDC+12, SD15a, SDD15, SD15b, SD19, VD21].
**Polyak** [JX20]. **Polygons** [Fie95].
**Polyhedral** [GL23, Pil94, VF00, ZvSD20].
**Polynomial** [AB19a, AABK19, BDD13, BKS08, BFS21, Bet09, BN10, Bor10, CSX15, DMR09, DQV22b, FJKM96, FLV04, Gem98, HLT08, HLM23, KJH16, Lau00, LC15a, LVV16, LXSdH20, MMMM06a, Mur91, Mur93, Mur98, NNT17, NV23, Rei91, SKP11, Sor92, TMV18, TH01, VD21, VKDD21, Wim06, YXS21, Ash91, BV88, Tre88b].
**Polynomial-Time** [BN10]. **Polynomially** [GR97]. **Polynomials** [AKU20, AB16a, AMVW15, AMR+18, BNS13, BKMS14, BKMS15, BdTD11, BDF17, BV95, BGH95, wC03, Cla10, DB20, De 11, DDD20, DP15, DIS15, EGK91, FLT10, FIS01, GH91, GL18, GW07, GdlI08, GR05, HM04a, HM04b, HMT06, HMMT07, HMT09, IR08, JLZ16, JV04, Kit95, LP01, LP05, LNV92, LP17, LR94, LY03, LT09, Lin03, MMMM06b, Meu17, NNT17, NTTZ18, NK01, NST15, PSW22, RS96, RR94, RI11, RVV17, Tas15b, TDV15, TZ13, TT98, Xu15, ZZ98b, dSV01, DGIM06, MV88, Per88].
**Polytope** [GWZ05, GZ09, GZ15, JP09, JCG14].
**Polytopes** [GP16]. **Population** [KNX04, PL14, KN94]. **Port** [GHR21, MV20, MV21]. **Port-Hamiltonian** [GHR21, MV20, MV21]. **Posed** [BGT14, ES12, Kil99, KO01, DK88, Fos03].
**Posedness** [dSL08]. **positions** [BH96].
**Positive** [ADGH18, AMT90, AD02, AFPA07, Asw16, BGN03, BW95, BJL98, BDR12, BF06, BD05, BS10, BHH+08, BT92, CS01, Car94, CT08, CCL09, CHLS00, DK05, DHZ03, DY10, EG00, ED23, FHGJ06, FV98, FMFJ18, GP06, GT04, GHNV03, GLV10, HLW94, Her90, Hu92, HQ16, JMO93, JH02, JOvdD03, Joh08, JSG15, KOSvdD07, KN91, LLŠ09, Lat95b, Lau00, Li05, LS11, Lin19, Lu98b, LQ16, MV97, MA20, Mat92, Mat97b, MMW22, Mel04, Moa05, Mor22, NS07, ND06, NY95, NV02, OR93, Peñ98, Peñ05, PT05, Pha01, QXX14, Reu02, Roh94, RST18, SMBJS13, SAGS21, SH93, Wal03, WZ91, WZ95, Whi90, XG10, XC18, XHC21, Ye09, ZvSD20, Zha00, ZWF05, Zha17, Zha10b, vdMS05, AG88a, FM88, HPR89].
**Positive-Definite** [AFPA07, JSG15, KN91, MV97, Mel04, Moa05, SAGS21, WZ91].
**Positive-Semidefinite** [MA20]. **Positively** [SQ13]. **Positivity** [BD98b, CKP11, DD12, GP93, LGL16].
**Possibility** [Kol03]. **Possible** [GPS96, TM12]. **Posteriori** [BCW12].
**Potential** [ABM21, PYHK93, SC05, WW08].
**Potentially** [LOvdD02]. **Power** [BM01, CWY20, Del97, HS98, HV05, KM11, KM14, KW92, Ran07, TFL11, ZXS21, BN88].
**Power-Compositions** [BM01]. **Powers** [DD99, HK95, HL11, HL13, IM13, Seb96].
**pp** [Ano11]. **Practical** [BBK18, LK22, Lee95, TYUC17]. **Practice**

[Fos94]. **Prager** [May12]. **Prager-Like** [May12]. **Precise** [AS93]. **Precision** [AMHL22, CD15, FH19, HK95, JL23, MR22, PP11, YGL18, GS92]. **preclude** [JJ88]. **Preconditioned** [ASvG17, Axe92, BN06a, BN06b, BGSC07, CNP94, DFT92, DGGG22, Elm97, FS10, HS10, HS95a, HDSC23, HSC04, IW14, KN09, KK93b, KK93a, LW20a, LH05, Pes14, PW15, RP10, RW92, Ser98, SHY10, SX11, WZZ22]. **Preconditioner** [BG04, BS02a, BW99, CT99, ES12, EZ95, FP17, For03, FMFJ18, GLS12, GGV05, HT17, JWX03, LS06, lLNS17, MMN22, RN18, SZ99, SB04, SW08, Tan99, XLS16, XHC21, ZXS21]. **Preconditioners** [AGP19, AG19, ACST09, BNW09, BDSC11, BSZ20, BGH$^+$06, BK95, BG06a, BCMM95, Cap98, CP03b, CPS00, Che01a, CCZ97, CNW08, DYH06, Dol07, DS16, EN08, GMPS92, GG06, Gre92, HO92, KO05, KS22a, Kil99, LG06, LS17, Not14, NV02, PSW12, PR16, Pes19, SST05, SZ07, SHZ12, SSR20, TMNV10, TS99, Tyr92, Cha89, KCT90]. **Preconditioning** [ADGH18, ACW17, AV91, ABN09, Beb06, BOS16, BH03, Cao02, Cap00, Dem23, DGSW06, DSSC11, FJKM96, FTU23, GHL03, HJ07, JC22b, KNW20, KGW00, KL08, LRN06, LXSdH20, Log17, MT00, NS96, Not06, PAP00, PV17, PS04, PU10, RW94, RSS09, RS02, Ser96, SCBC21, SEM13, ST14, SCA12, SW08, Vav92, XX17, YXS21, vD99, Ash91, PU14]. **Preconditionings** [MP21, KY93]. **Preconditoner** [LW20b]. **Predicting** [Gil94, GS92]. **Prediction** [Elt92, GGC09, NP96, Qia88]. **Predictor** [BB98, HS23]. **Predictor-Corrector** [HS23]. **Preface** [LGPS90]. **Prescribed** [ADHM19, CE94, CKL04, DHST05, FIS01, NS94, RSS94, TDV15, BH96]. **Presence** [CGGS98, Par94, Wat00]. **Preserve** [DMS12, Loe90]. **Preserved** [DV06b, DV06a]. **preservers** [PR88]. **Preserving** [AM23, BWQ06, BNP23, BS91, BS94a, BH08, BDF17, Fit19, FHLS13, FT16, GLV10, GL10, HMMT05, HLT91, HLM94, HJP03, HLQ09, JN21, KRU14, KK17, KS12, KLS16, LX06, LGL16, MMS16, SS06, SdJL$^+$18, SMM20, VZ06, XC18, DS95]. **Pressure** [Mor22]. **Prewavelets** [Mae98]. **Primitive** [GGJ18, Pro13]. **Primitivity** [Ano11, CPZ11, FV98, WZ23]. **Principal** [AR93, Drm00b, JK95b, MSZ21, MTV10, MYA19, MM00, RST10, XK94, Yan98, dSV01, Özg91]. **Principal-Components** [AR93]. **Principle** [BRR00]. **Principles** [BL12, BL13, Bor03, Auc89]. **Priori** [AMS07, EV06, Lat95a, Sch23]. **Probabilistic** [CH23b, HI15, HIS18, IZ20, KW94, YC97, vDHvdV00]. **Probability** [Spe98]. **Probing** [CM92a, FSS21]. **Problem** [ASA04, AA94, Afs08, AE97, AHS00, AB19a, Aru92, BG11, Bai99, BS05, BL12, BL13, Bar93a, BJL98, BBT05, BBTT06, BBTK08, BF00, BGT14, BD90, BGT05b, BHP03, BEGM05, BDST08, BMU94, BFP95, BMV20, BW93, CZBL18, CE02, CGS98, Cha00, CP98, CG98a, CG06, CH06, CMT09, CF00, CB00, CH99, DBW15, DW06, DD10, DS19, DYY16, DS23, DK08a, DL17b, ES18, FZ16, Fri02, GOV19, Gow90, GS94, GS02, Gul95, GL10, HLT12, HPS$^+$11, HPS13, HPS15, HPS16, HP02, HKP05, HGL05, IM16, JNP21, JKN11, KM16, Kau93, Kau92, KN98, KN91, KMS01, KMS03, KLX07, LZ14, LM90, LGC$^+$14, LJW22, LM03, Lu95, Lu98a, LZ10, LN14, LKK97, Mac99, Mac95, Mal06, MP95a, Mar11a, MLV00, Mat98, Mee09, Meh04, MX98, MBN17, Mim00, MN97]. **Problem** [MPS98, NOZ11, NS18, NBS10, PDF16, Ple00, Ple06, Qi13, RW01, Sid95, Sun96, SD12, TETA05, VZ91, VGV09, Ven93, Voo12, VYH11, WE91, Wat93, WE94, Wei92, fX96, ZZ98a, ZWF05, Zha10a, ZXL14, ZYSY20, ZMW17, ZF14, dSL08, BJ95, Pan91, San88,

Tis93, Tre88a, Tre89, VV88, VV89, WBP89]. **Problems** [AT07, AGQS22, AM23, ABG07, ACST09, ANT09, ABN09, BDY99, BLL22, BESS22, Bar98, BST16, BSZ20, BDR12, Ben99, BOS16, BFS21, BG04, BN06b, BMS06, Bet09, BT10b, BH13, BM96, BES98, BHM00, BKK07, BBGF00, Bor10, BS16, BB20, BG06a, BGBM92, CGCDM13, CPTP09b, CGP09, CG10, CH93c, CESC20, CLNW20, CKL04, CGH11, CK91, CC17, CHZ03, CGS94, CSK95, CC92, CHLS00, DFT92, DG91c, DT08, DLM04, DW15, DS10, Dol07, DS16, DJR$^+$18, DP05, Eff13, EHvP04, EL97, EW13, EOS19b, FF94, Fio11, FJBd15, For03, For96, FS01, Fos03, Fri92, GH91, GHNV03, GITT96, GP97, GA18, GTI11, GJTP12, Gre05, Gu98a, Gu98b, GKL97, GKL14, Guo03, GHT09, HG18, HYI10, HMR01, HL23, HS10, HH98, HPZ23, HMP19, HZ01, HLQ09, Huc92, Ips06, Ips09, IW14]. **Problems** [Jam92, JMM14, Ji92, Jia22a, JLS01, Kan96, KKM14, Kau06, KNW20, KKSZ22, Kil99, KO01, Kni04, KMS15, KLV18, Lan07, LX09, Lau00, LC15a, LVV16, LG06, LY03, LS06, LNTX11, LNTX13, LW20a, LMPT20, MMMM06a, MMT08, Mal04, MH13a, MS10, MBN17, MZ19, MV23, Miy14, MH13b, MH15, Mor21, MM00, MPS00, NS07, Not14, Ors06, PS05, PYHK93, PSW12, PS04, QL99, QACT13, RT93, RHE14, RJ21, RSS09, Rod06, RPG96, RPG98, RS02, Rum12, RW92, Saa16, Sch05, SZ07, See11, SHZ12, SB04, SvdV96, SSR20, SW94, SB11, Sun95a, SV15, Tis01a, TH01, Tis03, Tům02, VMM15, Van92, wVjBqJ11, Wat01, WD00, WS12, WS00, WZZ22, XE12, YGM09, YBZC16, ZS14, ZH03, ZLQ12, ZSYJ18, ZBJ15, ZHY16, Zul11, CS89, CLS88, DK88, GIMT95, JN89, Meh88, MT89, Qia88, Wim88a]. **problems** [Zha95]. **Procedure** [CW96, GIKT95, GGL04, LSB16]. **Procedures** [GR00]. **Process** [Art96, BR08, CKR05, Gut92, Gut94, HKV05, Pai10, PP11, Pai19, Van08]. **Processes** [AGQS22, AG00, Cap98, CCZ97, Cla10, DQ02, GdlI08, Guo02, HM20, LF02a, LP89]. **Processing** [Aru92, SKP11, ZR95, Cri88, Fuh88]. **Procrustes** [AE97, SB88, ZYSY20]. **Product** [Alt13, Bar98, BOS13, BK90, BvdMR$^+$97, DHM19, DS18, GSV00, GK06, GR00, HK08, JS07, KN00, Kar11a, KT10b, LS11, LWW15, MMT05, MV02, MV07a, MP98, NNP04, RHE14, Sen06, Sha23b, SB03, Van10, Zha10b, ZR95, FM88, Tre88b]. **Product/Quotient** [GSV00]. **Products** [BZ07, BF05, CNG23, CDH12, FF94, FHLS13, FIS01, GTI11, GSTPT22, GLP01, GP04, HL17, HM90, HLS97, IZ20, JR13, MMT08, Mae98, MSZ15, Rod05, Ste18, WZ95, Zha97, HC89a, HC89b, PS88, Zha95]. **Profile** [PK93, PK94]. **Programming** [Ari00, AB01, ES92, FGM91, FS01, GS10a, Gil13, HXY11, LT97, LP11, MW01, OS09, PJB10, MT89]. **Project** [GMMN21]. **Projected** [CFL07, GL18, GOR14]. **Projecting** [Din98]. **Projection** [Bor14, BMP20, CWY20, GHHW90, JK95a, Jia22b, Mor21, Sim16, TP14, ZH03]. **Projections** [BL21, CE02, FL19, FNV08, Grc10, MOR04, RKN20, WD00, WZ17]. **Projective** [Hu92, Sal88]. **Projectors** [GT99, KS17, MS03, RE13, Ste11b]. **Prony** [Bos21]. **Proof** [Drm10, NV94, PS94, RS18, Bar89]. **Propagation** [CYA$^+$18]. **Proper** [SCBG05]. **Properties** [BSvdD95, BO96, BU21, BDMS10, BDMS12, BRZ06, Che98, DG91a, Elt92, FLT13, GIK00, Gov91b, Gow96, GW00, HP92a, Hla23, KK93b, KK93a, Le 96, LF02b, LQ16, MNR15, MMW18, MP95b, ND06, NS94, NSCS10, OS10, PP11, PW14a, RE13, SB04, SQ13, Sta22, SU94, Tre94, Tre05, VZ91, Xie23, dF05, Bas89, Lag91, ML89, VV89].

**Property** [DRTW91, EOS19c, EOS19b, HV19, JWX03, LT97, MO20, NNF14]. **Proportional** [BGMN92, CCH98, KLX04, LEMCD19]. **Proximity** [KT10a]. **Proxy** [XC20, YXY20, YXS21]. **Proxy-GMRES** [YXS21]. **Pseudocontractions** [SB01]. **Pseudoinverse** [LC16]. **Pseudoinverses** [DS17, FA23]. **Pseudomonotone** [Gow90]. **Pseudoperipheral** [GPS90]. **Pseudopolynomial** [GHNV03]. **Pseudospectra** [AA09, AAB10, BLO03, BLO07, BBM21, EK17, GL13, GKL14, HT00, Kar10, Kar11b, LP05, Ran07, TH01]. **Pseudospectral** [BLO04, GO11, KV14, LV17]. **Pseudospectrum** [BL10, BGN12]. **Pseudosymmetric** [BNP23]. **PSVD** [ABL94]. **Pure** [SDN21]. **Purely** [MS10]. **Pyramids** [HO15].

**QMR** [Sim97]. **QR** [CH23b, Ste06]. **QTT** [DK13, EDK16, KK12]. **Quadratic** [Ain17, AW00, Ari00, AB01, BS05, BBTT06, BGG18, BH90, BT10b, BMM20, CKL04, CCL09, DL03, FGM91, FS01, GP97, GHT09, GL10, HK01, HGL05, HLQ09, KLX07, LP01, LZ14, LNV92, LY03, LSM22, LS11, Lin03, Mat98, Mee09, MP11, NK01, OYBV19, Pin19, Ple06, PPLG20, QACT13, RS96, RT93, See11, SH91a, Tas15a, Tas15b, TZ13, TU91, Voo12, ZS14, ZH03, Zha10b, Meh88]. **Quadratic-Bilinear** [BGG18, LSM22]. **Quadratically** [BBTT06, HMWY18, MV23, QS06]. **Quadrature** [CKR05, FMRR13, FGS14b, UCS17]. **Quadratures** [Kau92]. **Quadric** [Nie10]. **Quadruples** [CMT09, GP98]. **Quality** [GM98]. **Quantile** [HNRS22]. **Quantile-Based** [HNRS22]. **Quantum** [CKO$^+$22, ELN22, MSV19]. **Quarter** [BMM20]. **Quasi** [BGG18, BT12, BT13, BLAK91, CS98, Cla10, DS97, DQ02, EM15, GI00, GIK00, GR17b, GdlI08, Guo02, Guo03, Har07, HM20, HMR01, MO20, Ste05, VGV09]. **Quasi-Birth-and-Death** [Cla10, DQ02, GdlI08]. **Quasi-Birth-Death** [Guo02, Guo03, HMR01]. **Quasi-Cyclic** [Har07]. **Quasi-Definite** [GI00, GIK00]. **Quasi-Gram** [Ste05]. **Quasi-Kronecker** [BT13, BT12]. **Quasi-Minimum** [MO20]. **Quasi-Newton** [EM15, GR17b]. **Quasi-Separable** [VGV09]. **Quasi-Stationary** [HM20]. **Quasi-Toeplitz** [BLAK91, CS98]. **Quasidefinite** [GSS96]. **Quasiseparable** [BOS13, BBD11, BEG$^+$09]. **Quasiseparable-Vandermonde** [BEG$^+$09]. **Quaternion** [JN21, SDN21]. **Quaternions** [Mac95]. **Question** [Kir02]. **Queue** [GT02]. **Queueing** [BM96]. **Queues** [DLLT22, HN97]. **Quotient** [DJ00, GSV00, MA20, Not03, RS08, Ste16c, SL94, SX11, XE10, ZAK13, BF89]. **Quotients** [CDH12]. **QZ** [KK07].

**R** [CT15, Ikr97, KZ10]. **Radau** [FLSS17]. **Radial** [Le 19, WLD18]. **Radii** [GP18, HNT99, Li91, MMS16]. **Radius** [Alt13, BM19, BN05, BN10, BZ00, COP20, GR93, GO11, GGMO17, JCG14, KV14, LO20, LW05, Mor22, NP13, Tig91, Tro90, BH96, OW88]. **Radix** [PL18]. **Radix-2** [PL18]. **Ramaswami** [Guo02]. **Random** [Ain17, AB19a, BMM20, BK21, CWY20, CD05, CLNW20, CC09, Del97, DMS13, DRSZ07, DGIM15, DK08b, ES08, GN03, HHP21, Hol91, INRZ21, Jia22b, KN99, KW92, PCB16, PMT23, RVA05, RS21, VT98, Ede88]. **Randomization** [SG21]. **Randomized** [BYDW18, BBK18, BG13, CD13, DGR23, FXG18, FTU23, GR15, GR17b, GS23, HI15, MNR15, MM23, Mar11b, MSKC21, NP23, Nec19, PJM23, PK23, RST10, Sai19, Ste21, WXZ16, XXC14, XXCB14, XXG12, Xia13,

YGL18, ZF13]. **Randomly** [PJM21]. **Range** [AS93, BLd93, CP17, CG19, DF20, GKL18, GTI11, KM16, LP01, LR94, LP00, Lin03, Lu20, RS18, TW03, TU91, FM88]. **Range-Space** [GTI11]. **Ranges** [Cro16, GLPS11, MA99, PSW22]. **Rank** [AKU20, ADGH18, AJRS13, AC20, AG88b, Arg15, ABM21, Asw16, BL21, BR19, BR22, BV92, BESS22, BLW15, BYDW18, BKS18, BBV19, BV00, BBBT20, BDG20, BEGG07, BCR11, BD10, BSU15, BS10, BHH$^+$08, BPR20, BK21, CCB$^+$20, CGCDM13, CR21, CI94, CDGS10, CWY20, CS09, CO12, COV14, Cho10, CGMZ21, CFG98, CP03c, CDLP05, CHW10, CSEP21, Cif21, CLG93, CGLM08, CK20, CKM22, DH01, Dax08, DDV00b, De 11, DD07, DD08, DD16, De 18, DDD20, DV07, DV08a, DV08b, DGGX15, DGR23, Di 09, DS20b, DD20, DK06, DI19, DWWY20, DL17b, ES09, ES11, ES18, EG15, ED22, ED23, FHL23, FPST13, Fei94, FB95, Fos03, Fou18, FP16, FT07, Fri16, GLPS11, GMN20, GR17a, GT17, GOV19, GG11, GGL04, GQ14, Grc10, GV07, GE94]. **Rank** [GCC18, GC19, GL13, Hal22, HY01, HS23, HM20, Hel95, HLW94, HMP19, HS13, HST19, IAVD11, IAV13, IUM14, JMPR19, JK15, JKN11, KM16, KK12, KGD23, KDGG13, KO18, KL07, KR02, Kol03, KO15, Kon00, KK17, KT11, LK22, LH22, LLZ09, LC16, LW02b, LZ05a, LS17, LNSU18, LMPT20, MU13, MA20, MPR18, MMW17, MSS19, MH15, MD03, MHG15, MBM08, NP23, NS11, NW14, Nie17, OA23, OSS14, PK93, PK94, Pan93, PE95, PK23, PL97, PSW22, PL14, Qi11, QCL16, Rie92, SCPW12, SS10, SMBJS13, SB92, SC10, SG21, SDN21, SZH22, SD15a, SDD15, Ste08, Ste10a, Ste13, Ste93b, Ste16b, Ste16c, Ste18, STT17, Tas15a, TP22, TYUC17, VV10, VYH11, WC14, WCY15, WLD18, WS12, WCCL16, WD94, WD95, XLS16, XX16, XG10, Xie23, Yan20, YXY20]. **Rank** [YGL18, Zab91, ZZ99, ZG01, ZZS02, ZZS04, ZLQ12, ZHQ16, ZXS21, Zhl12, dSL08, dTDM08, vdV96, BK89, FMSS21, MK20, Wim88b]. **Rank-** [BLW15, BV00, CSEP21, ES09, GGL04, KR02, Kon00, NW14, DDV00b, De 11, DD20, SD15a, SDD15]. **Rank-1** [DDV00b, GCC18, Ste10a, ZLQ12]. **Rank-Completing** [HMP19]. **Rank-Constrained** [FT07]. **Rank-Deficient** [Fos03, HS13, KGD23, MH15]. **Rank-One** [Arg15, BL21, BR22, BEGG07, GE94, HST19, JK15, LNSU18, MMW17, MSS19, MHG15, PL14, Qi11, SB92, WC14, ZG01, AKU20, BK21]. **Rank-Reducing** [WD95]. **Rank-Revealing** [CGCDM13, CI94, HY01, LLZ09, LZ05a, PE95, Ste93b]. **Rank-Structured** [CR21, MPR18, XG10, Zhl12]. **Ranking** [WI09]. **Ranks** [DL17a, NY19, RW95, TP23, TL06, HPR89]. **Rapidly** [Auc91]. **Rate** [BLL22, Guo01a, KNX04, MM23, Ste23]. **Rates** [BMfY03, LFW13, Nab99]. **Ratio** [AKU20, CHLW23, LNSU18, NBS10, Qi11]. **Rational** [AB16a, AB18, ADMZ18, ADHM19, BL00, BGV10, BFS21, BG15, BV00, BD90, CMV19, CGMM23, DD10, DQV22b, DSZ14, EG20, FKLR13, GG14, HB12, Ian09, KL91, KO15, KK93b, KK93a, LM98a, Lie08, LMC22, LW94, MV97, Nov11, OV99, Sid95, Sim16, SCMV21, SB11, VFGM05, VMM15, CF89]. **rationally** [Tre88a]. **Raviart** [PS04]. **Rayleigh** [BF89, BD09, CDH12, Hav89, KA10, Not03, RS08, SX11, Tan94, WZ17, XE10, ZXL14, ZAK13, ZK17]. **Rayleigh-Quotients** [CDH12]. **Reachability** [BF06, NT08]. **Reachable** [Men12, ZvSD20]. **Reaction** [KS15]. **Real** [AA94, BGMN15, Che01b, Chu91, CP03c, CES22, CDN14, DMP96, DLT15, Fio11, FG94, FIS01, GZ09, GL13, GGMO17, GR05, HIS23, Hig92, HDT10, JWN18, JW11, JLZ16, JP93, KN91, Li06, LV17, LKK97, MV07b,

Mel99, Nab00, PDF16, Peñ01, Peñ05, Roh93, SHJ09, Tam99, TY02, Tre90, Voo12, WD94, XZC99, Zha05, vdMRR01, AG88a]. **Real-Structured** [BGMN15]. **Real-Symplectic** [Fio11]. **Real-Valued** [CP03c, JW11, JLZ16]. **Realization** [CFL07, FPST13, LM90, MSKC21, Par99]. **Realizations** [FN04, HMP94, JK97, Par92, Wim88a]. **Realness** [ABK+11, CT08]. **Recapture** [BP92]. **Recession** [Gow96]. **Reciprocal** [LF02a]. **Reconstruction** [Bar08, BKKL91, GS03, ZGP10, HM89]. **reconstructive** [Sal88]. **Recovery** [BIS12, BdTD11, DDM10, Fou18, GQ14, Pin19, QCBZ21, WCCL16]. **Rectangular** [Baz00, BHL+93, BD10, GT04, GT08, HLS97, WA07, YL08]. **Recurrence** [ESS+12, ZZ98b]. **Recurrences** [GS00b, GR00]. **Recurrent** [Guo02]. **Recursion** [BM00]. **Recursions** [BLAK91]. **Recursive** [AHS00, Bér09, CS01, CGV03, EVD22, KS08, LM03, MR22, PL18, PV17, Qia88, ST01, Tam97, Wel11, ZWF05, ZZLY02]. **Recursively** [Gre97]. **Recycling** [CFT16, RSH21]. **Recycling-Based** [RSH21]. **Reduced** [GV99, Gre99, JX20, NS96, SS17]. **Reducibility** [LJS19, LW94]. **Reducible** [BCGG10, EHW10]. **Reducing** [DYH06, GMN16, RS06, WD95, YB91]. **Reduction** [ASvG17, AG91b, Bar02, Bar94, BB12, BGG18, BDG20, BB96, BG94, BKK18, DV07, DD14, DRV21, Fei94, FL18, FG15, GVV04, GPM03, Gei91, GR17a, GP97, GAB08, Guo03, HMR01, HJP03, IT18, JK95a, Law13, LSM22, MJM11, NTTZ18, NBS10, OA23, OST08, OST09, Ost10, PYHK93, Par92, RT99, SS17, Sou19, SS23, Tis04, VVM05, VGA10, ZPW18]. **Reductions** [SH91b]. **Reeves** [YBZC16]. **Referees** [Ano97]. **Reference** [Tol97]. **Refinable** [Han03, JRZ99, RST01]. **Refined** [Eir00, HP92a, IN09, JN03]. **Refinement** [BES05, DHT01, JC22b, JDS03, Miz22, Tis01a, Hav89]. **Refinements** [BG19a, CKP11]. **Refining** [RST18]. **Reflection** [BKKL91]. **Reflexive** [Che98, NNP04, Wan98b]. **Reformulations** [RT20]. **Region** [IAVD11, Kir92, SW94]. **Regions** [HL02]. **Regression** [ACW17, BE07, Fei94, GIG22, MYA19, SCBC21, SA22, O'L90]. **Regular** [BR19, Bez12, Cao00a, Cao00b, DD16, GT17, Hua21, LV06, Pow88]. **Regularity** [FGP00, GP16, JR99, RR98, RST01]. **Regularization** [BE07, BGMN92, CCH98, GMN20, GL21, GHO99, JLSZ22, KS99, KO01, KLX04, Mal03, MH13a, PSW12, RSH21, WXZ16]. **Regularization-Robust** [PSW12]. **Regularized** [BBTT06, BBTK08, BST16, CC17, DGSW06, Dol07, HMWY18, LC16, LPT10, PO03, RG05, SNC02, SHZ12]. **Regularizing** [HJ07]. **Regulators** [KB90]. **Related** [Alt13, BF93, BKMS14, CZ03, Cro16, CKP11, DMC13, DLM04, DK98, FS01, GP18, Gut92, Gut94, Gut14, Hla23, HLS97, KLV18, May12, MP91, PK93, PK94, SWYM96, ZLQ12, Bas89, BBDS95]. **Relation** [Fie95, GHR21, Nou96, Tam97, Xu98, ZZ98b, MV88]. **Relations** [BS02b, CG96, EGGR99, GPPT23, GP03, HLT91, Mat05]. **Relationship** [CG92, HPS+11, PP05b, Peñ98]. **Relationships** [CF02]. **Relative** [Bar00b, DDY14b, DP04, DMM03, DMM08, DH97, EI98, EGTP17, HC15, Le 96, Li98a, Li98b, Li99, Li05, LR99, Par05, Tru06, Ye09]. **Relative-Error** [DMM08]. **Relatively** [WLV06]. **Relaxation** [AW00, BF05, Cif21, ENV92, HG21, HZ01, LZ10, Woź93]. **Relaxations** [FJBd15, Hel00, LQ16, NW14, Sch05]. **Reliable** [Dhi98, Ral11]. **Remark** [Lat95b]. **Remarks** [BGT05a, Fri16, RS18, Wei95]. **Renumbering** [BW99]. **Reordering**

[GK06, JNP21, PFRR17, Zha01]. **Reorderings** [LC05]. **Reorthogonalizing** [GGL04]. **Repartitioning** [GH92]. **Repeated** [AT98, BS96, QACT13]. **Replacement** [CD14]. **Representation** [DV08b, FS97, GdlI08, KK12, Mar11b, PJM21, Sai16, Ste16a, SB95, SB03, Wei96, Xie23]. **Representations** [CDG+05, CGP06, CDG+07, HLW05, HR00, JLZ16, LHC16, MW01, WLV06, WL12]. **Representing** [Tig91]. **Reputation** [dKV10]. **Require** [Tsa98]. **Rescaling** [Hu92]. **Research** [GKL12]. **Residual** [AIM22, CD14, CGLV11, DH97, Ern00, FJKM96, GJX22, Gre97, HJ07, JN21, Mat98, Meu11, Meu17, Saa06, Ste91b, gS96, Tru06]. **Residual-Minimizing** [Ern00]. **Residual-type** [Saa06]. **Residuals** [BD09, Grc10]. **Resistance** [Fit19, SS23]. **Resolution** [CC92]. **Resonance** [GS06]. **Respect** [Ble21, RODS15, Uhl18, WD94]. **Response** [BL12, BL13, ZXL14, MP88]. **Restart** [WS00]. **Restarted** [BJM05, BER04, BF00, FGS14a, JK97, JN03, LS96, Leh01, MR97, Mor95, Mor00, NZ16, Sim00, XE12]. **Restarting** [AGJ14, CGLV11, EEG11, FKST23, JLSZ22, Sta02]. **Restarts** [FGS14b, ZH17]. **Restoration** [CR96, NNP04, RHE14]. **Restricted** [BT10a, CDD00, DG91a, MT15, Nov11, VZ91, Zha91]. **Restricted-denominator** [Nov11]. **Restrictively** [LW20a]. **Result** [CGL18, Pai10, Sle09, Voo12]. **Results** [BLd93, Cho10, DG91b, Din98, Djo08, DD13a, DIKMI18, Fer97, GS02, GWZ05, KS03, Mei04, Men99, MT00, MPS98, NP96, Ser98, Wil08, YL00, YY10, YY11, von93, CRR93]. **Resummations** [GTJ13]. **Retractions** [GL18]. **Retrievable** [BD22]. **Retrieval** [BR05, CFL17, VD21, VKDD21]. **Revealing** [CGCDM13, CI94, DGGX15, DK06, FB95, HY01, KDGG13, LLZ09, LZ05a, PE95, PL97, SG21, Ste93b]. **Reverse** [BMRZ94, Djo08]. **Reversible** [DR93]. **Review** [AYLR04, Meu92]. **Revisited** [Dub00, Hig05, Pey01, Wu17]. **Revisiting** [AC20, NV23]. **reweighted** [O'L90]. **Ribière** [JX20]. **Riccati** [BIP08, CR10, FHS09, Guo98, GL00b, GL00a, Guo01b, GH07b, GIM08, JL98, JOAKt10, KP99, LwCKL13, Lim07, LgS02, LX06, LX12, Lu05, MOR16, MX09, Sch95a, Sim16, gS98b, Sun04, gWcWL12]. **Riccati-Type** [LX06]. **Ridge** [ACW17, GIG22, SCBC21]. **RidgeSketch** [GIG22]. **Riemannian** [BS10, BAMC20, CDH12, DGGG22, HMWY18, IAVD11, JX20, Lim13, Lin19, SAGS21, VV10, WCCL16, YBZC16, Zha10a, ZBJ15, Zim17, ZH22]. **Riesz** [vdMS05]. **Right** [AIM22, GRT07, HPS13, HPS16, HP02, KS92, MB10, Ple00, WCW10]. **Right-Hand** [AIM22, GRT07, HPS13, HPS16, KS92, MB10]. **Rightmost** [EW13, MR97]. **Rigidity** [KK21, ST08, SC10]. **Rigorous** [CS10a, DN11]. **Ring** [CLL20]. **Ritz** [AKPP08, BGV10, BD09, CE12, Hav89, KA07, KA10, MSZ20, MSZ21, PP11, Tan94, TM12, WZ17, Wu17, Wül05, ZXL14, ZK17]. **Robert** [Joh96]. **Robust** [AGP19, AL98b, BSZ20, BH90, BLO03, DLMT13, Eff13, EL97, FMFJ18, GQ14, HL23, KB93, LGWX12, LNT18, MRU22, NK01, O'L90, PSW12, SNC02, Sch05, WLV06, WT11, XG10, XX17, Yan93, Zha01, Zul11]. **RobustMap** [Ost10]. **Robustness** [BCGG10, Gil13, MV20, WD94]. **Role** [Liu90]. **Root** [DK98, EKNX93, FHL23, Gaw19, GH06, HMMT05, Ian06, Ian09, KNOX02, LFW13, Mat97a, Mei04, MV23, KN94]. **Root-Max** [MV23]. **Rootfinding** [CR21]. **Roots** [AMVW15, AMR+18, CG15b, FH10, GR05, LB02, Lu98b, MS91, NST15, Smi03, JN89]. **Rosenbrock** [AB16a]. **Rotation** [DL02, JSG15]. **Rotations** [AP94, Drm10, GO95, Moa02, SV05, Van11, PS88, SB88].

**Rounding** [CH23b, CYA+18, SvdVM00]. **Roundoff** [EMC17, LEMCD19, LMC22]. **Roundoff-Error-Free** [EMC17, LEMCD19, LMC22]. **Row** [CH06, CK20, CH99, DH05, FHS+94, GNP94, RS94, RSS94, Pan91]. **Row-Wise** [CH99]. **Rows** [GN03]. **RQ** [SY98]. **Rule** [DTGVL05, Mat96, SW98]. **Rules** [CKR05, LK95, Xu15]. **Rutishauser** [WE90].

**S** [CT15, WW08]. **Saddle** [BSZ20, BB18, BG04, BG06a, CHZ03, DGSW06, Dol07, DJR+18, EG15, GGV05, GS10b, GOR14, HZ01, JR08, KC09, LZ10, Not14, Not19, OS10, PW14b, PR16, PU10, PU14, RS02, RST18, SZ07, SHY10, SHZ12, SB04, Tům02, WT11, XW07, Zul11]. **Saddle-Point** [CHZ03, DGSW06, EG15, GOR14, HZ01, Tům02]. **Saddlepoint** [RW92]. **Saddlepoints** [Men99]. **Salesman** [JNP21]. **Sammon** [ZLN10]. **Sample** [BMfY03, GTP18, GKL95, GKL97, MSS19]. **Sampling** [AKP08, GS03, IW14, LK22, LH22, SD19, XXCB14, XXG12]. **Sandwich** [Jia98]. **Satisfy** [ZZ98b]. **Satisfying** [CG03a]. **Scalable** [WLMD19, vD99]. **Scalar** [ACST09, BvdMR+97, Kar11a, MMT05, MMT08]. **Scale** [ABM+17, BSFM10, BYDW18, BHM00, ES92, FI18, FM93a, GIG22, GH07a, GAB08, GS23, HXY11, JK95a, KMMM18, LC15b, LwCKL13, MS10, Men18, OS09, PR12, SS13, Sim16, SK16, SY98, WZ17, ZSYJ18, HC89a, HC89b, MZ19]. **Scaled** [CE02, FHL23, GN16, Mat09, HD97]. **Scaling** [AMH10, AP94, BBS15, Bet09, BZ00, BX08, CH94, DP05, FLV04, FH19, Fay95, Hig05, HO15, JSG15, KL92, KZ10, KRU14, RSS94, SW97]. **Scaling-Rotation** [JSG15]. **Scalings** [BB95, DQV22a, Gre92, HPTH19]. **Schatten** [FHLS13]. **Scheduled** [MM23]. **Scheduling** [ADLK01, ADV05]. **Scheme** [ALN07, ALP07, CWY20, IAVD11, NY95]. **Schemes** [Bor03, JZ99, Whi00, vdG93, Whi89]. **Schmidt** [Bar19, BP92, CLR21, GGL04, PRS06, Ste05, VNVM14]. **Schrödinger** [JLS01]. **Schubert** [YL16]. **Schur** [GLV10, Ste02, ALAK94, ABN09, BLAK91, BL10, CO99, CS96b, CDGS10, CLN12, CNW08, CH88, DH03, DDV04, DV06b, ET10, GKX94, GK06, GH06, HL11, HL13, HL21, HS95b, HLS97, IM13, JMM14, KS22a, KL98a, KPC94, KMP01, LZ05b, MV07b, Mat95b, Pet21, SK95, Smi03, Ste01, Sun95b, ZXS21, ZH17, vdV96]. **Schur-Monotonic** [GLV10]. **Schur-Type** [ZH17]. **Schur's** [LJS19]. **Schwarz** [Bor09, BPS05, FS97, FNS08, HM90, NS07]. **Science** [AD21]. **Scores** [HIW15, Hoo17, SG21]. **Search** [Hig93, RCH08]. **Searches** [HK01]. **Secant** [CFG98]. **Second** [BS05, BH93, BB96, DRV21, FLV04, GR93, Koh99, LNT18, OL99, OW95, PS04, Vac94, WZZ22]. **Second-Moment** [BH93]. **Second-Order** [BB96, OL99, PS04, Vac94, WZZ22, BS05]. **Section** [LGPS90, MG92, NP99]. **Sections** [Rog05, Sil03]. **Secular** [LB02]. **Segregation** [DMW23]. **Seidel** [MNR15]. **Selected** [RS21, XXCB15]. **Selection** [AB13, CK20, CB00, Lu10, RE98, YXY20, dBG08]. **Self** [BLL22, BP21, CKL21, Cao09, DQV22b, GL23, LP01, LWWY14, MSZ20, PL18, Per88, WE89, WE90, YGM09, ZAK13, vdMS05]. **Self-Adjoint** [Cao09, LP01, MSZ20, ZAK13, BP21, vdMS05]. **Self-Conjugate** [DQV22b]. **Self-Consistent** [BLL22, CKL21, LWWY14, YGM09]. **Self-Dual** [GL23, Per88]. **Self-equivalent** [WE89]. **Self-Recursive** [PL18]. **Self-Similar** [WE90]. **Selfadjoint** [KL98b, RRR06, ZZTA02]. **Semantic** [VS14, ZZ99]. **Semencul** [AG91a]. **Semi** [BY88, GK15, LHC16, SA22]. **Semi-Infinite**

[SA22]. **Semi-iterative** [BY88]. **Semi-Nonnegative** [GK15]. **Semi-Separable** [LHC16]. **Semialgebraic** [QCL16]. **Semicircle** [BZ07]. **Semiclassical** [HL17]. **Semiconvergence** [AM05]. **Semidefinite** [AD02, BS10, BHH+08, CS01, Car94, CFG98, DHZ03, DH97, DY10, FNS08, GS10a, GS02, HXY11, Hel00, HLW94, Her90, JT98, Lau00, LWXZ06, Mal04, MA20, MW01, MMW22, NS07, NW14, Ste10b, SH93, WZ95, Zha00, HPR89]. **Semidirect** [HG14]. **Semigroups** [GR97, Jia98]. **Semimonotone** [MP95b]. **Semiproximal** [BST16]. **Semirings** [Pat00]. **Semiseparable** [CG03b, CDG+05, CGP06, GLV10, Har05, Mar11b, VVM05, XC18]. **Semisimple** [LMZ03, Lan07, QCT15, QCT16]. **Semismooth** [DS16, Qi13]. **Semismoothness** [QY04]. **Sense** [HPS16]. **Sensing** [JKN11]. **Sensitivity** [Afs08, AA19, Bol90, CI95b, DB88, GA18, GG06, GTPI13, GKL97, Mey94, Sch23, Zen16, Zen19, Zha93b]. **Separability** [Miz22]. **Separable** [HG14, KS92, LHC16, VGV09]. **Separation** [De 11, GED22, LZ05b, WLB05]. **Separator** [GW22]. **Separators** [GM98]. **Sequence** [BGH95, DD99, LM98a, Pai09, PW14a, Tam97]. **Sequences** [Arg15, FFH+19, FC01, GJX22, HSC04, NSCS10]. **Sequential** [DP07, Pea88]. **Sequentially** [CDG+05]. **Serial** [OYBV19]. **Series** [DM05, FG15, HR93, KS03, LW20a, SGX14, VP93, Bas89, BN88, Tre88b]. **Serra** [WW08]. **Serra-Capizzano** [WW08]. **Server** [GT02]. **Set** [AM95, AKM97, BM19, BF06, CP17, EK96, Gow96, Gro97, Hla08, Hla23, HLM23, Huh01, KP08, LP96, LH22, May12, NS18, Pil94, RS18, Pea88]. **set-theoretic** [Pea88]. **Sets** [AMT90, BN10, CRS99, CRS01, CG19, De 18, DLT15, GGJ18, GGO13, GZ15, GP16, Kar11a, KO18, May12, MPS00, Pop12, Pro13, SU94]. **Several** [Bin90, CCG+09]. **Sham** [LWWY14]. **Shape** [AKM97]. **Shared** [ABM21, KP92]. **Sharp** [BLL22, BT92, Dri06, Hal20, TVW15, PS88]. **Shary** [Neu00]. **Sherman** [Rie92]. **Shift** [AM23, BMS06, FS10, GS03, MV02, ZZ99, HL06]. **Shift-Invariant** [GS03]. **Shift-Invert** [AM23, FS10, HL06]. **Shifted** [CES22, CM03, GLS94, Guo03, GIM08, HMR01, HG21, KM11, KM14, MV07a, RN18]. **Shifting** [MP91, vdG93]. **Shifts** [BBM02a, Emb09, MV18, Wat95, Zhl12]. **Short** [ESS+12]. **Short-Term** [ESS+12]. **shorted** [BM88]. **SIAM** [Ano11, CH93a, HC89b, WW08, Zha95, GI97, Ikr97]. **Sided** [BB07, CZ02, FB95, Fie96, OYBV19, OYV22, SWYM96, ZH17]. **Sides** [AIM22, GRT07, HPS13, HPS16, KS92, MB10]. **Sign** [BD98a, BMOvdD04, BC92, BD15, BDF17, BHM97, CK00, HMMT04, JMO93, KL91, KL92, KOSvdD07, LOvdD02, LS95, Peñ95, Sha95, SHS03, Tsa98, JJ88]. **Sign-Central** [BD15]. **Sign-Nonsingular** [BC92]. **Sign-Solvability** [CK00, Sha95]. **Signal** [Aru92, SKP11, ZR95, Fuh88]. **Signature** [PSS19]. **Signatures** [Wim06]. **Signed** [FA23, HKG09, KSH02, SHS03]. **Significance** [Van92]. **SIMD** [BMSV92]. **Similar** [LLŠ09, Sle09, WE90]. **Similarity** [CG15a, FP98, GKK99, IIM94, LPS08, VVM05, dSV01, CH88]. **Similarity/Equivalence** [IIM94]. **Simple** [Bol90, GG14, Lu05, MA20, OP05, Ste91b, Tam99, WLB05]. **Simpler** [JRG09, NTTZ18]. **Simulation** [CKO+22]. **Simultaneous** [AhS98, Bin90, BGBM93, BMV20, CS96a, DF20, DDV04, De 06, GOV19, LN22, LUC18, MM11, OST09, PR91, Sut12, CJL96a, CJL96b]. **Sinc** [NP02]. **Sine** [CDD00]. **Single** [AD98, BMU94, CHH+15, MX98, Mim15, SX11, Meh88]. **Single-Curl** [CHH+15]. **Single-Input** [AD98, BMU94, MX98, Mim15].

**Single-Vector** [SX11]. **Singly** [Tis03]. **Singular** [AMMS08, AHH01, BB08, BES15, BV90, Bar02, BL02, BT17, BGT14, BB96, BK90, Bor09, BW97, Cao08, CGV03, CI95a, CL09, CT15, CHH+15, CFG97, CCH98, CDD00, DDV00a, DG91a, DV92a, De 94b, DD98, Dem92, Dem99, DP09, DPP22, DSD17, DI19, DJ00, Drm00a, ES12, Fer98, Fri05, GMN18, Gra10, GE95c, GRK17, GLM17, Han94, HMP94, HHSW97, HDT10, HMP19, HS00, HJP03, HC15, IS07, JS94, JN03, JC22b, JN91, JN93, KGD23, Kit95, Krä19, LC15b, Li93, Li98a, Li98b, LM02, LS07, LNT18, MS02, MMW17, MVV92, MMH94, MR18, MS03, Not16, O'N05, OYV22, PS94, PP05a, PSW22, RY05, RW95, Rog05, Rum97, SCBG05, SS06, SWZ11, Sil03, Ste21, SB01, gS00a, Tam98, wVjBqJ11, WA07, Wan15, Wat92b, WCB22, XPL+18, XNB22, YB91, Zen19, Zha91, Zha97]. **Singular** [Zha00, ZQ10, Bap89, BY88, BN87, FF93, GL96, KN89, WE89]. **Singularities** [MS99, VJ07]. **Singularity** [Bea01, FP16, LH05, PS22, RR98, Roh93, Wan98a]. **Singularity-Induced** [Bea01]. **Singularly** [DLLT22, MMN22, Naj98]. **Sinkhorn** [Kni08]. **Size** [CNW08, GW22, KNX04]. **Size-Classified** [KNX04]. **Skeleton** [CD13]. **Sketch** [GMMN21]. **Sketch-and-Project** [GMMN21]. **Sketched** [PJM21]. **Sketching** [ACW17, CLNW20, CJ21, FGK+22, GIG22, GS23, MYA19, TYUC17]. **Skew** [AKM97, BGN03, BLdP97, BBMX02, Ben09, DHZ03, DK14, Fer98, GV09, GPTPV16, Hac93, Hla08, Kre05, Meh99, Rod05, RP10, SB04, Tam98, TY02, Tre05, Yas03]. **Skew-Adjoint** [Rod05]. **Skew-Centrosymmetric** [TY02, Yas03]. **Skew-Hamiltonian** [BBMX02, Kre05, Meh99]. **Skew-Hamiltonian/Hamiltonian** [BBMX02, Meh99]. **Skew-Hermitian** [BGN03, Ben09, RP10, SB04]. **Skew-Symmetric** [AKM97, BLdP97, DHZ03, Fer98, GV09, GPTPV16, Hac93, Rod05, Tam98, DK14]. **Skewcirculant** [Huc92]. **Slack** [GL23]. **Slicing** [Har98]. **Slow** [BET02]. **Sluggish** [O'C02]. **Small** [BPR20, BLO07, CO12, CNW08, GTP18, GV07, GKL95, GKL97, Hig03, JV04, Kar11b, Ste21]. **Small-Sample** [GTP18, GKL95, GKL97]. **Smallest** [GW22, Mal06, Mel04, Xue96]. **Smith** [LK95, Mur91, Mur93]. **Smooth** [DE99, Mae98]. **Smoothed** [BC10, SST06]. **Smoother** [TW00]. **Smoothers** [DJR+18]. **Smoothing** [AIM22, AC20, HJ07, HL23, QL99]. **Smoothing-Norm** [HJ07]. **Smoothness** [CD00, Han03, JRZ99, JJ03, LO20]. **Snap** [IT06]. **Snap-Back** [IT06]. **SOAR** [BS05]. **Sobolev** [RST01]. **Solution** [AM95, AKM97, BS05, Bar98, BBT05, BBTT06, BBTK08, BFS21, BGT14, BM96, BV01, CGRV20, CGCDM13, CI95b, CPTP09b, CH97, DK05, DHZ03, DS16, DP07, EHvP04, FLM12, Gar90, GL03, dMGF14, GTPI13, GV09, GL00b, GH07b, HLT12, HB94, Han94, Hla08, Hla23, HP92b, HM97, HO92, HLM23, Ips06, Ips09, Jou92, KS08, LŠ10, LHHR95, LN22, Li99, LW02b, LBL05, LEMCD19, Lu94, Lu96, Lu05, Mac99, May12, Mee03, Mee09, MP11, MPS00, OS10, OL99, PAP00, Pai19, PYHK93, PP05b, PJM21, Pop12, PPLG20, RG05, Rod06, RPG96, SC03, SJ92, Tsu93, Ver96, Wei92, Zha93b, AG88a, Tre88a, Tre89, VV88]. **Solutions** [BES15, BPE94, BT92, Buc00, CPTP09a, Che01b, CGH11, CK91, CH94, CR10, DYY16, EL97, EP94, GHR95, Ho90, KC09, KT10a, KLX07, Lat95a, LH22, Mal03, MX09, NS18, OSS14, yPWjP12, RDC93, RK95, Ste23, gS96, VV10, WS12, Wim92, XZC99, ZHZ05, ZWF05, DK88, Wim88b]. **Solvability** [CK00, DBW15, HPS16, Pop15, Roh03, Sha95]. **Solve** [ANT09, BLL22, GH07a, VGV09]. **Solved**

[HLT08, LC15a, LVV16]. **Solver** [ADLK01, ADV05, AV91, CS98, CGP06, CDG+07, DV08a, DL92, GIG22, GJX22, HY00, Ste03, VHK01, XXG12, Tsa94]. **Solvers** [AGP19, AIM22, ADR92, AGL98, DH93, DGSW06, DSSC11, Gov91a, GTI11, GS00b, Gut14, JR08, MR97, PJM23, PFRR17, STvDD17, SvdVM00, Wri95, XXCB14, Xia13, XE10]. **Solves** [FS10, SX11]. **Solving** [AT07, ADD89, BEG+09, Ben99, BD90, BM99, BMM20, BHP03, BF05, BLNT13, BMV20, CG10, CG96, DHT01, DTGVL05, ESR01, ES12, EG00, FXG18, Fio11, Fos03, GRT07, GMMN21, GLS94, GKL14, GL00a, GHT09, GL10, HXY11, Hig90b, HK01, HMP19, HV05, Huc92, Ji92, JLSZ22, JV04, JOAKt10, LwCKL13, LXSdH20, LLZ23, LMC22, LH05, MNR18, MV07b, MPR18, MLV00, MM00, NY95, Ors06, PV17, Sha23a, SWZ11, SS17, ST14, SB11, TMV18, ZF13, BDV89]. **Some** [Auj00, BLd93, BGT05a, BK97, BN10, CGL18, CCJ+00, CDG+05, CS10a, CD00, Cho10, CHW10, CZ03, CHZ03, Cro16, DLM04, Dri06, EGGR99, EL91, GR17a, GIK00, GG06, GS02, HMT93, Ho90, JJ88, Kan96, KS03, LN22, Li91, LZ97, MP95b, MPS98, ND06, NP96, Not19, SU94, Ste11a, TL06, Tre94, Wei95, XX16, Xia12, YL00, ZQZ14, von93, GIMT95, MT89, VV89]. **SOR** [Dan91, HN98]. **Soules** [EM10]. **Source** [KNW20]. **Space** [AD02, AB01, AFPA07, BW95, BGK+18, BH90, BH93, BD10, Bry17, Cle00, Drm00b, FJ97, GP98, GTI11, GOS15, GS00b, PR16, Qi11, QZL05, YXS21]. **Spaces** [AG19, BvdMR+97, DIKMI18, DS18, GT08, GS03, HV19, KSH02, MMT05, MMMM06b, NNT17, Sal88]. **Sparse** [ADGH18, AGP19, Ari00, AB01, AL98b, AKP08, BV92, BLP90, BM02, BW99, BT02, BFP95, BrD07, Cav94, CDG+07, Che01a, CC09, CG90, DD97, DH99, DH01, DH05, DGL99, DEG+99, DD12, DK99, DK01, DP05, DP07, EL92, EL05, EL08, FSS21, GL99, GMS92, GL93, GNP94, Gil94, GO95, GD22, GT08, GED22, GGC09, GLS94, Gup02, HS13, HS14, JN93, KU13, LRG23, LGPS90, LS06, LC05, Liu90, LNP93, LEMCD19, LMC22, LB96, Lu10, LN14, LKK97, MSZ15, NP96, NP99, NR99, NY95, PFRR17, PL97, Pin19, RS06, Reu02, RS94, RE98, RS21, SZ99, STvDD17, SYJ00, SV93, SV15, Tan99, TW00, Vog99, WZZH21, XLS16, Xia13, XXCB15, XBC22, ZZS02, ZZS04, ZXS21, dBG08, vD99, vdSBvdV93, ADD89, DY90, KY93, Liu88, PSL90]. **Sparsified** [CCB+20]. **Sparsifying** [FGK+22]. **Sparsity** [CK12, HJOvdD93, HLW94, PN18, HPR89]. **Spatially** [Par94]. **SPD** [LGWX12, XX17]. **Special** [BG94, BJ16, Che98, DCM08, FFH+19, Fie95, Fie00, Ips06, IS08, Ips09, LGPS90, MG92, NP99, SHS03, Tho94, BHH88, HM89]. **Specific** [COV14, COV17]. **Specified** [CHKL01, Chu91, CS10b, Dan93, DB20, KKM14]. **Spectra** [BP21, HSC04, IZ04, KA07, MT00, Ser98]. **Spectral** [Alt13, AG91b, AG88b, BMfY03, BSvdD95, BU21, BGK+18, BM19, BGSC07, BE03, BN05, BN10, BZ00, BCGG10, BCW12, CSX15, CHLW23, Cap00, CF89, COP20, CG98b, Cle00, CGI10, CP17, CG19, FGJ00, FKZ23, FST+13, FC01, FL99, GSCS15, GP97, GG06, GS06, GS10b, Grc10, GR93, GM98, GGO13, HNT99, HGC00, HDSC23, JJ03, JW11, JCG14, Kar11a, KS17, KK93b, KK93a, Lan07, LS01, Li16, MS97, MSZ21, Mat97b, MW01, Mön11, MS18, NNF14, NP13, NSCS10, PR01, PJB10, QY04, RS18, Sen06, SB04, SQ13, Sta22, TP14, TY02, Tig91, Tre90, Tre94, WS12, Wel11, WZZ22, XE12, Yas03, BH96, OW88]. **Spectrally** [BMOvdD04]. **Spectroscopy** [LW05]. **Spectrum** [BHS23, Chu91, CG98a, DHST05, FT16, GMS90, MP21, MF20, MSS19, MS03, PV09,

RN18, SdJL+18, ZAK13, DS95]. **Spectrum-based** [MF20]. **Sphere** [CDLP05]. **Spherical** [ZLQ12]. **SPIKE** [MM09]. **Spill** [CCL09]. **Spill-Over** [CCL09]. **Spillover** [ZL23, QCCT17]. **Spline** [AC20, HHRV99, GBCW89]. **Splines** [AC20, Pin19]. **Split** [Mel01]. **Splitting** [BBS15, BGN03, Ben09, Cao00b, HM04a, lLNS17, MBN17, Ral09, RP10, SB04, YLA97]. **Splittings** [Cao00a]. **Spread** [MSZ21]. **Spring** [NW02]. **Spurious** [LRG23]. **Square** [DL02, DK98, FHL23, FH10, Gaw19, GD22, GR93, HL08, HH94, HMMT05, LFW13, Lu98b, MS91, Mat97a, Mei04, PR01, XSW10, JN89]. **Squared** [BEBT07, GN16, PP05b]. **Squares** [ABG07, Aru92, ANT09, BG11, Bar98, BBT05, BBTT06, BBTK08, BE10, BST16, Ben99, BN06b, BPE94, BES98, BHM00, Bjö14, BV01, BHP03, BX05, BV95, CGCDM13, CNP94, CGS98, CPTP09b, CGP09, CG10, CH93b, CLL20, CJ21, Chu91, CG98b, CSEP21, CK91, CHMW20, CH99, DN08, DHZ03, EL97, EP94, EOS19c, FF94, FB94, For96, FS01, GS10a, GHO99, GJTP12, GTPI13, Grc10, Gu98a, Gu98b, GW92, Gul95, HG18, HYI10, HXY11, HPS+11, HG14, HM97, HV97, IW14, INRZ21, Jam92, KS92, KLR98, KP08, KT10a, LY03, LS06, LW20a, LJW22, LPT10, Mal04, Mal03, MVP05, Mar11a, MLV00, MW01, MH13b, MH15, PRS06, Rei91, RG05, Rod06, Rum12, Sha95, SC03, STT17, TETA05, Usc12, VZ91, Van92, WC14, WCY15, Wei92, WD00, XXCB14, Yan20, ZH03, ZHY16, ZMW17, ZZLY02]. **Squares** [ZF13, O'L90, Qia88, VV88, VV89, Zha95]. **Squaring** [AMH10, BBS15, FH19, Hig05]. **SR** [Hua21]. **Stability** [BBD+16, BH90, BvdG11, BES98, Bjö14, Ble21, BLO03, BX08, CLR21, CMT09, Cor93, DLMT13, FLM10, FJ97, FGS96, GSS96, GLT96, GGMO17, GP18, Hig90b, Hig92, Hig97, IM94, JWX03, KB93, KZ10, Kni04, KV14, LNT18, LR05, LSB16, MS99, Mai99, MMS16, MT15, MF20, NH12, OOvdD98, OP05, PRS06, Pai10, PMT23, PT18, RR08, Roh94, RT99, SV97, SS98, Ste03, Ste16b, Tis01b, TS90, Tro90, Wat95, Wri95, Wri97, XX16, YP98, Yal00, Yan98, ZFW07, BBDS95, BDV89, JJ88]. **Stabilization** [DF20, HY00, MF20, Wül05]. **Stabilized** [Ern00, Le 19, LZ10, Sim97, VHK01]. **Stabilizing** [CS96b, OS09]. **Stable** [AB05, AMVW15, AMR+18, AABK19, Bar00a, BBV19, BNP22, CM93, CS98, CGS98, Cha00, CG03b, CH99, CP20, DP07, rFO06, FGS14b, Fuh07, GNS18, Gov91a, GE94, Gu98c, GGbCC03, GP18, Hu92, JK97, JRG09, LŠ10, LW97, LOvdD02, NP20, PLM94, RR08, Sut12, TCTM00, Tro90, Vav94, XXCB14, XSW10, ZS14, CJL96b, GL03]. **Stable/Unstable** [GP18]. **Stage** [SJ92, YLA97, SB01]. **Staircase** [EEK99, EM00, SZK95]. **Start** [Del97, KW92]. **State** [BH90, BH93, BGMN92, CMT09, Cle00, Cor93, DGMR00, DWWY20, ES18, HS10, KLX04, LFW13, BHKR11, Zab89]. **State-Discretization** [DGMR00]. **state-feedback** [Zab89]. **State-Space** [BH90, Cle00]. **States** [DA05, NT08]. **Stationary** [BF11, Cao08, FNS08, GV99, HM20, KS15, LF02a, Liu12, MS02, Mey94, OW96]. **Statistical** [BCR11, GKL95, GKL97, Hoo17, KLR98]. **Steady** [ES18]. **Steady-State** [ES18]. **Steepest** [KL08]. **Stencils** [He21]. **Step** [AV91, CD14, CD15, Car18, KMN11, Sle09, Sor92]. **Steps** [MV18, Sle09]. **Stepwise** [Mim00]. **Stiefel** [Bry17, LWW15, Zim17, ZH22]. **Stieltjes** [Bas89, FGS14a, GS21, MMS94, NV94]. **Stiffness** [GSCS15]. **Stochastic** [AK90, BF11, CH23a, CG98a, DGMR00, ES18, EU10, Fie95, FST+13, GDF01, HR93,

MW12, PU10, PU14, Pul13, RT20, Sen98, UCS17, WSSL06, XBC22, YBZC16, Hav89]. **Stoichiometry** [WCB22]. **Stokes** [Elm97, WT11]. **Stopping** [ADR92, Ari13, CPTP09b, EL91]. **Strang** [KO05]. **Strassen** [BPR20]. **Strategies** [DP05, DP07, Kon00, RE98, Ser96]. **Strategy** [BF05, CD14, HS23, KS22a, PFRR17, Zha01]. **Stratification** [EEK99, EJK09, FGP00, GP98, Huh01]. **Stratification-Enhanced** [EEK99]. **Strict** [BD15, Zie95]. **Strictly** [GP06, MMS94, NV94]. **Strong** [ADMZ18, BS94b, Ger92, LP17, Yal00, BDV89]. **Stronger** [FJKM96]. **Strongly** [BS94a, DQV22b, Mal06, Tas15b]. **Structural** [ADHM19, DIKMI18, EL92]. **Structure** [AM23, AFPA07, BRR00, BKW22, BFZ07, BR19, Bar98, BT17, BNP23, BS15, Bol90, BHR10, BJMS17, CK91, CSK95, CKM22, De 94b, Di 09, DLM04, DJK17, DS18, Gil94, Gre05, GGC09, GL10, HH93, HJP03, HLQ09, HKBM08, JN21, KC94, KO05, KK17, KT10b, KS12, KLS16, LP96, LGC08, LX06, LK95, MV17, MMS16, MBO97, MD03, NP96, SdJL$^+$18, SMM20, ZZ99, ZZ01, dTDM08, DS95]. **Structure-Preserving** [BNP23, GL10, HLQ09, KK17, KS12, KLS16, LX06, MMS16, SMM20]. **Structured** [AA09, AK20, AK21, AC20, ADC04, ANT19, BB08, BBT05, BBTK08, BE10, BST16, BM06, Bor10, BKMS14, BKMS15, BK19, Buc00, BGBM92, BGN12, BGMN15, BK06, CGCDM13, CR21, CLNW20, CJ21, Cif21, CB90, DV07, DV08a, DV08b, Dem99, DK06, Fuh07, GR17a, GW07, GK93, Gu98b, Gu98c, GGMO17, GRK17, GL10, HHSW97, HH92, HH98, IUM14, JV16, JK95b, KKT06, Kar10, Kar11b, KS22b, KS08, KPM09, LX09, Li99, Mac99, MMT05, MMMM06a, MMT08, MVP05, MU13, MPR18, MLV00, MV21, Mur91, Mur93, NP99, OSS14, PS22, PO03, RVV17, RPG96, RPG98, Rum03a, Rum03b, Rum15, SV97, Ste16b, gS98a, TH01, Tis01b, Tis03, VFGM05, Wat92b, WD95, XXC14, XXCB14, XX16, XG10, XCGL10, Xia12, XXG12, XX17, XW07, Zhl12, vdWM95, DGIM06, GIMT95]. **Structures** [BKMS14, BKMS15, DD07, DV06a, DV06b, EK96, FGJ00, FFH$^+$19, GL93, PS22, RD95, ST08, ZGP10, DB88]. **Study** [CG15b, Zhe96, Zhe98]. **Sturm** [BGH95, Mal06]. **Style** [Dol07]. **Subadditive** [ZQ10]. **Subclasses** [LQ16]. **Subcritical** [HM20]. **Subdefinite** [CHLS00, ND06]. **Subdiagonal** [GN16]. **Subdivision** [JZ99]. **Subdivisions** [GP16]. **Subdominant** [GN03]. **Subgeometric** [Mas16]. **Subgraph** [COP20]. **Subgraphs** [CP20]. **Subject** [CG98b, VV89]. **Sublinear** [CD13]. **Submatrices** [JK95b, RS21, dSV01]. **Submatrix** [Bai05, OR93]. **Submultiplicativity** [JN91]. **Subsampled** [BG13]. **Subset** [AB13, CK20, CB00, DA05, Fei94, ZvSD20]. **Subspace** [ASVM04, AT07, ABM$^+$17, ABMV20, AKPP08, BR05, BD09, CP03a, CFT16, CGMM23, DS20a, ESS$^+$12, ELN22, EN08, Ern00, FGS14a, FLS20, FKST23, GGLN13, GJX22, GG14, GPTPV16, GMN16, Gut14, HPZ23, HS95a, HIS18, HGL05, INRZ21, JK97, Jia22a, KMMM18, KO15, KT10b, KT11, KV14, KLV18, Leh01, Li98b, LY03, MVV92, MH13b, NZ16, RSH21, RSS09, RS02, Saa97, Saa16, SS19, Sai19, SS13, Sid95, Sim00, Sim16, SK16, TP14, Ver96, WY17, ZPW18, vdES04, Fuh88, Lag91]. **Subspace-Based** [AT07]. **Subspaces** [BD98a, BER04, BKS08, BBMX02, BT10b, BHM97, BK06, CGV03, DHW92, DIKMI18, Drm00b, DK98, DSZ14, FB95, FMX02, HIS18, Jia22b, KK14, KA07, Kre05, Li93, LW97, Men12, Miy14, PLM94, RR08, Rod05, Ste16a, SL94, Tam99, WLB05, YL16]. **Substochastic** [Har99]. **Substructures**

[ST08]. **Substructuring** [EV06, PW90]. **Successive** [Eff13, GH92, MHG15]. **Successively** [JOvdD01, JOvdD04]. **Such** [JKM11]. **Sufficient** [BM00, Cor93, CC92, HQ16, LŠ10, Mor12, MM00, Pin19, RR98, ST08, ZWF05, Gad88, Pan91]. **Sum** [ADHM19, BLW15, BLdP97, Her96, LPS08, OW92, WZL21]. **Summations** [GMN18]. **Sums** [FF99, FHS+94, GTJ13, GED22, HS00, MW01]. **Superdiagonal** [Tam98]. **Superfast** [AG88a, CGS+08, FLM12, Ste03, VHK01, XXCB14, XCGL10, XXG12]. **Superlinear** [CT99, CP03b]. **Supernodal** [DGL99, DEG+99]. **Supernodes** [JNP21, LNP93]. **Superoptimal** [Tyr92]. **Superresolution** [ZGP10]. **Supersymmetric** [KR02]. **Support** [BGH+06, BH03, BGH07, LRG23, SW97]. **Support-Graph** [BGH+06]. **Supports** [RS21]. **Suprema** [AMT90]. **Surfaces** [Nie10]. **SVD** [BYDW18, CS09, DP09, DM04, DV08c, DV08d, GSV00, GL05, GE95a, GCC18, IO16, LGC+14, MSKC21, MVV93, OYBV19, OYV22, Par05, Vac94, WLV06, Xu05, ZZ99]. **SVD-Based** [GCC18]. **SVD-like** [Xu05]. **SVDs** [CF02, Koe05, ZZ01]. **Swarztrauber** [Tsa94]. **Sylvester** [AT07, BMO92, CJL96a, DK15, GL96, GH07a, HM97, KP92, Kåg94, Li99, MPR18, SS13]. **Sylvester-type** [DK15]. **Symbol** [BGK+18, BDFF22, GSCS15]. **Symbol-Based** [BDFF22]. **Symbolic** [EL92, GGC09, Gup02]. **Symbols** [BV07, HK12]. **Symmetric** [ADGH18, AM95, AKM97, AT98, AG92, Arg15, AFPA07, AGL98, Auc91, BNW09, BBD+14, BO96, BOCL97, Bar93a, BESS22, BLdP97, BR08, BS96, BL91, Bor14, BMV20, CNX22, Cao00a, Cao09, CD15, Cav94, Cha00, CFJKS13, CH98, CE94, CG98b, CGLM08, CDN14, CW96, DHT01, DDD20, DHZ03, DMM03, DK06, DRV21, DP05, DP07, EGTP17, EG00, rFO06, FXG18, Fer98, FMFJ18, Fri92, Fri16, GITT96, GI00, GIK00, GOV19, GSS96, GV09, GPTPV16, GLS94, GL05, GE94, GLV10, GCC18, Hac93, HO94, HL17, HIS23, Han03, HM04a, HB94, HY01, HR00, Her96, HMMT07, Hla08, HS14, HV05, IT06, IAV13, JWN18, Jia01, JLZ16, JP93, JLS01, JSG15, Kau93, KN91, LZ14, LF02b, LUC18, Lin19, LM03, Lu98b, MV97, MV13, Mat09, May12, Mee03, MB10, MMW17, Mel99]. **Symmetric** [Mel04, Meu92, MSS19, Moa05, MHG15, MHG17, MRU22, NS07, NP23, NOZ11, Nie17, NY95, Not19, NV02, OW92, OW95, PM06, Ral11, RBB90, Reu02, Rob16, RS92, Rod05, RODS15, SZ07, SS10, SK20, SvdVM00, SAGS21, ST14, Tam98, TY02, TL06, Tis04, Tre90, Tre05, Tur03, VGV09, VYH11, WZ91, Whi90, WS00, XLS16, XG10, XHC21, Ye09, Zha05, ZWF05, ZLQ12, ZHQ16, ZS07, vDHvdV00, All89, BDV89, DK14, FGS96, GE95b, JP94, Liu88, Ove88, Tre88a]. **Symmetric-Definite** [Cha00, CG98b]. **Symmetric-Indefinite** [BBD+14]. **Symmetries** [FT16, RR94, VV15]. **Symmetrization** [ALN07, Fit19, Le 19]. **Symmetrized** [DD98, FFH+19, Pes19]. **Symmetry** [AM23, CCL09, EL92, HM04a, KRU14, PS22, SS06, Ste11a]. **SYMMLQ** [EOS19a]. **Symplectic** [BF00, DJ09, Fio11, GS06, GKL14, JTZ20, KS12, KLS16, LW97, SAGS21, SMM20, Xu20, Meh88]. **Synchronization** [FKZ23]. **Synchronizing** [GGJ18]. **Synthesis** [JKN11]. **System** [AB16a, BFZ07, DH93, DK05, DJK17, FPST13, FGL21, FL99, JW11, KPC94, LSM22, LV10, MR97, PJM23, PGVR98, RBB90, WCW10, WZZ22, ZL23, Wri97]. **System-Theoretic** [LSM22]. **Systematic** [EJ23, QCT16]. **Systems** [AIM22, AM95, ADC04, AK90, BGN03, BRR00, Bar08, BSFM10, BEBT07, BB18, BEG+09, BB12, BGG18, BG19b, BF06, BH90, BH93, BB96, BM99, BDFF22, BG94, Bor03, BF05, BLNT13, BW97, BGMN92, BCW12, CT91,

CP03a, Cao08, CP03b, CPS00, CI95b, CS98, CG03b, CGS+08, CESC20, CCZ97, CNW08, CCH98, CH06, CFL07, CT08, CK00, CHMW20, Cor93, CG96, DGMR00, DTGVL05, DL03, DGSW06, DRV21, DS16, DSZ14, DP07, ENV92, EGTP17, ES12, EG00, EG15, EL91, FLM10, FLM12, FXG18, FL19, FG15, FJ97, FV98, FNS08, FKLR13, GVV04, GL03, Ger92, GMPS92, GSS96, GJX22, GLT96, GGV05, GRT07, GOR14, Gov91a, GR15, GMMN21, GTI11, GV99, Gre99, GV09, Gu98c, GAB08, GHL03, GHR95, HNRS22, Han94, HMP94, Hig90a, Hig90b, HH92, HG21, HS14]. **Systems** [HO92, HV05, IKSG10, JC22a, JC22b, Jou92, KGW00, KC09, KS08, KT10b, KT11, KLX04, Lan07, LW02a, LWXZ06, LM90, LSM22, lLNS17, LNT18, LW20b, LEMCD19, LMC22, Lu94, Lu95, Lu96, Lu98a, LH05, LT94b, MNR18, MV02, MV07a, MV07b, Mat92, Mee03, MB10, MMS16, MMW18, MV20, MV21, Mel01, Men08, Men12, MG10, MJM11, MF20, Mim15, MV23, MO20, MO23, Mor00, MR18, NRT92b, NP02, NY95, Not16, Not19, NV02, OS10, PAP00, PS05, PJM21, PR16, PV17, Pop12, Pop15, PU10, QCCT17, RT93, RE13, RD95, RY05, RT20, RK95, Roh03, Rum12, STvDD17, Ser96, SŠ91, Sha23a, SvdVM00, ST14, Ste23, gSS97, gS98a, SZK95, SJ92, TMV18, TV09, VHK01, VD21, VKDD21, Var94, Vav94, Ver96, Wal95, Wei95, XCGL10, XXG12, XW07, YP98]. **Systems** [Yan93, ZvSD20, Zen19, ZXS21, dKV10, vdES04, vdWM95, AG88a, ADD89, Ash91, BDV89, CJL96a, CJL96b, Cha89, CH92, CH93a, Cri88, FGS96, HC89a, HC89b, Sch95a, Tre88b, Wim88a, Zab89, PU14]. **Systolic** [MVV93].

**T** [Zha95]. **T.** [JWX03, KO05]. **Tailored** [LSM22]. **Tails** [AW05, ES05]. **Takagi** [DPP22, XQ08]. **Tandem** [GT02]. **Tangential** [DSZ14, GVV04]. **Task** [ADV05]. **Taylor** [SGX14]. **Technique** [BJM05, CM92a, HM20, Hav89]. **Techniques** [DMP96, FSS21, JX20, JOAKt10, LS96, PS08, BK89]. **Telescopes** [Bar08]. **Tensor** [AJRS13, BLW15, BYDW18, BBK18, BFG23, BBV19, BG19b, BLNT13, CS09, CHZ16, CLL20, CJ21, CNG23, CGLM08, CDH12, De 08a, De 08b, DN08, DCM08, De 11, DW15, DK13, DD20, DD21, DGGG22, DIS15, ES09, ES11, EDK16, ED22, FHLS13, GQ14, GCC18, HK08, INRZ21, JK15, JLZ16, JX20, KS15, KS22b, KL10, Kol01, Kol03, KM11, KM14, Krä19, KT10b, KT11, LK22, LC15b, LC16, Li16, LUC18, LGL16, LRSV13, MMD08, MV08, MSV19, MK20, MHG17, MBM08, NQZ10, NW14, Nie17, NY19, NY20, Ose10, Qi11, QXX14, QCL16, QCBZ21, RV12, Rau02a, Rau02b, SK20, SD19, Ste10a, Ste11a, SL12, Ste13, Usc12, VD21, VKDD21, WCY15, Yan20, ZN21, ZLQ12, dSL08]. **Tensor-Based** [MMD08]. **Tensor-CUR** [MMD08]. **Tensor-Product** [HK08]. **Tensor-Structured** [CJ21]. **Tensor-Train** [LRSV13]. **Tensors** [Ano11, Asw16, AB19b, BB08, BBBT20, BPR20, CHLW23, CPZ11, CWY20, CS09, CK12, CO12, COV14, COV17, CGMZ21, CGLM08, CDN14, CLN14, DDV00b, DL17a, DD13a, DD13b, DD14, DSD17, ED23, Fri16, GTH19b, Gra10, GC19, HST19, IAVD11, IAV13, JWN18, KBHH13, KR02, KK17, LNSU18, LRSV13, LQ16, MHG15, MRU22, NQB14, PSS19, QXX14, QCBZ21, Rob16, Sai16, ST21, SQ13, SZH22, SD15b, VNVM14, WC14, YY10, YY11, ZG01, ZQZ14, ZHQ16]. **Term** [BLAK91, ESS+12, GR00, VKDD21, ZZ98b, GS00b]. **Terms** [BLW15, De 08a, De 08b, DN08, De 11, DD20, SD15a, SDD15, Ste10a, Ste12]. **Test** [OP05, vdMS05, Stu89]. **Tests** [MH13a]. **Text** [HJP03]. **th** [Ian09, Smi03, Ste10a, Ian06, GH06]. **Their** [Bar19, Bez12, CCZ97, CM03, DL17a, EK96, GL23, HL13, JLZ16, KMS01, KMS03, Lew91,

LF02b, NP99, RS96, Sil03, SX11, Tig91, AD21, HM89, HMT09, JN89, MV88, TFL11]. **Theorem** [AMS07, ADHM19, CLN14, GTH19a, GTH19b, HS95b, JDS03, Kol03, Kra95, KH13, Lew99, LM98b, Lin11, May12, MSV19, TT99, YY10, YY11, Zhe96, Zhe98, IM95, Tis93]. **Theorems** [BH13, wC03, CK00]. **Theoretic** [FV98, LSM22, vdWM95, Pea88]. **Theoretical** [Jia22a, KBHH13, Mei04]. **Theoretically** [TP22]. **Theory** [ABK+11, AH16, AHN21, BL12, BKS08, BBGF00, BH03, BGH07, BM06, BCGG10, DDY14b, DS23, DM05, EEK97, EEK99, EL05, ES11, EJK09, ELN22, FS97, GPM03, GLT96, GS06, GdlI08, Gut92, Gut94, HDSC23, KP99, KH13, KK21, LMZ03, Li98a, Li98b, Li99, LWWY14, Lu05, Mai99, Mal03, MOC91, MX09, MBO97, Mor94, NNPQ23, Not16, RT20, SKP11, SC10, SMM20, gS98b, WE94, XG98, CT88, DK88, OW88, KY93]. **Thick** [WS00]. **Thick-Restart** [WS00]. **Third** [DD13a, DD13b, DD14, KBHH13, LGL16, QCBZ21, SD15b]. **Third-Order** [DD13a, DD13b, DD14, KBHH13, SD15b]. **Thomas** [PS04]. **Thompson** [Joh96]. **Three** [BLAK91, BPR20, CHH+15, Cho10, DPP13, EJ23, EI98, GV99, Gre99, GMBS12, GS00b, GR00, Hig92, HHLW13, LRA93, LXSdH20, OST08, RHE14, SdA10, Ste13, ZZ98b]. **Three-Dimensional** [CHH+15, GV99, Gre99, HHLW13, LXSdH20, OST08]. **Three-Term** [BLAK91, GR00, ZZ98b, GS00b]. **Three-Way** [Cho10, GMBS12, LRA93, SdA10, Ste13, BPR20]. **Threshold** [DDN20, HS14]. **Tight** [DT11, Sou19]. **Tightening** [Gar09]. **Tikhonov** [GHO99, GW00, Mal03, WXZ16]. **Time** [BGK+18, BN10, Bom00, CT91, CFL07, Cor93, Dhi98, DD12, DLMT13, Har05, JOAKt10, KNW20, KS03, KLX04, LF02a, LgS02, LNT18, LEMCD19, Mas16, MG10, MJM11, MF20, OST08, PCB16, PSW12, RT93, Sou19, ST14, Sun04, TCTM00, VP93, BF06, LP89, Meh88]. **Time-Delay** [MG10, MJM11, MF20]. **Time-Dependent** [PSW12]. **Time-Invariant** [DLMT13]. **Time-periodic** [MF20]. **Time-Varying** [CT91, LNT18]. **Times** [DA05, FI18, GN13, KN99]. **TLS** [HPS16, PGVR98]. **Toda** [DRTW91, Lag91]. **Toda-Type** [DRTW91]. **Toeplitz** [CH93a, Ikr97, AG88a, BN06b, BMF05, BD90, BM99, BLAK91, BBDS95, BDFF22, BK95, BGKS99, BET02, BV07, BBM21, BGN12, Cap98, Cha89, CH92, CNP94, CPS00, CS98, CGS+08, CESC20, CNW08, CE94, DG91b, DG91c, DD10, DLM04, DK08a, FKKL96, FLM10, FLM12, FFH+19, FSZ14, Fri92, GKX94, GP03, HB94, HY00, HH94, HR00, HR04, Huc92, HSC04, Ito96, JV16, JR88, KC94, KN00, KN91, KL18, KK93b, KK93a, LS04, lLNS17, LH05, MV97, MV88, MP21, Mel99, Mel01, Mel04, MT00, Næv93, NSCS10, NV02, PK93, Per91, PW15, Pes19, RS92, Rod06, Rog05, SK95, Ser96, Ser98, Sil03, Ste03, SH93, Swe93, Tre88a, Tre88b, Tre89, Tre90, Tre94, VHK01, Var94, Vec03, VJ07, XXCB14, XXG12, ZZTA02]. **Toeplitz-** [Rod06]. **Toeplitz-Block** [KC94]. **Toeplitz-Derived** [KC94]. **Toeplitz-Like** [FLM10, lLNS17, FLM12, SK95]. **Toeplitz-Plus-Hankel** [HR04]. **Toeplitz-Plus-Tridiagonal** [CESC20]. **Toeplitz-Related** [DLM04]. **Toeplitz/Hankel** [MVP05]. **Tolerance** [BBGL92]. **Tomographic** [HKBM08]. **Tomography** [Sal88]. **Torus** [Tho94]. **Total** [Aru92, BG11, BDSC11, BBT05, BBTT06, BBTK08, BE10, BST16, BHM00, FB94, GP93, GHO99, GTPI13, HPS+11, LJW22, LPT10, MVP05, MLV00, PO03, RS06, RG05, RPG96, RPG98, VZ91, Van92, Wei92, ZMW17, VV88, VV89]. **Totally** [CKRU08, DK05, FGJ00, FHGJ06, GT04, HC15, Koe05, Koe07, Peñ98, ZY93].

**Tournament** [BFG23, FL02]. **Trace** [BK21, CH23a, FSS21, LWW15, NBS10, PCK22, SAGS21, WZ95, Wat92a, WZL21, Ber88]. **Trace-Sum** [WZL21]. **Traces** [OR93]. **Tracking** [FL19, MVV92]. **Tractability** [LRG23]. **Tractable** [LQ16]. **Train** [Krä19, LC15b, LC16, LRSV13]. **Trains** [HLQ09]. **Transfer** [Bar94, FN04, NNPQ23]. **Transform** [BF93, BK95, BG13, DL17a, For03, HR00, KO05, Kuz15, SB03]. **Transformation** [CCJ+00, CG15a, Le 19, Mai99, XE12]. **Transformations** [Dub00, IIM94, IT18, LM98a, SV05, Ste16b, Uhl18, WL12]. **Transforms** [BD95, FKST23, FGK+22, SKP11, Tur97, RS88]. **Transient** [EK17]. **Transients** [O'C02]. **Transition** [DRSZ07, EHW10, JJ03, LFW13, Spe98]. **Transitions** [DJK17, EK96]. **Transmission** [LF02b, Wat95]. **Transport** [Lu05, MX09]. **transposition** [JH88]. **Transputers** [vdSBvdV93]. **Traveling** [JNP21]. **Traveling-Salesman-Problem** [JNP21]. **Tree** [GG03, MSZ03, dF05, Liu88]. **Tree-Like** [MSZ03]. **Trees** [CL99, EL05, EL08, KU13, KNS97, KN98, Liu90, MP11, Nab01]. **Triadic** [rFO06]. **Triangle** [ZQ10]. **Triangular** [ABL94, BMF05, BCN95, BKK18, FSZ14, HY01, JTZ20, LM02, MV02, Næv93, OST09, PK93, PK94, Pes14, RW95, SHZ12, Vec03, VP93, VT98, vD99, CH88, KP92, Naz89]. **Triangularizable** [Mae98]. **Triangularization** [SS98]. **Triangularizations** [IIM94]. **Triangularizing** [TZ13]. **Tricyclic** [DL92]. **Tridiagonal** [BO96, BOCL97, BGT05b, BD98b, Bom00, BG94, CESC20, CM03, CW96, DG91b, DG91c, DRSZ07, Dhi98, DL92, ES08, rFO06, Fer97, Fer98, Gei91, GITT96, GKL18, Har05, Hig90a, HO92, HHH12, LS04, Meu92, Nab99, Par92, PL93, PDF16, Per91, Ple06, Tis04, VGV09, VH16, Wal95, Wil08, YP98, GE95b, Tsa94]. **Tridiagonal-Diagonal** [Tis04]. **Tridiagonality** [Bom00]. **Tridiagonalization** [Cav94, GIKT95, Pai10, PP11, SB05, GBCW89]. **Tridiagonalizing** [BS96]. **Tridiagonals** [Ral11]. **Trifocal** [BBBT20]. **Trigonometric** [AH16, BD95, KO05]. **Trigonometry** [EW20]. **Triple** [QCBZ21]. **Triples** [PR01]. **Triplets** [Drm00a, OYV22, Zha91]. **Tropical** [NST15]. **Trummer** [Lu95]. **Truncated** [BGT14, GTPI13, Le 19, MM09, SGX14, SH23, SY98, TMV18, ZZ01]. **Truncation** [DRV21]. **Truncations** [Mas16]. **Trust** [DS23, IAVD11, SW94]. **Trust-Region** [IAVD11]. **TSC** [PM06]. **Tucker** [DK13, EDK16, LRSV13, OST08, Sai16]. **Tukey** [SKP11]. **Tukey-Type** [SKP11]. **Tunable** [FH21]. **Tuples** [WZ23]. **Twice** [HN22, LS01]. **Twisted** [BBM21, WL12]. **Two** [ABL94, Bjö14, CE94, CZ02, DGIM06, DP09, DK13, EDK16, FI18, FB95, Fie96, FNV08, GW07, GT99, GS00b, HL23, HM04b, HP02, HKP05, Ji92, JH02, Kil99, LSB16, Not16, OYBV19, OYV22, Pál11, Ple00, PV17, RJ21, Sch95b, SWYM96, Sle09, Sou19, Ste91b, SB01, SJ92, TMNV10, WA07, WT11, XZ22, YLA97, Zha10b, ZH17]. **Two-Dimensional** [Ji92, Kil99, Sch95b]. **Two-Grid** [PV17, XZ22]. **Two-Level** [DK13, EDK16, Not16, TMNV10, WT11, LSB16, Sou19]. **Two-Parameter** [DP09, HP02, HKP05, Ji92, Ple00, RJ21]. **Two-Sided** [CZ02, FB95, Fie96, OYBV19, OYV22, SWYM96, ZH17]. **Two-Stage** [SJ92, SB01]. **Two-Stage-Splitting** [YLA97]. **Two-term** [GS00b]. **Two-Variable** [Pál11]. **Type** [AIM22, BEG+09, BBD11, BLAK91, BS16, DRTW91, DM05, FAT16, GR00, HP02, HKP05, Ito96, KO05, LUC18, LX06, LLZ23, LV17, MV08, MMS94, MSZ03, SKP11, Wal03, Wat98, WL12, ZHY16, ZK17, BL94, DK15, IM95, Kuz15, Saa06, ZH17].

**Ulm** [wVjBqJ11]. **Ulm-like** [wVjBqJ11]. **Ultrametric** [Fie00, MMS94, NV94]. **ULV** [BES05]. **Unbalanced** [ZYSY20]. **Unbounded** [CO99]. **Uncertain** [BOS16, EL97, SNC02]. **Uncertainties** [CGGS98, Wat01]. **Uncertainty** [BEBT07, Yan93]. **Uncontrollability** [BLO04, Gu00, GMO+06, Men08, Mit21]. **uncontrollable** [Sch95a]. **Uncorrelated** [CGH11]. **Uncoupled** [Zha93b, Hav89]. **Uncoupling** [Van08]. **Undamped** [JW11, QCCT17]. **Underdetermined** [DH93, Rum12, gSS97]. **Undersampled** [CGH11]. **Unfoldings** [RV12]. **Uni** [GMBS12]. **Uni-mode** [GMBS12]. **Unicity** [de 94a]. **Unified** [DGR23, FS97, He21, Mal03, MS18, WZ23]. **Uniform** [BL94, DS20a, GG14, HL06, IM94, Urs21, WZZ22]. **Uniformly** [CRS99, CRS01, DTGVL05]. **Unifying** [GTH19b, HPZ23, VD21, VKDD21]. **Unimodular** [AKP08, FR23, IT18, BV88]. **Unipathic** [MNST96]. **Uniqueness** [BB95, De 08b, DD13a, DD13b, DL15, DD20, FMX02, GMBS12, Her96, JK15, KK21, Mor12, SC10, SD15a, SD15b, SdA10, Ste10a, Ste11a, SL12]. **Unit** [Baz00, CDLP05, Guo98, JTZ20, Pai09]. **Unitarily** [Aru92, HM90, QZL05, Sai19, VJ07, Zha99]. **Unitary** [AYLR04, BDG20, BM94, BEGG07, BBGF00, BGH95, DW06, DZ01, GGbCC03, Kni04, KL98b, Li95, LS03, LPS08, NNF14, Pai09, PW14a, Sev03, SV05, Ste06, gS96, Tho94]. **Univariate** [FR23]. **Universal** [Ste23]. **Unknown** [FST+13]. **Unknowns** [CT93, Whi00]. **Unlifted** [BL21]. **unrestricted** [MT89]. **Unstable** [GP18, LOvdD02]. **Unstructured** [DFT92, Rum15]. **Unsymmetric** [AM95, ALP07, DD97, EL92, EL05, EL08, EL91, GL93, Gup02, Gut92, Gut94, Jia95, KU13, MO23, RS06, DY90]. **Unsymmetric-Pattern** [DD97]. **Unsymmetrized** [AP02]. **Unwinding** [AH14]. **Update** [Bar93a, CFG98, ES92, GGL04, XXC14, XBC22]. **Updates** [BKS18, BV00, EMC17, GR17b, LGI21, MSS19, SB92, ZPW18]. **Updating** [CCL09, EGK91, IK06, Kon00, LM06a, LLZ09, LZ05a, MTV10, MVV92, MVV93, Naz89, Ste93b, SV00, Sun95a, VS14, BK89]. **Upper** [AW05, BCN95, FG94, Lee95, Nab00, WD00]. **URV** [PE95]. **Use** [Ari00, BD95, DK99, EJK09, GW00, Swe93]. **Useful** [Pai09]. **User** [GL99]. **Using** [AS93, ADLK01, ALP07, ANT09, ACW17, ABN09, BD98a, BKS08, BI99, BBGL92, BEGM05, BCW12, CCB+20, DIS15, Fos03, FSV14, GL18, Gul95, He21, JMM14, LC16, LM98a, LXSdH20, LE02, Mac99, MSKC21, Nov11, Ose10, PYHK93, PP05a, PO03, RE13, SCBC21, SK20, SS17, TV09, WLV06, XK94, AL98b, HRS88, O'L90, Zab89]. **USSOR** [Nou96]. **UTV** [Jia22b]. **Uzawa** [LZ10].

**V** [ADC04]. **V-cycle** [ADC04]. **Validated** [KC09]. **Validation** [BG19a, EMC17, GBCW89]. **Valleys** [LRG23]. **Value** [ASA04, AMMS08, AGQS22, ABN09, BB08, BES15, Bar02, BM19, BGT14, CE12, CL09, CHH+15, CFG97, CDD00, DDV00a, DG91a, DV92a, De 94b, DD98, Dem99, DI19, DJ00, Drm00a, FL99, Fri05, GMN18, Gra10, GE95c, GGO13, HMP94, Hla23, HJP03, JS94, JN03, JN91, Kar11a, KGD23, Li98a, LS07, MVV92, MMH94, O'N05, PS94, PP05a, Rog05, SCBG05, SS06, gS00a, TM12, wVjBqJ11, WA07, Wat92b, WCB22, YB91, Zha91, JN89, WE89]. **Valued** [ALAK94, CP03c, Cla10, GdlI08, JW11, JLZ16, Kra95, KH13, Mat93a, QCT15, QCT16, Sid95]. **Values** [AKPP08, BGV10, BT17, BK90, CI95a, DP09, DPP22, DSD17, Fer98, GRK17, HHSW97, HDT10, HS00, HC15,

JN93, Kar11a, Kit95, KA07, KMS01, KMS03, Krä19, LC15b, LO20, Li93, LM02, LM18, MSZ20, MSZ21, RW95, Sil03, Tam98, Wu17, Wül05, XPL+18, XNB22, Zha97, Zha00, ZQ10, Bap89]. **Vandermonde** [ASA04, AK21, Baz00, BEG+09, Bez12, DK05, FH93, Hig90b, KS03, KRS19, Li06, Lu94, Lu95, Lu96, Lu98a, Pan16, Rei91, gS98a, ZZ98b]. **Vandermonde-Like** [KRS19, ZZ98b, Hig90b, Lu96, Rei91]. **Vanishing** [Hel95]. **Variable** [AV91, BMS06, GW07, Gre99, HZ01, KL08, LZ10, NY95, Pál11, DGIM06, MH95]. **Variable-Step** [AV91]. **Variables** [Ain17, BI99, CGGS99, CGSS01, CH93b, Hel00, MT89]. **Variant** [AG91a, MT89]. **Variants** [CLR21, GOV19, GTI11, KK07, PCK22, RT99, ZZLY02]. **variate** [GSCS15]. **Variation** [BDSC11, BM94, MSZ21]. **Variational** [Auc89, CFG97, CF02]. **Variations** [Li98a, Li98b]. **Varied** [Par05]. **Varieties** [YL16]. **Variety** [JT98]. **Various** [RVV17]. **Varying** [CT91, LNT18, Mal06]. **Vector** [AFPA07, BF05, BRZ06, BV95, CT15, Elt92, FI18, Fay95, GTI11, HR00, HQ16, IS11, JMO93, MMMM06b, MP11, NNT17, OW96, Sid95, SW97, SX11, VZ06, Wan15, KN94]. **Vector-Valued** [Sid95]. **Vectors** [Bar93b, BK21, LC15b, Pai09, PP11, PW14a, Ste21, Wu17, BN87]. **Vera** [GKRV90]. **Verification** [Voo12]. **Verifications** [Sch05]. **Verified** [FH10, Rum12, Rum22]. **Versal** [EEK97, EM00, GPM03]. **Version** [KDGG13, MSV19, Sim97]. **Versions** [BB07]. **versus** [Alt13, Bér09]. **Vertex** [GW22]. **Vertical** [MN97, QL99]. **Via** [Dax08, GOV19, Gow96, STT17, Van08, AGP19, AEGL19, AABK19, Bar94, BH90, BG13, BLNT13, BZ00, BMV20, CFT16, CGCDM13, CDG+07, CWY20, CHZ16, CDD00, wC03, CT88, DGGG22, DMW23, FGL21, FP16, GVV04, GMN18, GTH19b, GNS18, GP97, GGO13, HY01, IT18, KS22a, KS22b, LN22, Lew99, Lin19, LEMCD19, LMC22, LP11, LP13, Mae98, Mat95b, MW01, PR01, Pin19, SG21, SAGS21, SB11, TMV18, UCS17, XXCB14, XXG12, XX17, XC20, YXY20, YXS21, ZŠ94]. **Vibrating** [Lan07, TV09]. **Vibration** [HLQ09]. **Vibrations** [MMMM06a]. **Vibroacoustic** [QCCT17, ZL23]. **View** [BCR11, Hig03, Ost10]. **Viscosity** [TV09]. **Vishik** [MBO97]. **Volterra** [FG15]. **Volume** [BI99]. **Volumetric** [HHSW97]. **vs** [Toh97].

**W** [Zha95]. **W.** [Ikr97]. **Waldén** [GJTP12]. **Walk** [ES08]. **Walks** [AHN21, BMM20, DMS13, DRSZ07, KN99, PCB16]. **Wasserstein** [TP23]. **Watson** [HM20]. **Wave** [HL17, HDSC23, LW20b]. **Wavefront** [Bar08]. **Wavelet** [For03, Tur97]. **Wavelets** [GP16, Hel95, JRZ99, JJ03]. **Way** [BV90, Cho10, GTW00, GMBS12, LRA93, SdA10, Ste13, BPR20]. **Weak** [HV19]. **Weakly** [AB19b, CM93, SŠ91, SWYM96, CJL96b]. **Weierstrass** [BR19, dTDM08]. **Weighing** [NW02]. **Weight** [DV08b, For96]. **Weighted** [BN06b, BV01, DS18, DL17b, FI18, FS01, GW92, Gul95, HHSW97, HS13, HV97, KNS97, KN98, KT10a, SES95, SW98, WD00, YL08]. **Weighting** [MPS01, Whi89]. **Weights** [BHS23, GG11]. **Well** [AB19a, BBM02a, MX98]. **Well-Focused** [BBM02a]. **Weyr** [BR22]. **WGL** [YL08]. **Where** [EW20]. **Which** [BEGG07, Cao09, Kui00]. **Whose** [LO20, dF05, AdHN88]. **widths** [FMSS21]. **Wielandt** [MSV19]. **Wiener** [ET10, Guo01b, JDS03]. **Wilkinson** [FP20]. **Wise** [CH99]. **within** [HPS13, HPZ23, JNP21, LM98a]. **without** [DD07, YC97]. **Woodbury** [Rie92]. **Words** [JH02]. **Work** [LEMCD19]. **Works** [HPS+11]. **World** [Hig03]. **Worst** [FLT13]. **Worst-Case** [FLT13]. **Wrapped** [Ain17].

**Xu** [KZ10].

**Young** [HN90, Kol03, Lin11, VNVM14].

**Zero** [DG91c, Gow96, GP04, SD12, ZFW07, GKR89]. **Zero-Fill** [ZFW07]. **Zero-Finding** [SD12]. **Zeros** [DY10, Kit95, Lin03, TU91]. **Zolotarev** [Gaw19].

# References

**Adams:1994:TDC**

[AA94] Loyce Adams and Peter Arbenz. Towards a divide and conquer algorithm for the real nonsymmetric eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1333–1353, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22017`.

**Adhikari:2009:SBE**

[AA09] Bibhas Adhikari and Rafikul Alam. Structured backward errors and pseudospectra of structured matrix pencils. *SIAM Journal on Matrix Analysis and Applications*, 31 (2):331–359, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Alam:2019:SAN**

[AA19] Rafikul Alam and Sk. Safique Ahmad. Sensitivity analysis of nonlinear eigenproblems. *SIAM Journal on Matrix Analysis and Applications*, 40(2): 672–695, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ahmad:2010:PCP**

[AAB10] Sk. Safique Ahmad, Rafikul Alam, and Ralph Byers. On pseudospectra, critical points, and multiple eigenvalues of matrix pencils. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1915–1933, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Aurentz:2019:SCG**

[AABK19] Jared L. Aurentz, Anthony P. Austin, Michele Benzi, and Vassilis Kalantzis. Stable computation of generalized matrix functions via polynomial interpolation. *SIAM Journal on Matrix Analysis and Applications*, 40(1):210–234, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Arioli:2001:BEA**

[AB01] Mario Arioli and Lucia Baldini. A backward error analysis of a null space algorithm in sparse quadratic programming. *SIAM Journal on Matrix Analysis and Applications*, 23(2):425–442, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37597`.

**Alam:2005:SEM**

[AB05] R. Alam and S. Bora. On stable eigendecompositions of matrices. *SIAM Journal on Matrix Analysis and Applications*, 26(3):830–848, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41845`.

**Avron:2013:FSS**

[AB13] Haim Avron and Christos Boutsidis. Faster subset selection for matrices and applications. *SIAM Journal on Matrix Analysis and Applications*, 34 (4):1464–1499, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Alam:2016:LRM**

[AB16a] Rafikul Alam and Namita Behera. Linearizations for rational matrix functions and Rosenbrock system polynomials. *SIAM Journal on Matrix Analysis and Applications*, 37 (1):354–380, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Arrigo:2016:EMC**

[AB16b] Francesca Arrigo and Michele Benzi. Edge modification criteria for enhancing the communicability of digraphs. *SIAM Journal on Matrix Analysis and Applications*, 37(1):443–468, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Alam:2018:GFP**

[AB18] Rafikul Alam and Namita Behera. Generalized Fiedler pencils for rational matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 39(2):587–610, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Armentano:2019:PEP**

[AB19a] Diego Armentano and Carlos Beltrán. The polynomial eigenvalue problem is well conditioned for random inputs. *SIAM Journal on Matrix Analysis and Applications*, 40(1): 175–193, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Azimzadeh:2019:HOB**

[AB19b] Parsiad Azimzadeh and Erhan Bayraktar. High order Bellman equations and weakly chained diagonally dominant tensors. *SIAM Journal on Matrix Analysis and Applications*, 40(1): 276–298, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Altafini:2023:ECM**

[ABC+23] Diego Altafini, Dario A. Bini, Valerio Cutini, Beatrice Meini, and Federico Poloni. An edge centrality measure

based on the Kemeny constant. *SIAM Journal on Matrix Analysis and Applications*, 44(2):648–669, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1486728`.

**Arrigo:2016:CGM**

[ABF16] Francesca Arrigo, Michele Benzi, and Caterina Fenu. Computation of generalized matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 37(3):836–860, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Arioli:2007:PCN**

[ABG07] Mario Arioli, Marc Baboulin, and Serge Gratton. A partial condition number for linear least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 29(2):413–433, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Alam:2011:PTH**

[ABK+11] R. Alam, S. Bora, M. Karow, V. Mehrmann, and J. Moro. Perturbation theory for Hamiltonian matrices and the distance to bounded-realness. *SIAM Journal on Matrix Analysis and Applications*, 32(2):484–514, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p484_s1`.

**Adams:1994:CPT**

[ABL94] Gary E. Adams, Adam W. Bojańczyk, and Franklin T. Luk. Computing the PSVD of two $2 \times 2$ triangular matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(2):366–382, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22157`.

**Aliyev:2017:LSC**

[ABM+17] Nicat Aliyev, Peter Benner, Emre Mengi, Paul Schwerdtner, and Matthias Voigt. Large-scale computation of $\mathcal{L}_\infty$-Norms by a greedy subspace method. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1496–1516, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ashcraft:2021:BLR**

[ABM21] Cleve Ashcraft, Alfredo Buttari, and Theo Mary. Block low-rank matrices with shared bases: Potential and limitations of the $\text{BLR}^2$ format. *SIAM Journal on Matrix Analysis and Applications*, 42(2):990–1010, ???? 2021. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic).

**Aliyev:2020:SFN**

[ABMV20] Nicat Aliyev, Peter Benner, Emre Mengi, and Matthias Voigt. A subspace framework for $\mathcal{H}_\infty$-norm minimization. *SIAM Journal on Matrix Analysis and Applications*, 41 (2):928–956, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Axelsson:2009:PBV**

[ABN09] Owe Axelsson, Radim Blaheta, and Maya Neytcheva. Preconditioning of boundary value problems using elementwise Schur complements. *SIAM Journal on Matrix Analysis and Applications*, 31(2):767–789, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Andersson:2018:EMG**

[AC18] Fredrik Andersson and Marcus Carlsson. ESPRIT for multidimensional general grids. *SIAM Journal on Matrix Analysis and Applications*, 39(3):1470–1488, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Andersen:2020:SSR**

[AC20] Martin S. Andersen and Tianshi Chen. Smoothing splines and rank structured matrices: Revisiting the spline kernel. *SIAM Journal on Matrix Analysis and Applications*, 41(2): 389–412, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Andrew:1993:DEE**

[ACL93] Alan L. Andrew, K.-W. Eric Chu, and Peter Lancaster. Derivatives of eigenvalues and eigenvectors of matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 14(4):903–926, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Avron:2009:CPS**

[ACST09] Haim Avron, Doron Chen, Gil Shklarski, and Sivan Toledo. Combinatorial preconditioners for scalar elliptic finite-element problems. *SIAM Journal on Matrix Analysis and Applications*, 31(2):694–720, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Avron:2017:FKR**

[ACW17] Haim Avron, Kenneth L. Clarkson, and David P. Woodruff. Faster kernel ridge regression using sketching and preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1116–1138, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Arnold:1998:SIE**

[AD98] Mark Arnold and Biswa Nath Datta. Single-input eigenvalue assignment algorithms: a close look. *SIAM Journal on Matrix Analysis and Applications*, 19(2):444–467, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29488`.

**Arbenz:2002:PSM**

[AD02] Peter Arbenz and Zlatko Drmac. On positive semidefinite matrices with known null space. *SIAM Journal on Matrix Analysis and Applications*, 24(1):132–149, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38133`.

**Arrigo:2021:MLF**

[AD21] Francesca Arrigo and Fabio Durastante. Mittag-Leffler functions and their applications in network science. *SIAM Journal on Matrix Analysis and Applications*, 42(4):1581–1601, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Arico:2004:VCO**

[ADC04] Antonio Aricò, M. Donatelli, and S. Serra Capizzano. V-cycle optimal convergence for certain (multilevel) structured linear systems. *SIAM Journal on Matrix Analysis and Applications*, 26(1):186–214, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42198`.

**Arioli:1989:SSL**

[ADD89] Mario Arioli, James W. Demmel, and Iain S. Duff. Solving sparse linear systems with sparse backward error. *SIAM Journal on Matrix Analysis and Applications*, 10(2):165–190, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Amestoy:1996:AMD**

[ADD96] Patrick R. Amestoy, Timothy A. Davis, and Iain S. Duff. An approximate minimum degree ordering algorithm. *SIAM Journal on Matrix Analysis and Applications*, 17(4):886–905, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27895`.

**Agullo:2018:LRF**

[ADGH18] Emmanuel Agullo, Eric Darve, Luc Giraud, and Yuval Harness. Low-rank factorizations in data sparse hierarchical algorithms for preconditioning symmetric positive definite matrices. *SIAM Journal on Matrix Analysis and Appli-*

*cations*, 39(4):1701–1725, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Anguas:2019:VDI**

[ADHM19] Luis M. Anguas, Froilán M. Dopico, Richard Hollister, and D. Steven Mackey. Van Dooren's index sum theorem and rational matrices with prescribed structural data. *SIAM Journal on Matrix Analysis and Applications*, 40(2):720–738, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Avdelas:1988:GAI**

[AdHN88] G. Avdelas, J. de Pillis, A. Hadjidimos, and M. Neumann. A guide to the acceleration of iterative methods whose iteration matrix is nonnegative and convergent. *SIAM Journal on Matrix Analysis and Applications*, 9(3):329–342, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Amestoy:2001:FAM**

[ADLK01] Patrick R. Amestoy, Iain S. Duff, Jean-Yves L'Excellent, and Jacko Koster. A fully asynchronous multifrontal solver using distributed dynamic scheduling. *SIAM Journal on Matrix Analysis and Applications*, 23(1):15–41, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35819`.

**Amparan:2018:SLR**

[ADMZ18] A. Amparan, F. M. Dopico, S. Marcaida, and I. Zaballa. Strong linearizations of rational matrices. *SIAM Journal on Matrix Analysis and Applications*, 39(4):1670–1700, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Arioli:1992:SCI**

[ADR92] Mario Arioli, Iain Duff, and Daniel Ruiz. Stopping criteria for iterative solvers. *SIAM Journal on Matrix Analysis and Applications*, 13(1):138–144, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Amestoy:2005:TSA**

[ADV05] Patrick R. Amestoy, Iain S. Duff, and Christof Vömel. Task scheduling in an asynchronous distributed memory multifrontal solver. *SIAM Journal on Matrix Analysis and Applications*, 26(2):544–565, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41987`.

**Andersson:1997:CPP**

[AE97] Lars-Erik Andersson and Tommy Elfving. A constrained Procrustes problem. *SIAM Journal on Matrix Analysis*

*and Applications*, 18(1):124–139, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27754`.

**Andreotti:2019:CGP**

[AEGL19] Eleonora Andreotti, Dominik Edelmann, Nicola Guglielmi, and Christian Lubich. Constrained graph partitioning via matrix differential equations. *SIAM Journal on Matrix Analysis and Applications*, 40(1): 1–22, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Arsigny:2007:GMN**

[AFPA07] Vincent Arsigny, Pierre Fillard, Xavier Pennec, and Nicholas Ayache. Geometric means in a novel vector space structure on symmetric positive-definite matrices. *SIAM Journal on Matrix Analysis and Applications*, 29(1): 328–347, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Afsari:2008:SAP**

[Afs08] Bijan Afsari. Sensitivity analysis for the problem of matrix joint diagonalization. *SIAM Journal on Matrix Analysis and Applications*, 30(3):1148–1171, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ammar:1988:SSR**

[AG88a] Gregory S. Ammar and William B. Gragg. Superfast solution of real positive definite Toeplitz systems. *SIAM Journal on Matrix Analysis and Applications*, 9(1):61–76, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). SIAM Conference on Linear Algebra in Signals, Systems, and Control (Boston, Mass., 1986).

**Arbenz:1988:SDH**

[AG88b] Peter Arbenz and Gene H. Golub. On the spectral decomposition of Hermitian matrices modified by low rank perturbations with applications. *SIAM Journal on Matrix Analysis and Applications*, 9(1):40–58, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ammar:1991:VGS**

[AG91a] Gregory Ammar and Paul Gader. A variant of the Gohberg–Semencul formula involving circulant matrices. *SIAM Journal on Matrix Analysis and Applications*, 12(3): 534–540, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ammar:1991:RAC**

[AG91b] Gregory S. Ammar and William B. Gragg. $O(n^2)$ reduction algorithms for the construction of a band matrix

from spectral data. *SIAM Journal on Matrix Analysis and Applications*, 12(3):426–431, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Arbenz:1992:LAS**

[AG92] Peter Arbenz and Gene H. Golub. $QR$-like algorithms for symmetric arrow matrices. *SIAM Journal on Matrix Analysis and Applications*, 13(2): 655–658, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Artzrouni:2000:NMI**

[AG00] Marc Artzrouni and Olivier Gavart. Nonlinear matrix iterative processes and generalized coefficients of ergodicity. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1343–1353, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34896`.

**AlDaas:2019:CEL**

[AG19] Hussam Al Daas and Laura Grigori. A class of efficient locally constructed preconditioners based on coarse spaces. *SIAM Journal on Matrix Analysis and Applications*, 40(1): 66–91, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Agullo:2014:BGM**

[AGJ14] E. Agullo, L. Giraud, and Y.-F. Jing. Block GMRES method with inexact breakdowns and deflated restarting. *SIAM Journal on Matrix Analysis and Applications*, 35(4): 1625–1651, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ashcraft:1998:ASI**

[AGL98] Cleve Ashcraft, Roger G. Grimes, and John G. Lewis. Accurate symmetric indefinite linear equation solvers. *SIAM Journal on Matrix Analysis and Applications*, 20(2):513–561, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29692`.

**Agullo:2019:RPG**

[AGP19] Emmanuel Agullo, Luc Giraud, and Louis Poirel. Robust preconditioners via generalized eigenproblems for hybrid sparse linear solvers. *SIAM Journal on Matrix Analysis and Applications*, 40(2):417–439, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Akian:2022:MAV**

[AGQS22] Marianne Akian, Stéphane Gaubert, Zheng Qu, and Omar Saadi. Multiply accelerated value iteration for

NonSymmetric affine fixed point problems and application to Markov decision processes. *SIAM Journal on Matrix Analysis and Applications*, 43(1):199–232, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M1367192`.

**Alanelli:2007:NIC**

[AH07] M. Alanelli and A. Hadjidimos. A new iterative criterion for $H$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 29(1):160–176, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Aprahamian:2014:MUF**

[AH14] Mary Aprahamian and Nicholas J. Higham. The matrix unwinding function, with an application to computing the matrix exponential. *SIAM Journal on Matrix Analysis and Applications*, 35(1):88–109, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Aprahamian:2016:MIT**

[AH16] Mary Aprahamian and Nicholas J. Higham. Matrix inverse trigonometric and inverse hyperbolic functions: Theory and algorithms. *SIAM Journal on Matrix Analysis and Applications*, 37(4):1453–1477, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Avrachenkov:2001:IAM**

[AHH01] Konstantin E. Avrachenkov, Moshe Haviv, and Phil G. Howlett. Inversion of analytic matrix functions that are singular at the origin. *SIAM Journal on Matrix Analysis and Applications*, 22(4):1175–1189, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Arrigo:2021:TBD**

[AHN21] Francesca Arrigo, Desmond J. Higham, and Vanni Noferini. A theory for backtrack-downweighted walks. *SIAM Journal on Matrix Analysis and Applications*, 42(3):1229–1247, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ando:1998:SC**

[AhS98] Tsuyoshi Ando and Mau hsiang Shih. Simultaneous contractibility. *SIAM Journal on Matrix Analysis and Applications*, 19(2):487–498, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31881`.

**Arav:2000:RIE**

[AHS00] Marina Arav, Daniel Hershkowitz, and Volker Mehrmann Hans Schneider. The recursive inverse eigenvalue problem.

*SIAM Journal on Matrix Analysis and Applications*, 22(2): 392–412, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35404`.

**Aihara:2022:CIR**

[AIM22] Kensuke Aihara, Akira Imakura, and Keiichi Morikuni. Cross-interactive residual smoothing for global and block Lanczos-type solvers for linear systems with multiple right-hand sides. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1308–1330, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1436774`.

**Ainsleigh:2017:MCM**

[Ain17] Phillip Ainsleigh. A method for computing moments of quadratic forms involving wrapped random variables. *SIAM Journal on Matrix Analysis and Applications*, 38(2): 554–573, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Allman:2013:TRI**

[AJRS13] Elizabeth S. Allman, Peter D. Jarvis, John A. Rhodes, and Jeremy G. Sumner. Tensor rank, invariants, inequalities, and applications. *SIAM Journal on Matrix Analysis and Applications*, 34(3):1014–1045, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Arun:1990:BAS**

[AK90] K. S. Arun and S. Y. Kung. Balanced approximation of stochastic systems. *SIAM Journal on Matrix Analysis and Applications*, 11(1):42–68, January 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Allen:2020:SIB**

[AK20] Larry Allen and Robert C. Kirby. Structured inversion of the Bernstein mass matrix. *SIAM Journal on Matrix Analysis and Applications*, 41(2): 413–431, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Allen:2021:SIB**

[AK21] Larry Allen and Robert C. Kirby. Structured inversion of the Bernstein–Vandermonde matrix. *SIAM Journal on Matrix Analysis and Applications*, 42(2):557–577, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Alefeld:1997:SSP**

[AKM97] Götz Alefeld, Vladik Kreinovich, and Günter Mayer. On the shape of the symmetric, persymmetric, and skew-symmetric solution set. *SIAM*

*Journal on Matrix Analysis and Applications*, 18(3):693–705, July 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29706`.

**Atreas:2008:CSU**

[AKP08] N. D. Atreas, C. Karanikas, and P. Polychronidou. A class of sparse unimodular matrices generating multiresolution and sampling analysis for data of any length. *SIAM Journal on Matrix Analysis and Applications*, 30(1):312–323, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Argentati:2008:BCR**

[AKPP08] M. E. Argentati, A. V. Knyazev, C. C. Paige, and I. Panayotov. Bounds on changes in Ritz values for a perturbed invariant subspace of a Hermitian matrix. *SIAM Journal on Matrix Analysis and Applications*, 30(2):548–559, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Agrachev:2020:CPB**

[AKU20] Andrei Agrachev, Khazhgali Kozhasov, and André Uschmajew. Chebyshev polynomials and best rank-one approximation ratio. *SIAM Journal on Matrix Analysis and Applications*, 41(1):308–331, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Axelsson:1995:EEB**

[AL95] O. Axelsson and H. Lu. On eigenvalue estimates for block incomplete factorization methods. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1074–1085, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25343`.

**Ashcraft:1998:ADM**

[AL98a] Cleve Ashcraft and Joseph W. H. Liu. Applications of the Dulmage–Mendelsohn decomposition and network flow to graph bisection improvement. *SIAM Journal on Matrix Analysis and Applications*, 19(2):325–354, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30843`.

**Ashcraft:1998:ROS**

[AL98b] Cleve Ashcraft and Joseph W. H. Liu. Robust ordering of sparse matrices using multisection. *SIAM Journal on Matrix Analysis and Applications*, 19(3):816–832, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/29908.

**Ackner:1994:SAM**

[ALAK94] Reuven Ackner, Hanoch Lev-Ari, and Thomas Kailath. The Schur algorithm for matrix-valued meromorphic functions. *SIAM Journal on Matrix Analysis and Applications*, 15(1):140–150, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/21892.

**Allwright:1989:MME**

[All89] J. C. Allwright. On maximizing the minimum eigenvalue of a linear combination of symmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 10(3):347–382, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Amestoy:2007:DMS**

[ALN07] Patrick R. Amestoy, Xiaoye S. Li, and Esmond G. Ng. Diagonal Markowitz scheme with local symmetrization. *SIAM Journal on Matrix Analysis and Applications*, 29(1):228–244, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Amestoy:2007:UOU**

[ALP07] Patrick R. Amestoy, Xiaoye S. Li, and Stéphane Pralet. Unsymmetric ordering using a constrained Markowitz scheme. *SIAM Journal on Matrix Analysis and Applications*, 29(1):302–327, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Altenberg:2013:OSR**

[Alt13] Lee Altenberg. On the ordering of spectral radius product $r(\mathbf{A})\mathbf{r}(\mathbf{AD})$ versus $r(\mathbf{A^2D})$ and related applications. *SIAM Journal on Matrix Analysis and Applications*, 34(3):978–998, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Alefeld:1995:SUS**

[AM95] Götz Alefeld and Günter Mayer. On the symmetric and unsymmetric solution set of interval systems. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1223–1240, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/26807.

**Arndt:2005:NCS**

[AM05] Hans-Robert Arndt and Günter Mayer. New criteria for the semiconvergence of interval matrices. *SIAM Journal on Matrix Analysis and Applications*, 27(3):689–711, July 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http:

//epubs.siam.org/sam-bin/dbq/article/62264.

**Alefeld:2009:NCF**

[AM09] G. Alefeld and G. Mayer. New criteria for the feasibility of the Cholesky method with interval data. *SIAM Journal on Matrix Analysis and Applications*, 30 (4):1392–1405, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Appeltans:2023:SPS**

[AM23] Pieter Appeltans and Wim Michiels. A structure preserving shift-invert infinite Arnoldi algorithm for a class of delay eigenvalue problems with Hamiltonian symmetry. *SIAM Journal on Matrix Analysis and Applications*, 44(1):331–358, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL https://epubs.siam.org/doi/10.1137/21M1452706.

**Al-Mohy:2009:CFD**

[AMH09] Awad H. Al-Mohy and Nicholas J. Higham. Computing the Fréchet derivative of the matrix exponential, with an application to condition number estimation. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1639–1657, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Al-Mohy:2010:NSS**

[AMH10] Awad H. Al-Mohy and Nicholas J. Higham. A new scaling and squaring algorithm for the matrix exponential. *SIAM Journal on Matrix Analysis and Applications*, 31(3):970–989, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Al-Mohy:2022:APA**

[AMHL22] Awad H. Al-Mohy, Nicholas J. Higham, and Xiaobo Liu. Arbitrary precision algorithms for computing the matrix cosine and its Fréchet derivative. *SIAM Journal on Matrix Analysis and Applications*, 43(1):233–256, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL https://epubs.siam.org/doi/10.1137/21M1441043.

**Aishima:2008:CDA**

[AMMS08] Kensuke Aishima, Takayasu Matsuo, Kazuo Murota, and Masaaki Sugihara. On convergence of the DQDS algorithm for singular value computation. *SIAM Journal on Matrix Analysis and Applications*, 30(2): 522–537, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Alic:1997:BDM**

[AMPV97] M. Alić, B. Mond, J. Pečarić, and V. Volenec. Bounds

for the differences of matrix means. *SIAM Journal on Matrix Analysis and Applications*, 18(1):119–123, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29076`.

**Aurentz:2018:FBS**

[AMR+18] Jared L. Aurentz, Thomas Mach, Leonardo Robol, Raf Vandebril, and David S. Watkins. Fast and backward stable computation of roots of polynomials, Part II: Backward error analysis; companion matrix and companion pencil. *SIAM Journal on Matrix Analysis and Applications*, 39(3): 1245–1269, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Albeverio:2007:PTE**

[AMS07] Sergio Albeverio, Alexander K. Motovilov, and Alexei V. Selin. The a priori $\tan\Theta$ theorem for eigenvectors. *SIAM Journal on Matrix Analysis and Applications*, 29(2):685–697, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Anderson:1990:SPO**

[AMT90] W. N. Anderson, Jr., T. D. Morley, and G. E. Trapp. Sets of positive operators with suprema. *SIAM Journal on Matrix Analysis and Applications*, 11(2):207–212, April 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Aurentz:2015:FBS**

[AMVW15] Jared L. Aurentz, Thomas Mach, Raf Vandebril, and David S. Watkins. Fast and backward stable computation of roots of polynomials. *SIAM Journal on Matrix Analysis and Applications*, 36(3):942–973, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Anonymous:1997:LR**

[Ano97] Anonymous. List of referees. *SIAM Journal on Matrix Analysis and Applications*, 18(2):519–520, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/97401`.

**Anonymous:2011:EPC**

[Ano11] Anonymous. Erratum: "Primitivity, the Convergence of the NQZ Method, and the Largest Eigenvalue for Nonnegative Tensors" (SIAM J. Matrix Anal. Appl., **32** (2011), pp. 806–819). *SIAM Journal on Matrix Analysis and Applications*, 32(4):1559, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/`

1/sjmael/v32/i4/p1559_s1. See [CPZ11].

**Avron:2009:UPF**

[ANT09] Haim Avron, Esmond Ng, and Sivan Toledo. Using perturbed $QR$ factorizations to solve linear least-squares problems. *SIAM Journal on Matrix Analysis and Applications*, 31 (2):674–693, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Arslan:2019:SCN**

[ANT19] Bahar Arslan, Vanni Noferini, and Françoise Tisseur. The structured condition number of a differentiable map between matrix manifolds, with applications. *SIAM Journal on Matrix Analysis and Applications*, 40(2):774–799, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Anda:1994:FPR**

[AP94] Andrew A. Anda and Haesun Park. Fast plane rotations with dynamic scaling. *SIAM Journal on Matrix Analysis and Applications*, 15(1):162–174, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/19301`.

**Amestoy:2002:UMF**

[AP02] Patrick R. Amestoy and Chiara Puglisi. An unsymmetrized multifrontal $LU$ factorization. *SIAM Journal on Matrix Analysis and Applications*, 24(2):553–569, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37537`.

**Arun:1993:CHL**

[AR93] K. S. Arun and V. B. Rao. Constructive heuristics and lower bounds for graph partitioning based on a principal-components approximation. *SIAM Journal on Matrix Analysis and Applications*, 14(4): 991–1015, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Arguillere:2015:ASS**

[Arg15] Sylvain Arguillère. Approximation of sequences of symmetric matrices with the symmetric rank-one algorithm and applications. *SIAM Journal on Matrix Analysis and Applications*, 36(1):329–347, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Arioli:2000:UFS**

[Ari00] M. Arioli. The use of $QR$ factorization in sparse quadratic programming and backward

error issues. *SIAM Journal on Matrix Analysis and Applications*, 21(3):825–839, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33814`.

**Arioli:2013:GGK**

[Ari13] M. Arioli. Generalized Golub–Kahan bidiagonalization and stopping criteria. *SIAM Journal on Matrix Analysis and Applications*, 34(2):571–592, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Artzrouni:1996:DLP**

[Art96] Marc Artzrouni. On the dynamics of the linear process $Y(k) = A(k)Y(k-1)$ with irreducible matrices $A(k)$. *SIAM Journal on Matrix Analysis and Applications*, 17(4):822–833, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27796`.

**Artzrouni:2003:LCE**

[Art03] Marc Artzrouni. The local coefficient of ergodicity of a nonnegative matrix. *SIAM Journal on Matrix Analysis and Applications*, 25(2):507–516, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39180`.

**Arun:1992:UCT**

[Aru92] K. S. Arun. A unitarily constrained total least squares problem in signal processing. *SIAM Journal on Matrix Analysis and Applications*, 13(3):729–745, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Aberth:1993:PME**

[AS93] Oliver Aberth and Mark J. Schaefer. Precise matrix eigenvalues using range arithmetic. *SIAM Journal on Matrix Analysis and Applications*, 14(1):235–241, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Abu-Saris:2004:GEV**

[ASA04] Raghib Abu-Saris and Wajdi Ahmad. Generalized exponential Vandermonde determinant and Hermite multipoint discrete boundary value problem. *SIAM Journal on Matrix Analysis and Applications*, 25(4):921–929, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42126`.

**Ashby:1991:MPP**

[Ash91] Steven F. Ashby. Minimax polynomial preconditioning for Hermitian linear sys-

tems. *SIAM Journal on Matrix Analysis and Applications*, 12(4):766–789, October 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ahmad:2017:PMB**

[ASvG17] Mian Ilyas Ahmad, Daniel B. Szyld, and Martin B. van Gijzen. Preconditioned multishift BiCG for $\mathcal{H}_\in$-optimal model reduction. *SIAM Journal on Matrix Analysis and Applications*, 38(2):401–424, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Absil:2004:CCI**

[ASVM04] P.-A. Absil, R. Sepulchre, P. Van Dooren, and R. Mahony. Cubically convergent iterations for invariant subspace computation. *SIAM Journal on Matrix Analysis and Applications*, 26(1):70–96, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42200`.

**Aswani:2016:LRA**

[Asw16] Anil Aswani. Low-rank approximation and completion of positive tensors. *SIAM Journal on Matrix Analysis and Applications*, 37(3):1337–1364, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Andrew:1998:CDR**

[AT98] Alan L. Andrew and Roger C. E. Tan. Computation of derivatives of repeated eigenvalues and the corresponding eigenvectors of symmetric matrix pencils. *SIAM Journal on Matrix Analysis and Applications*, 20(1):78–100, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30433`.

**Akcay:2007:SBM**

[AT07] Hüseyin Akçay and Semiha Türkay. A subspace-based method for solving Lagrange–Sylvester interpolation problems. *SIAM Journal on Matrix Analysis and Applications*, 29 (2):377–395, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Auchmuty:1989:VPE**

[Auc89] Giles Auchmuty. Variational principles for eigenvalues of nonsymmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 10(1):105–117, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Auchmuty:1991:GRC**

[Auc91] Giles Auchmuty. Globally and rapidly convergent algorithms for symmetric eigenproblems. *SIAM Journal on Matrix Analysis and Applications*, 12(4):

690–706, October 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Aujla:2000:SNI**

[Auj00] Jaspal Singh Aujla. Some norm inequalities for completely monotone functions. *SIAM Journal on Matrix Analysis and Applications*, 22(2):569–573, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36976`.

**Axelsson:1991:BBG**

[AV91] O. Axelsson and P. S. Vassilevski. A black box generalized conjugate gradient solver with inner iterations and variable-step preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 12(4):625–644, October 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Anstreicher:2000:LRQ**

[AW00] Kurt Anstreicher and Henry Wolkowicz. On Lagrangian relaxation of quadratic matrix constraints. *SIAM Journal on Matrix Analysis and Applications*, 22(1):41–55, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34029`.

**Azais:2005:ULB**

[AW05] Jean-Marc Azaïs and Mario Wschebor. Upper and lower bounds for the tails of the distribution of the condition number of a Gaussian matrix. *SIAM Journal on Matrix Analysis and Applications*, 26(2):426–440, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42976`.

**Anderson:2010:EDC**

[AW10] William Anderson and Martin T. Wells. The exact distribution of the condition number of a Gaussian matrix. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1125–1130, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Axelsson:1992:BEP**

[Axe92] O. Axelsson. Bounds of eigenvalues of preconditioned matrices. *SIAM Journal on Matrix Analysis and Applications*, 13 (3):847–862, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Iterative methods in numerical linear algebra (Copper Mountain, CO, 1990).

**Au-Yeung:2004:ULM**

[AYLR04] Yik-Hoi Au-Yeung, Chi-Kwong Li, and Leiba Rodman. *H*-unitary and Lorentz matri-

ces: a review. *SIAM Journal on Matrix Analysis and Applications*, 25(4):1140–1162, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42189`.

**Bai:1999:CMM**

[Bai99] Zhong-Zhi Bai. On the convergence of the multisplitting methods for the linear complementarity problem. *SIAM Journal on Matrix Analysis and Applications*, 21(1):67–78, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32403`.

**Bai:2005:IEC**

[Bai05] Zheng-Jian Bai. The inverse eigenproblem of centrosymmetric matrices with a submatrix constraint and its approximation. *SIAM Journal on Matrix Analysis and Applications*, 26(4):1100–1114, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43418`.

**Bouchard:2020:AJD**

[BAMC20] Florent Bouchard, Bijan Afsari, Jérôme Malick, and Marco Congedo. Approximate joint diagonalization with Riemannian optimization on the general linear group. *SIAM Journal on Matrix Analysis and Applications*, 41(1):152–170, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bapat:1989:MSV**

[Bap89] R. B. Bapat. Majorization and singular values. II. *SIAM Journal on Matrix Analysis and Applications*, 10(4):429–434, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Barnett:1989:LAN**

[Bar89] Stephen Barnett. Leverrier's algorithm: a new proof and extensions. *SIAM Journal on Matrix Analysis and Applications*, 10(4):551–556, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Barlow:1993:EAU**

[Bar93a] Jesse L. Barlow. Error analysis of update methods for the symmetric eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 14(2):598–618, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Barlow:1993:EBC**

[Bar93b] Jesse L. Barlow. Error bounds for the computation of null vectors with applications to Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 14(3):798–812, July

1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Barnett:1994:RTF**

[Bar94] Stephen Barnett. Reduction of a transfer function via an observability matrix. *SIAM Journal on Matrix Analysis and Applications*, 15(1):134–139, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/19108`.

**Barrlund:1998:ESC**

[Bar98] Anders Barrlund. Efficient solution of constrained least squares problems with Kronecker product structure. *SIAM Journal on Matrix Analysis and Applications*, 19 (1):154–160, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29502`.

**Barlow:2000:SCF**

[Bar00a] Jesse L. Barlow. Stable computation with the fundamental matrix of a Markov chain. *SIAM Journal on Matrix Analysis and Applications*, 22(1):230–241, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33453`.

**Barrlund:2000:RDM**

[Bar00b] Anders Barrlund. The $p$-relative distance is a metric. *SIAM Journal on Matrix Analysis and Applications*, 21(2):699–702, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34088`.

**Barlow:2002:MAB**

[Bar02] Jesse L. Barlow. More accurate bidiagonal reduction for computing the singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 23(3):761–798, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34354`.

**Bardsley:2008:WRM**

[Bar08] Johnathan M. Bardsley. Wavefront reconstruction methods for adaptive optics systems on ground-based telescopes. *SIAM Journal on Matrix Analysis and Applications*, 30(1): 67–83, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Barlow:2019:BMG**

[Bar19] Jesse L. Barlow. Block modified Gram–Schmidt algorithms and their analysis. *SIAM Journal on Matrix Analysis and Applications*, 40(4):1257–1290,

???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Basu:1989:PAM**

[Bas89] Sankar Basu. Padé approximants to matrix Stieltjes series: convergence and related properties. *SIAM Journal on Matrix Analysis and Applications*, 10(3):383–406, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bazan:2000:CRV**

[Baz00] Fermín S. V. Bazán. Conditioning of rectangular Vandermonde matrices with nodes in the unit disk. *SIAM Journal on Matrix Analysis and Applications*, 21(2):679–693, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33602`.

**Balakrishnan:1995:EUO**

[BB95] V. Balakrishnan and S. Boyd. Existence and uniqueness of optimal matrix scalings. *SIAM Journal on Matrix Analysis and Applications*, 16(1):29–39, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23539`.

**Bhat:1996:SOS**

[BB96] Sanjay P. Bhat and Dennis S. Bernstein. Second-order systems with singular mass matrix and an extension of Guyan reduction. *SIAM Journal on Matrix Analysis and Applications*, 17(3):649–657, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26826`.

**Bezerra:1998:ELG**

[BB98] Licio H. Bezerra and Fermin S. V. Bazán. Eigenvalue locations of generalized companion predictor matrices. *SIAM Journal on Matrix Analysis and Applications*, 19(4):886–897, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31493`.

**Bosner:2007:BPV**

[BB07] Nela Bosner and Jesse L. Barlow. Block and parallel versions of one-sided bidiagonalization. *SIAM Journal on Matrix Analysis and Applications*, 29(3):927–953, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Badeau:2008:FMS**

[BB08] Roland Badeau and Rémy Boyer. Fast multilinear singular value decomposition for structured tensors. *SIAM Journal on Matrix Analysis and Applications*, 30(3):1008–

1021, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Benner:2012:IBM**

[BB12] Peter Benner and Tobias Breiten. Interpolation-based $\mathcal{H}_2$-model reduction of bilinear control systems. *SIAM Journal on Matrix Analysis and Applications*, 33(3):859–885, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beik:2018:IMD**

[BB18] Fatemeh Panjeh Ali Beik and Michele Benzi. Iterative methods for double saddle point systems. *SIAM Journal on Matrix Analysis and Applications*, 39 (2):902–921, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Borm:2020:HMC**

[BB20] Steffen Börm and Christina Börst. Hybrid matrix compression for high-frequency problems. *SIAM Journal on Matrix Analysis and Applications*, 41 (4):1704–1725, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bertolini:2020:RTG**

[BBBT20] Marina Bertolini, Gianmario Besana, Gilberto Bini, and Cristina Turrini. The rank of trifocal Grassmann tensors. *SIAM Journal on Matrix Analysis and Applications*, 41(2): 591–604, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bevilacqua:2011:TMQ**

[BBD11] Roberto Bevilacqua, Enrico Bozzo, and Gianna M. Del Corso. *qd*-type methods for quasiseparable matrices. *SIAM Journal on Matrix Analysis and Applications*, 32(3): 722–747, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p722_s1`.

**Ballard:2014:CAS**

[BBD+14] Grey Ballard, Dulceneia Becker, James Demmel, Jack Dongarra, Alex Druinsky, Inon Peled, Oded Schwartz, Sivan Toledo, and Ichitaro Yamazaki. Communication-avoiding symmetric-indefinite factorization. *SIAM Journal on Matrix Analysis and Applications*, 35(4):1364–1406, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ballard:2016:INS**

[BBD+16] Grey Ballard, Austin R. Benson, Alex Druinsky, Benjamin Lipshitz, and Oded Schwartz. Improving the numerical stability of fast matrix multiplication. *SIAM Journal on Matrix*

*Analysis and Applications*, 37 (4):1382–1418, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bojanczyk:1995:SBR**

[BBDS95] A. W. Bojanczyk, R. P. Brent, F. R. De Hoog, and D. R. Sweet. On the stability of the Bareiss and related Toeplitz factorization algorithms. *SIAM Journal on Matrix Analysis and Applications*, 16(1):40–57, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22156`.

**Bohnhorst:2000:PTU**

[BBGF00] B. Bohnhorst, A. Bunse-Gerstner, and H. Fassbender. On the perturbation theory for unitary eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 21(3):809–824, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33323`.

**Boley:1992:AFT**

[BBGL92] Daniel L. Boley, Richard P. Brent, Gene H. Golub, and Franklin T. Luk. Algorithmic fault tolerance using the Lanczos method. *SIAM Journal on Matrix Analysis and Applications*, 13(1):312–332, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Battaglino:2018:PRC**

[BBK18] Casey Battaglino, Grey Ballard, and Tamara G. Kolda. A practical randomized CP tensor decomposition. *SIAM Journal on Matrix Analysis and Applications*, 39(2):876–901, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Braman:2002:MAPa**

[BBM02a] Karen Braman, Ralph Byers, and Roy Mathias. The multishift $QR$ algorithm. Part I: Maintaining well-focused shifts and level 3 performance. *SIAM Journal on Matrix Analysis and Applications*, 23(4):929–947, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38457`.

**Braman:2002:MAPb**

[BBM02b] Karen Braman, Ralph Byers, and Roy Mathias. The multishift $QR$ algorithm. Part II: Aggressive early deflation. *SIAM Journal on Matrix Analysis and Applications*, 23(4):948–973, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38458`.

**Burrage:2021:LPT**

[BBM21] Kevin Burrage, Pamela Burrage, and Shev Macnamara. Localization and pseudospectra of twisted Toeplitz matrices with applications to ion channels. *SIAM Journal on Matrix Analysis and Applications*, 42 (4):1656–1679, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Benner:2002:NCD**

[BBMX02] Peter Benner, Ralph Byers, Volker Mehrmann, and Hongguo Xu. Numerical computation of deflating subspaces of skew-Hamiltonian/ Hamiltonian pencils. *SIAM Journal on Matrix Analysis and Applications*, 24(1):165–190, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36743`.

**Bader:2015:SSS**

[BBS15] Philipp Bader, Sergio Blanes, and Muaz Seydaoglu. The scaling, splitting, and squaring method for the exponential of perturbed matrices. *SIAM Journal on Matrix Analysis and Applications*, 36(2):594–614, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beck:2005:GSS**

[BBT05] Amir Beck and Aharon Ben-Tal. A global solution for the structured total least squares problem with block circulant matrices. *SIAM Journal on Matrix Analysis and Applications*, 27(1):238–255, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/61223`.

**Beck:2008:FMF**

[BBTK08] Amir Beck, Aharon Ben-Tal, and Christian Kanzow. A fast method for finding the global solution of the regularized structured total least squares problem for image deblurring. *SIAM Journal on Matrix Analysis and Applications*, 30(1):419–443, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beck:2006:FGO**

[BBTT06] Amir Beck, Aharon Ben-Tal, and Marc Teboulle. Finding a global optimal solution for a quadratically constrained fractional quadratic problem with applications to the regularized total least squares. *SIAM Journal on Matrix Analysis and Applications*, 28(2): 425–445, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beltran:2019:PBA**

[BBV19] Carlos Beltrán, Paul Breiding, and Nick Vannieuwen-

hoven. Pencil-based algorithms for tensor rank decomposition are not stable. *SIAM Journal on Matrix Analysis and Applications*, 40(2):739–773, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bolzern:1988:PLE**

[BC88] Paolo Bolzern and Patrizio Colaneri. The periodic Lyapunov equation. *SIAM Journal on Matrix Analysis and Applications*, 9(4):499–512, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Brualdi:1992:SNM**

[BC92] Richard A. Brualdi and Keith L. Chavey. Sign-nonsingular matrix pairs. *SIAM Journal on Matrix Analysis and Applications*, 13(1): 36–40, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Burgisser:2010:SAM**

[BC10] Peter Bürgisser and Felipe Cucker. Smoothed analysis of Moore–Penrose inversion. *SIAM Journal on Matrix Analysis and Applications*, 31(5): 2769–2783, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Brannick:2022:BME**

[BC22] James Brannick and Shuhao Cao. A bootstrap multigrid eigensolver. *SIAM Journal on Matrix Analysis and Applications*, 43(4):1627–1657, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M131151X`.

**Butkovic:2010:RST**

[BCGG10] P. Butkovič, R. A. Cuninghame-Green, and S. Gaubert. Reducible spectral theory with applications to the robustness of matrices in max-algebra. *SIAM Journal on Matrix Analysis and Applications*, 31(3): 1412–1431, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bru:1995:MPB**

[BCMM95] R. Bru, C. Corral, A. Martínez, and J. Mas. Multisplitting preconditioners based on incomplete Choleski factorizations. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1210–1222, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24900`.

**Bru:1995:IBU**

[BCN95] Rafael Bru, Joan Josep Climent, and Michael Neumann. On the index of block upper

triangular matrices. *SIAM Journal on Matrix Analysis and Applications*, 16(2):436–447, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23558`.

**Bocci:2011:PMN**

[BCR11] Cristiano Bocci, Enrico Carlini, and Fabio Rapallo. Perturbation of matrices and nonnegative rank with a view toward statistical models. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1500–1512, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1500_s1`.

**Butler:2012:PEA**

[BCW12] T. Butler, P. Constantine, and T. Wildey. A posteriori error analysis of parameterized linear systems using spectral methods. *SIAM Journal on Matrix Analysis and Applications*, 33(1):195–209, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bini:1990:SGE**

[BD90] Dario Bini and Fabio Di Benedetto. Solving the generalized eigenvalue problem for rational Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 11(4):537–552, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bhatia:1993:MMF**

[BD93] Rajendra Bhatia and Chandler Davis. More matrix forms of the arithmetic-geometric mean inequality. *SIAM Journal on Matrix Analysis and Applications*, 14(1):132–136, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bozzo:1995:UCM**

[BD95] Enrico Bozzo and Carmine Di Fiore. On the use of certain matrix algebras associated with discrete trigonometric transforms in matrix displacement decomposition. *SIAM Journal on Matrix Analysis and Applications*, 16(1):312–326, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24510`.

**Bai:1998:UMS**

[BD98a] Zhaojun Bai and James Demmel. Using the matrix sign function to compute invariant subspaces. *SIAM Journal on Matrix Analysis and Applications*, 19(1):205–225, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/29771.

**Bohner:1998:PBT**

[BD98b] Martin Bohner and Ondrej Doslý. Positivity of block tridiagonal matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(1):182–195, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/31879.

**Bhatia:2005:GLE**

[BD05] Rajendra Bhatia and Driss Drissi. Generalized Lyapunov equations and positive definite functions. *SIAM Journal on Matrix Analysis and Applications*, 27(1):103–114, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/60897.

**Bosner:2009:SGR**

[BD09] Nela Bosner and Zlatko Drmač. Subspace gap residuals for Rayleigh–Ritz approximations. *SIAM Journal on Matrix Analysis and Applications*, 31(1):54–67, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Boito:2010:CMS**

[BD10] Paola Boito and Jean-Pierre Dedieu. The condition metric in the space of rectangular full rank matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2580–2602, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Brualdi:2015:SSC**

[BD15] Richard A. Brualdi and Geir Dahl. Strict sign-central matrices. *SIAM Journal on Matrix Analysis and Applications*, 36 (3):1202–1220, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Balan:2022:LAG**

[BD22] Radu Balan and Chris B. Dock. Lipschitz analysis of generalized phase retrievable matrix frames. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1518–1571, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL https://epubs.siam.org/doi/10.1137/21M1435446.

**Batselier:2013:GMP**

[BDD13] Kim Batselier, Philippe Dreesen, and Bart De Moor. The geometry of multivariate polynomial division and elimination. *SIAM Journal on Matrix Analysis and Applications*, 34 (1):102–125, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Batselier:2014:CDN**

[BDD14] Kim Batselier, Philippe Dreesen, and Bart De Moor. The canonical decomposition of $\mathcal{C}_{\lceil}^{\setminus}$ and numerical Gröbner and border bases. *SIAM Journal on Matrix Analysis and Applications*, 35(4):1242–1264, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Baechler:2020:CDM**

[BDE+20] Gilles Baechler, Frederike Dümbgen, Golnoosh Elhami, Miranda Kreković, and Martin Vetterli. Coordinate difference matrices. *SIAM Journal on Matrix Analysis and Applications*, 41(1):332–363, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bueno:2017:LHM**

[BDF17] María I. Bueno, Froilán M. Dopico, and Susana Furtado. Linearizations of Hermitian matrix polynomials preserving the sign characteristic. *SIAM Journal on Matrix Analysis and Applications*, 38(1):249–272, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bolten:2022:SBA**

[BDFF22] Matthias Bolten, Marco Donatelli, Paola Ferrari, and Isabella Furci. A symbol-based analysis for multigrid methods for block-circulant and block-Toeplitz systems. *SIAM Journal on Matrix Analysis and Applications*, 43(1):405–438, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1390554`.

**Bevilacqua:2015:CBE**

[BDG15] R. Bevilacqua, G. M. Del Corso, and L. Gemignani. A CMV-based eigensolver for companion matrices. *SIAM Journal on Matrix Analysis and Applications*, 36(3):1046–1068, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bevilacqua:2020:ERC**

[BDG20] Roberto Bevilacqua, Gianna M. Del Corso, and Luca Gemignani. Efficient reduction of compressed unitary plus low rank matrices to Hessenberg form. *SIAM Journal on Matrix Analysis and Applications*, 41(3):984–1003, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Batenkov:2020:CPN**

[BDGY20] Dmitry Batenkov, Laurent Demanet, Gil Goldman, and Yosef Yomdin. Conditioning of partial nonuniform Fourier matrices with clustered nodes. *SIAM Journal on Matrix Analysis and Applications*, 41(1):199–220, ???? 2020. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic).

**Ballard:2011:MCN**

[BDHS11] Grey Ballard, James Demmel, Olga Holtz, and Oded Schwartz. Minimizing communication in numerical linear algebra. *SIAM Journal on Matrix Analysis and Applications*, 32(3):866–901, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p866_s1`.

**Beltran:2010:CPC**

[BDMS10] Carlos Beltrán, Jean-Pierre Dedieu, Gregorio Malajovich, and Mike Shub. Convexity properties of the condition number. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1491–1506, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beltran:2012:CPC**

[BDMS12] Carlos Beltrán, Jean-Pierre Dedieu, Gregorio Malajovich, and Mike Shub. Convexity properties of the condition number II. *SIAM Journal on Matrix Analysis and Applications*, 33(3):905–939, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ben-David:2012:PDC**

[BDR12] Emanuel Ben-David and Bala Rajaratnam. Positive definite completion problems for Bayesian networks. *SIAM Journal on Matrix Analysis and Applications*, 33(2):617–638, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bai:2011:FPT**

[BDSC11] Zheng-Jian Bai, Marco Donatelli, and Stefano Serra-Capizzano. Fast preconditioners for total variation deblurring with antireflective boundary conditions. *SIAM Journal on Matrix Analysis and Applications*, 32(3):785–805, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p785_s1`.

**Brickell:2008:MNP**

[BDST08] Justin Brickell, Inderjit S. Dhillon, Suvrit Sra, and Joel A. Tropp. The metric nearness problem. *SIAM Journal on Matrix Analysis and Applications*, 30(1):375–396, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bueno:2011:REM**

[BdTD11] María I. Bueno, Fernando de Terán, and Froilán M. Dopico. Recovery of eigenvectors and minimal bases of

matrix polynomials from generalized Fiedler linearizations. *SIAM Journal on Matrix Analysis and Applications*, 32(2): 463–483, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p463_s1`.

**Bunch:1989:SSA**

[BDV89] James R. Bunch, James W. Demmel, and Charles F. Van Loan. The strong stability of algorithms for solving symmetric linear systems. *SIAM Journal on Matrix Analysis and Applications*, 10(4):494–499, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bai:1999:AAB**

[BDY99] Zhaojun Bai, David Day, and Qiang Ye. ABLE: An adaptive block Lanczos method for non-Hermitian eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 20(4):1060–1082, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31780`.

**Bhatia:2003:HOL**

[BE03] Rajendra Bhatia and Ludwig Elsner. Higher order logarithmic derivatives of matrices in the spectral norm. *SIAM Journal on Matrix Analysis and Applications*, 25(3):662–668, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41366`.

**Beck:2007:RRB**

[BE07] Amir Beck and Yonina C. Eldar. Regularization in regression with bounded noise: a Chebyshev center approach. *SIAM Journal on Matrix Analysis and Applications*, 29(2): 606–625, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beck:2010:STM**

[BE10] Amir Beck and Yonina C. Eldar. Structured total maximum likelihood: An alternative to structured total least squares. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2623–2649, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beardmore:2001:SIB**

[Bea01] R. E. Beardmore. The singularity-induced bifurcation and its Kronecker normal form. *SIAM Journal on Matrix Analysis and Applications*, 23(1):126–137, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36457`.

**Bebendorf:2006:AIP**

[Beb06] Mario Bebendorf. Approximate inverse preconditioning of finite element discretizations of elliptic operators with nonsmooth coefficients. *SIAM Journal on Matrix Analysis and Applications*, 27(4):909–929, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beck:2007:MSE**

[BEBT07] Amir Beck, Yonina C. Eldar, and Aharon Ben-Tal. Mean-squared error estimation for linear systems with block circulant uncertainty. *SIAM Journal on Matrix Analysis and Applications*, 29(3):712–730, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bella:2009:FBP**

[BEG+09] T. Bella, Y. Eidelman, I. Gohberg, I. Koltracht, and V. Olshevsky. A fast Björck–Pereyra-type algorithm for solving Hessenberg–Quasiseparable-Vandermonde systems. *SIAM Journal on Matrix Analysis and Applications*, 31(2):790–815, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bini:2007:FEA**

[BEGG07] D. A. Bini, Y. Eidelman, L. Gemignani, and I. Gohberg. Fast $QR$ eigenvalue algorithms for Hessenberg matrices which are rank-one perturbations of unitary matrices. *SIAM Journal on Matrix Analysis and Applications*, 29(2): 566–585, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Boutry:2005:GEP**

[BEGM05] Gregory Boutry, Michael Elad, Gene H. Golub, and Peyman Milanfar. The generalized eigenvalue problem for nonsquare pencils using a minimal perturbation approach. *SIAM Journal on Matrix Analysis and Applications*, 27(2):582–601, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42879`.

**Benbow:1999:SGL**

[Ben99] Steven J. Benbow. Solving generalized least-squares problems with LSQR. *SIAM Journal on Matrix Analysis and Applications*, 21(1):166–177, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32183`.

**Benzi:2009:GHS**

[Ben09] Michele Benzi. A generalization of the Hermitian and skew-Hermitian splitting iteration. *SIAM Journal on Matrix Analysis and Applications*, 31

(2):360–374, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bernstein:1988:ITM**

[Ber88] Dennis S. Bernstein. Inequalities for the trace of matrix exponentials. *SIAM Journal on Matrix Analysis and Applications*, 9(2):156–158, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beattie:2004:CRK**

[BER04] Christopher Beattie, Mark Embree, and John Rossi. Convergence of restarted Krylov subspaces to invariant subspaces. *SIAM Journal on Matrix Analysis and Applications*, 25(4):1074–1109, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39860`.

**Bereux:2009:CIC**

[Bér09] Natacha Béreux. Out-of-core implementations of Cholesky factorization: Loop-based versus recursive algorithms. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1302–1319, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bjorck:1998:SCG**

[BES98] Åke Björck, Tommy Elfving, and Zdenek Strakos. Stability of conjugate gradient and Lanczos methods for linear least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 19(3):720–736, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31202`.

**Barlow:2005:AAR**

[BES05] Jesse L. Barlow, Hasan Erbay, and Ivan Slapnicar. An alternative algorithm for the refinement of ULV decompositions. *SIAM Journal on Matrix Analysis and Applications*, 27(1):198–211, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37262`.

**Baker:2015:FSV**

[BES15] Jonathan Baker, Mark Embree, and John Sabino. Fast singular value decay for Lyapunov solutions with nonnormal coefficients. *SIAM Journal on Matrix Analysis and Applications*, 36(2):656–668, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Barlow:2022:DSA**

[BESS22] Jesse L. Barlow, Stanley C. Eisenstat, Nevena Jakovcević Stor, and Ivan Slapnicar. Deflation for the symmet-

ric arrowhead and diagonal-plus-rank-one eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 43(2):681–709, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M139205X`.

**Bottcher:2002:PCT**

[BET02] Albrecht Böttcher, Mark Embree, and Lloyd N. Trefethen. Piecewise continuous Toeplitz matrices and operators: Slow approach to infinity. *SIAM Journal on Matrix Analysis and Applications*, 24(2):484–489, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37697`.

**Betcke:2009:OSG**

[Bet09] T. Betcke. Optimal scaling of generalized and polynomial eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1320–1338, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bezerra:2012:VFR**

[Bez12] Licio H. Bezerra. Vandermonde factorizations of a regular Hankel matrix and their application to the computation of Bézier curves. *SIAM Journal on Matrix Analysis and Applications*, 33(2):411–432, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beattie:1989:LCC**

[BF89] Christopher Beattie and David W. Fox. Localization criteria and containment for Rayleigh quotient iteration. *SIAM Journal on Matrix Analysis and Applications*, 10(1):80–93, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bini:1993:MAR**

[BF93] Dario Bini and Paola Favati. On a matrix algebra related to the discrete Hartley transform. *SIAM Journal on Matrix Analysis and Applications*, 14 (2):500–507, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Benner:2000:IRS**

[BF00] Peter Benner and Heike Fassbender. An implicitly restarted symplectic Lanczos method for the symplectic eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 22(3):682–713, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34311`.

**Bouras:2005:IMV**

[BF05] Amina Bouras and Valérie Frayssé. Inexact matrix-vector

products in Krylov methods for solving linear systems: a relaxation strategy. *SIAM Journal on Matrix Analysis and Applications*, 26(3):660–678, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38474`.

**Benvenuti:2006:GRS**

[BF06] Luca Benvenuti and Lorenzo Farina. The geometry of the reachability set for linear discrete-time systems with positive controls. *SIAM Journal on Matrix Analysis and Applications*, 28(2):306–325, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Barreto:2011:CSD**

[BF11] André M. S. Barreto and Marcelo D. Fragoso. Computing the stationary distribution of a finite Markov chain through stochastic factorization. *SIAM Journal on Matrix Analysis and Applications*, 32 (4):1513–1523, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1513_s1`.

**Beaupere:2023:HOT**

[BFG23] Matthias Beaupère, David Frenkiel, and Laura Grigori. Higher-order $QR$ with tournament pivoting for tensor compression. *SIAM Journal on Matrix Analysis and Applications*, 44(1):106–127, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M1387663`.

**Baumann:2003:DOF**

[BFM03] Markus Baumann, Peter Fleischmann, and Otto Mutzbauer. Double ordering and fill-in for the $LU$ factorization. *SIAM Journal on Matrix Analysis and Applications*, 25(3):630–641, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39298`.

**Brualdi:1995:SBP**

[BFP95] Richard A. Brualdi, Shmuel Friedland, and Alex Pothen. The sparse basis problem and multilinear algebra. *SIAM Journal on Matrix Analysis and Applications*, 16(1):1–20, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23006`.

**Benner:2021:REI**

[BFS21] Peter Benner, Heike Fassbender, and Philip Saltenberger. A rational Even-IRA algorithm for the solution of $T$-even polynomial eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 42(3):

1172–1198, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Baragana:2007:HIJ**

[BFZ07] I. Baragaña, V. Fernández, and I. Zaballa. Hermite indices and Jordan structure of a perturbed linear system. *SIAM Journal on Matrix Analysis and Applications*, 29(2):455–472, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bondeli:1994:CRS**

[BG94] S. Bondeli and W. Gander. Cyclic reduction for special tridiagonal systems. *SIAM Journal on Matrix Analysis and Applications*, 15(1):321–330, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22053`.

**Benzi:2004:PGS**

[BG04] Michele Benzi and Gene H. Golub. A preconditioner for generalized saddle point problems. *SIAM Journal on Matrix Analysis and Applications*, 26(1):20–41, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41710`.

**Botchev:2006:CNP**

[BG06a] Mike A. Botchev and Gene H. Golub. A class of nonsymmetric preconditioners for saddle point problems. *SIAM Journal on Matrix Analysis and Applications*, 27(4):1125–1149, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bridson:2006:MCG**

[BG06b] Robert Bridson and Chen Greif. A multipreconditioned conjugate gradient algorithm. *SIAM Journal on Matrix Analysis and Applications*, 27(4):1056–1068, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Baboulin:2011:CCT**

[BG11] Marc Baboulin and Serge Gratton. A contribution to the conditioning of the total least-squares problem. *SIAM Journal on Matrix Analysis and Applications*, 32(3):685–699, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p685_s1`.

**Boutsidis:2013:IMA**

[BG13] Christos Boutsidis and Alex Gittens. Improved matrix algorithms via the subsampled randomized Hadamard transform. *SIAM Journal on Matrix*

*Analysis and Applications*, 34 (3):1301–1340, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Berljafa:2015:GRK**

[BG15] Mario Berljafa and Stefan Güttel. Generalized rational Krylov decompositions with an application to rational approximation. *SIAM Journal on Matrix Analysis and Applications*, 36(2):894–916, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**BenGharbia:2019:ACP**

[BG19a] I. Ben Gharbia and J. Ch. Gilbert. An algorithmic characterization of p-matricity II: Adjustments, refinements, and validation. *SIAM Journal on Matrix Analysis and Applications*, 40(2):800–813, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Benson:2019:CTE**

[BG19b] Austin R. Benson and David F. Gleich. Computing tensor $Z$-eigenvectors with dynamical systems. *SIAM Journal on Matrix Analysis and Applications*, 40(4):1311–1324, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bunse-Gerstner:1992:CNM**

[BGBM92] Angelika Bunse-Gerstner, Ralph Byers, and Volker Mehrmann. A chart of numerical methods for structured eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 13 (2):419–453, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bunse-Gerstner:1993:NMS**

[BGBM93] Angelika Bunse-Gerstner, Ralph Byers, and Volker Mehrmann. Numerical methods for simultaneous diagonalization. *SIAM Journal on Matrix Analysis and Applications*, 14(4):927–949, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Benner:2018:QOM**

[BGG18] Peter Benner, Pawan Goyal, and Serkan Gugercin. $\mathcal{H}_\in$-quasi-optimal model order reduction for quadratic-bilinear control systems. *SIAM Journal on Matrix Analysis and Applications*, 39(2):983–1032, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bunse-Gerstner:1995:SSP**

[BGH95] Angelika Bunse-Gerstner and Chun Yang He. On a Sturm sequence of polynomials for unitary Hessenberg matrices. *SIAM Journal on Matrix Analysis and Applica-*

*tions*, 16(4):1043–1055, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23050`.

**Bern:2006:SGP**

[BGH+06] Marshall Bern, John R. Gilbert, Bruce Hendrickson, Nhat Nguyen, and Sivan Toledo. Support-graph preconditioners. *SIAM Journal on Matrix Analysis and Applications*, 27(4):930–951, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Boman:2007:OEE**

[BGH07] Erik G. Boman, Stephen Guattery, and Bruce Hendrickson. Optimal embeddings and eigenvalues in support theory. *SIAM Journal on Matrix Analysis and Applications*, 29(2):596–605, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Benedusi:2018:STF**

[BGK+18] Pietro Benedusi, Carlo Garoni, Rolf Krause, Xiaozhou Li, and Stefano Serra-Capizzano. Space–time FE–DG discretization of the anisotropic diffusion equation in any dimension: The spectral symbol. *SIAM Journal on Matrix Analysis and Applications*, 39(3):1383–1420, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bottcher:1999:NLT**

[BGKS99] A. Böttcher, S. Grudsky, A. Kozak, and B. Silbermann. Norms of large Toeplitz band matrices. *SIAM Journal on Matrix Analysis and Applications*, 21(2):547–561, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34301`.

**Bunse-Gerstner:1992:RDS**

[BGMN92] Angelika Bunse-Gerstner, Volker Mehrmann, and Nancy K. Nichols. Regularization of descriptor systems by derivative and proportional state feedback. *SIAM Journal on Matrix Analysis and Applications*, 13(1):46–67, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Butta:2015:DER**

[BGMN15] P. Buttà, N. Guglielmi, M. Manetta, and S. Noschese. Differential equations for real-structured defectivity measures. *SIAM Journal on Matrix Analysis and Applications*, 36(2):523–548, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bai:2003:HSH**

[BGN03] Zhong-Zhi Bai, Gene H. Golub, and Michael K. Ng. Hermitian and skew-Hermitian splitting methods for non-Hermitian positive definite linear systems. *SIAM Journal on Matrix Analysis and Applications*, 24(3):603–626, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39545`.

**Butta:2012:CSP**

[BGN12] P. Buttà, N. Guglielmi, and S. Noschese. Computing the structured pseudospectrum of a Toeplitz matrix and its extreme points. *SIAM Journal on Matrix Analysis and Applications*, 33(4):1300–1319, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bertaccini:2007:SAP**

[BGSC07] Daniele Bertaccini, Gene H. Golub, and Stefano Serra-Capizzano. Spectral analysis of a preconditioned iterative method for the convection-diffusion equation. *SIAM Journal on Matrix Analysis and Applications*, 29(1):260–278, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beckermann:2005:SRE**

[BGT05a] B. Beckermann, S. A. Goreinov, and E. E. Tyrtyshnikov. Some remarks on the Elman estimate for GMRES. *SIAM Journal on Matrix Analysis and Applications*, 27(3):772–778, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bini:2005:EAM**

[BGT05b] Dario A. Bini, Luca Gemignani, and Françoise Tisseur. The Ehrlich–Aberth method for the nonsymmetric tridiagonal eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 27(1):153–175, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42978`.

**Bergou:2014:ECN**

[BGT14] El Houcine Bergou, Serge Gratton, and Jean Tshimanga. The exact condition number of the truncated singular value solution of a linear ill-posed problem. *SIAM Journal on Matrix Analysis and Applications*, 35(3):1073–1085, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beckermann:2010:CRR**

[BGV10] Bernhard Beckermann, Stefan Güttel, and Raf Vandebril. On the convergence of rational Ritz values. *SIAM Journal on Matrix Analysis and*

*Applications*, 31(4):1740–1774, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bernstein:1990:RSP**

[BH90] Dennis S. Bernstein and Wassim M. Haddad. Robust stability and performance analysis for state-space systems via quadratic Lyapunov bounds. *SIAM Journal on Matrix Analysis and Applications*, 11(2): 239–271, April 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bernstein:1993:CMS**

[BH93] Dennis S. Bernstein and David C. Hyland. Compartmental modeling and second-moment analysis of state space systems. *SIAM Journal on Matrix Analysis and Applications*, 14(3):880–901, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Brualdi:1996:SRM**

[BH96] Richard A. Brualdi and Suk-Geun Hwang. On the spectral radius of $(0, 1)$-matrices with 1's in prescribed positions. *SIAM Journal on Matrix Analysis and Applications*, 17(3):489–508, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28586`.

**Boman:2003:STP**

[BH03] Erik G. Boman and Bruce Hendrickson. Support theory for preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 25(3):694–717, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39063`.

**Bharali:2008:FPN**

[BH08] Gautam Bharali and Olga Holtz. Functions preserving nonnegativity of matrices. *SIAM Journal on Matrix Analysis and Applications*, 30(1): 84–101, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bindel:2013:LTN**

[BH13] David Bindel and Amanda Hood. Localization theorems for nonlinear eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 34 (4):1728–1749, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bevis:1988:MES**

[BHH88] Jean H. Bevis, Frank J. Hall, and Robert E. Hartwig. The matrix equation $A\overline{X} - XB = C$ and its special cases. *SIAM Journal on Matrix Analysis and Applications*, 9(3):348–359, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Booth:2008:MRA**

[BHH+08] Matthew Booth, Philip Hackney, Benjamin Harris, Charles R. Johnson, Margaret Lay, Lon H. Mitchell, Sivaram K. Narayan, Amanda Pascoe, Kelly Steinmetz, Brian D. Sutton, and Wendy Wang. On the minimum rank among positive semidefinite matrices with a given graph. *SIAM Journal on Matrix Analysis and Applications*, 30(2):731–740, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Berger:2011:FSM**

[BHKR11] Arno Berger, Theodore P. Hill, Bahar Kaynar, and Ad Ridder. Finite-state Markov chains obey Benford's Law. *SIAM Journal on Matrix Analysis and Applications*, 32(3): 665–684, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p665_s1`.

**Bhat:1993:NND**

[BHL+93] M. V. Bhat, W. G. Habashi, J. W. H. Liu, V. N. Nguyen, and M. F. Peeters. A note on nested dissection for rectangular grids. *SIAM Journal on Matrix Analysis and Applications*, 14(1):253–258, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Byers:1997:MSF**

[BHM97] Ralph Byers, Chunyang He, and Volker Mehrmann. The matrix sign function method and the computation of invariant subspaces. *SIAM Journal on Matrix Analysis and Applications*, 18(3):615–632, July 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27745`.

**Bjorck:2000:MLS**

[BHM00] Åke Björck, P. Heggernes, and P. Matstoms. Methods for large scale total least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 22(2):413–429, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35541`.

**Bojanczyk:2003:SIL**

[BHP03] Adam Bojanczyk, Nicholas J. Higham, and Harikrishna Patel. Solving the indefinite least squares problem by hyperbolic $QR$ factorization. *SIAM Journal on Matrix Analysis and Applications*, 24(4):914–931, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40149`.

**Borsdorf:2010:CNC**

[BHR10] Rüdiger Borsdorf, Nicholas J. Higham, and Marcos Raydan. Computing a nearest correlation matrix with factor structure. *SIAM Journal on Matrix Analysis and Applications*, 31 (5):2603–2622, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Brissette:2023:SCC**

[BHS23] Christopher Brissette, Andy Huang, and George Slota. Spectrum consistent coarsening approximates edge weights. *SIAM Journal on Matrix Analysis and Applications*, 44 (3):1032–1046, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1458119`.

**Ben-Israel:1999:CVF**

[BI99] Adi Ben-Israel. The change-of-variables formula using matrix volume. *SIAM Journal on Matrix Analysis and Applications*, 21(1):300–312, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29689`.

**Binding:1990:SDS**

[Bin90] Paul Binding. Simultaneous diagonalisation of several Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 11(4):531–536, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bini:2008:FNM**

[BIP08] Dario A. Bini, Bruno Iannazzo, and Federico Poloni. A fast Newton's method for a nonsymmetric algebraic Riccati equation. *SIAM Journal on Matrix Analysis and Applications*, 30(1):276–290, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bischof:1990:ICEa**

[Bis90] Christian H. Bischof. Incremental condition estimation. *SIAM Journal on Matrix Analysis and Applications*, 11(2): 312–322, April 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bailey:2012:DDM**

[BIS12] J. Bailey, M. A. Iwen, and C. V. Spencer. On the design of deterministic matrices for fast recovery of Fourier compressible functions. *SIAM Journal on Matrix Analysis and Applications*, 33(1):263–289, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bakonyi:1995:EDM**

[BJ95] Mihály Bakonyi and Charles R. Johnson. The Euclidean dis-

tance matrix completion problem. *SIAM Journal on Matrix Analysis and Applications*, 16(2):646–654, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24975`.

**Butkovic:2016:SCG**

[BJ16] Peter Butkovic and Daniel Jones. On special cases of the generalized max-plus eigenproblem. *SIAM Journal on Matrix Analysis and Applications*, 37(3):1002–1021, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Barrett:1998:CGP**

[BJL98] Wayne W. Barrett, Charles R. Johnson, and Raphael Loewy. Critical graphs for the positive definite completion problem. *SIAM Journal on Matrix Analysis and Applications*, 20(1):117–130, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32457`.

**Baker:2005:TAC**

[BJM05] A. H. Baker, E. R. Jessup, and T. Manteuffel. A technique for accelerating the convergence of restarted GMRES. *SIAM Journal on Matrix Analysis and Applications*, 26(4):962–984, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42201`.

**Bostan:2017:MDS**

[BJMS17] A. Bostan, C.-P. Jeannerod, C. Mouilleron, and É. Schost. On matrices with displacement structure: Generalized operators and faster algorithms. *SIAM Journal on Matrix Analysis and Applications*, 38(3):733–775, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bjorck:2014:STD**

[Bjö14] Åke Björck. Stability of two direct methods for bidiagonalization and partial least squares. *SIAM Journal on Matrix Analysis and Applications*, 35(1):279–291, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bartels:1989:CFU**

[BK89] Richard Bartels and Linda Kaufman. Cholesky factor updating techniques for rank 2 matrix modifications. *SIAM Journal on Matrix Analysis and Applications*, 10(4):557–592, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bhatia:1990:SVP**

[BK90] Rajendra Bhatia and Fuad Kittaneh. On the singular values of a product of operators. *SIAM Journal on Matrix Analysis and Applications*, 11 (2):272–277, April 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Boman:1995:FTB**

[BK95] E. Boman and I. Koltracht. Fast transform based preconditioners for Toeplitz equations. *SIAM Journal on Matrix Analysis and Applications*, 16(2):628–645, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25426`.

**Bhatia:1997:SIN**

[BK97] Rajendra Bhatia and Fuad Kittaneh. Some inequalities for norms of commutators. *SIAM Journal on Matrix Analysis and Applications*, 18(1):258–263, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29323`.

**Byers:2006:SCN**

[BK06] Ralph Byers and Daniel Kressner. Structured condition numbers for invariant subspaces. *SIAM Journal on Matrix Analysis and Applications*, 28(2): 326–347, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Benzi:2015:LBP**

[BK15] Michele Benzi and Christine Klymko. On the limiting behavior of parameter-dependent network centrality measures. *SIAM Journal on Matrix Analysis and Applications*, 36(2): 686–706, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Breen:2019:SCN**

[BK19] Jane Breen and Steve Kirkland. A structured condition number for Kemeny's constant. *SIAM Journal on Matrix Analysis and Applications*, 40(4): 1555–1578, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bujanovic:2021:NTE**

[BK21] Zvonimir Bujanovic and Daniel Kressner. Norm and trace estimation with random rank-one vectors. *SIAM Journal on Matrix Analysis and Applications*, 42(1):202–223, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bock:2007:CMP**

[BKK07] Hans Georg Bock, Ekaterina Kostina, and Olga Kostyukova.

Covariance matrices for parameter estimates of constrained parameter estimation problems. *SIAM Journal on Matrix Analysis and Applications*, 29(2):626–642, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bujanovic:2018:HBA**

[BKK18] Zvonimir Bujanović, Lars Karlsson, and Daniel Kressner. A Householder-based algorithm for Hessenberg-triangular reduction. *SIAM Journal on Matrix Analysis and Applications*, 39(3):1270–1294, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bruckstein:1991:RLM**

[BKKL91] Alfred Bruckstein, Thomas Kailath, Israel Koltracht, and Peter Lancaster. On the reconstruction of layered media from reflection data. *SIAM Journal on Matrix Analysis and Applications*, 12(1):24–40, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bora:2014:SEB**

[BKMS14] Shreemayee Bora, Michael Karow, Christian Mehl, and Punit Sharma. Structured eigenvalue backward errors of matrix pencils and polynomials with Hermitian and related structures. *SIAM Journal on Matrix Analysis and Applications*, 35(2):453–475, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bora:2015:SEB**

[BKMS15] Shreemayee Bora, Michael Karow, Christian Mehl, and Punit Sharma. Structured eigenvalue backward errors of matrix pencils and polynomials with palindromic structures. *SIAM Journal on Matrix Analysis and Applications*, 36(2):393–416, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bekas:2008:CLI**

[BKS08] C. Bekas, E. Kokiopoulou, and Yousef Saad. Computation of large invariant subspaces using polynomial filtered Lanczos iterations with applications in density functional theory. *SIAM Journal on Matrix Analysis and Applications*, 30(1):397–418, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beckermann:2018:LRU**

[BKS18] Bernhard Beckermann, Daniel Kressner, and Marcel Schweitzer. Low-rank updates of matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 39(1):539–565, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bamberger:2022:JLE**

[BKW22] Stefan Bamberger, Felix Krahmer, and Rachel Ward. Johnson–Lindenstrauss embeddings with Kronecker structure. *SIAM Journal on Matrix Analysis and Applications*, 43(4):1806–1850, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1432491`.

**Bojanczyk:1991:CEA**

[BL91] Adam W. Bojańczyk and Adam Lutoborski. Computation of the Euler angles of a symmetric $3 \times 3$ matrix. *SIAM Journal on Matrix Analysis and Applications*, 12(1): 41–48, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beckermann:1994:UAF**

[BL94] Bernhard Beckermann and George Labahn. A uniform approach for the fast computation of matrix-type Padé approximants. *SIAM Journal on Matrix Analysis and Applications*, 15(3):804–823, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23003`.

**Beckermann:2000:FFC**

[BL00] Bernhard Beckermann and George Labahn. Fraction-free computation of matrix rational interpolants and matrix GCDs. *SIAM Journal on Matrix Analysis and Applications*, 22(1):114–144, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32691`.

**Beardmore:2002:FDN**

[BL02] R. E. Beardmore and R. Laister. The flow of a DAE near a singular equilibrium. *SIAM Journal on Matrix Analysis and Applications*, 24(1):106–120, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37866`.

**Boulton:2010:SDM**

[BL10] Lyonell Boulton and Peter Lancaster. Schur decompositions of a matrix and the boundary of its pseudospectrum. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2921–2933, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v31/i5/p2921_s1`.

**Bai:2012:MPL**

[BL12] Zhaojun Bai and Ren-Cang Li. Minimization principles for the linear response eigenvalue problem I: Theory. *SIAM Journal on Matrix Analysis*

*and Applications*, 33(4):1075–1100, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bai:2013:MPL**

[BL13] Zhaojun Bai and Ren-Cang Li. Minimization principles for the linear response eigenvalue problem II: Computation. *SIAM Journal on Matrix Analysis and Applications*, 34 (2):392–416, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bahmani:2021:LRM**

[BL21] Sohail Bahmani and Kiryung Lee. Low-rank matrix estimation from rank-one projections by unlifted convex optimization. *SIAM Journal on Matrix Analysis and Applications*, 42 (3):1119–1147, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bistritz:1991:ITT**

[BLAK91] Y. Bistritz, H. Lev-Ari, and T. Kailath. Immitance-type three-term Schur and Levinson recursions for quasi-Toeplitz complex Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 12(3): 497–520, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bebiano:1993:SRN**

[BLd93] Natália Bebiano, Chi-Kwong Li, and João da Providência. Some results on the numerical range of a derivation. *SIAM Journal on Matrix Analysis and Applications*, 14(4):1084–1095, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bebiano:1997:DSS**

[BLdP97] Natália Bebiano, Chi-Kwong Li, and João da Providência. Determinant of the sum of a symmetric and a skew-symmetric matrix. *SIAM Journal on Matrix Analysis and Applications*, 18(1):74–82, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29342`.

**Blechta:2021:SLG**

[Ble21] Jan Blechta. Stability of linear GMRES convergence with respect to compact perturbations. *SIAM Journal on Matrix Analysis and Applications*, 42(1):436–447, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bai:2022:SEC**

[BLL22] Zhaojun Bai, Ren-Cang Li, and Ding Lu. Sharp estimation of convergence rate for self-consistent field iteration to solve eigenvector-

dependent nonlinear eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 43(1):301–327, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M136606X`.

**Brazell:2013:SMS**

[BLNT13] M. Brazell, N. Li, C. Navasca, and C. Tamon. Solving multilinear systems via tensor inversion. *SIAM Journal on Matrix Analysis and Applications*, 34 (2):542–570, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Burke:2003:OPA**

[BLO03] J. V. Burke, A. S. Lewis, and M. L. Overton. Optimization and pseudospectra, with applications to robust stability. *SIAM Journal on Matrix Analysis and Applications*, 25(1):80–104, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40281`.

**Burke:2004:PCD**

[BLO04] J. V. Burke, A. S. Lewis, and M. L. Overton. Pseudospectral components and the distance to uncontrollability. *SIAM Journal on Matrix Analysis and Applications*, 26(2):350–361, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43331`.

**Burke:2007:CLB**

[BLO07] J. V. Burke, A. S. Lewis, and M. L. Overton. Convexity and Lipschitz behavior of small pseudospectra. *SIAM Journal on Matrix Analysis and Applications*, 29(2):586–595, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bischof:1990:ICEb**

[BLP90] Christian H. Bischof, John G. Lewis, and Daniel J. Pierce. Incremental condition estimation for sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 11(4):644–659, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Batselier:2015:CAD**

[BLW15] Kim Batselier, Haotian Liu, and Ngai Wong. A constructive algorithm for decomposing a tensor into a finite sum of orthonormal rank-1 terms. *SIAM Journal on Matrix Analysis and Applications*, 36(3): 1315–1337, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Butler:1988:NSO**

[BM88] C. A. Butler and T. D. Morley. A note on the shorted op-

erator. *SIAM Journal on Matrix Analysis and Applications*, 9(2):147–155, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bhatia:1994:VUP**

[BM94] Rajendra Bhatia and Kalyan Mukherjea. Variation of the unitary part of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 15(3):1007–1014, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24323`.

**Bini:1996:SNM**

[BM96] Dario Bini and Beatrice Meini. On the solution of a nonlinear matrix equation arising in queueing problems. *SIAM Journal on Matrix Analysis and Applications*, 17(4):906–926, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28480`.

**Bini:1999:EMS**

[BM99] Dario Andrea Bini and Beatrice Meini. Effective methods for solving banded Toeplitz systems. *SIAM Journal on Matrix Analysis and Applications*, 20(3):700–719, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32458`.

**Barth:2000:MRC**

[BM00] Teri Barth and Thomas Manteuffel. Multiple recursion conjugate gradient algorithms Part I: Sufficient conditions. *SIAM Journal on Matrix Analysis and Applications*, 21(3):768–796, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33245`.

**Brunat:2001:PCD**

[BM01] Josep M. Brunat and Antonio Montes. The power-compositions determinant and its application to global optimization. *SIAM Journal on Matrix Analysis and Applications*, 23(2):459–471, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36914`.

**Bollhofer:2002:AMM**

[BM02] Matthias Bollhöfer and Volker Mehrmann. Algebraic multilevel methods and sparse approximate inverses. *SIAM Journal on Matrix Analysis and Applications*, 24(1):191–218, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36444`.

**Bora:2006:LPT**

[BM06] Shreemayee Bora and Volker Mehrmann. Linear perturbation theory for structured matrix pencils arising in control theory. *SIAM Journal on Matrix Analysis and Applications*, 28(1):148–169, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Benner:2019:EIC**

[BM19] Peter Benner and Tim Mitchell. Extended and improved criss-cross algorithms for computing the spectral value set abscissa and radius. *SIAM Journal on Matrix Analysis and Applications*, 40(4):1325–1352, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Berenhaut:2005:BIT**

[BMF05] Kenneth S. Berenhaut, Daniel C. Morton, and Preston T. Fletcher. Bounds for inverses of triangular Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 27(1):212–217, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/60826`.

**Bai:2003:CRS**

[BMfY03] Z. D. Bai, Baiqi Miao, and Jian feng Yao. Convergence rates of spectral distributions of large sample covariance matrices. *SIAM Journal on Matrix Analysis and Applications*, 25(1):105–127, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38511`.

**Bini:2020:SQM**

[BMM20] Dario A. Bini, Beatrice Meini, and Jie Meng. Solving quadratic matrix equations arising in random walks in the quarter plane. *SIAM Journal on Matrix Analysis and Applications*, 41(2):691–714, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bru:2010:IBI**

[BMMT10] Rafael Bru, José Marín, José Mas, and Miroslav Tůma. Improved balanced incomplete factorization. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2431–2452, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Barlow:1992:CMS**

[BMO92] Jewel B. Barlow, Moghen M. Monahemi, and Dianne P. O'Leary. Constrained matrix Sylvester equations. *SIAM Journal on Matrix Analysis and Applications*, 13(1):1–9, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Britz:2004:MSA**

[BMOvdD04] T. Britz, J. J. McDonald, D. D. Olesky, and P. van den Driessche. Minimal spectrally arbitrary sign patterns. *SIAM Journal on Matrix Analysis and Applications*, 26(1):257–271, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43251`.

**Brust:2020:CED**

[BMP20] Johannes J. Brust, Roummel F. Marcia, and Cosmin G. Petra. Computationally efficient decompositions of oblique projection matrices. *SIAM Journal on Matrix Analysis and Applications*, 41(2):852–870, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Brezinski:1994:RBM**

[BMRZ94] C. Brezinski, M. Morandi Cecchi, and M. Redivo-Zaglia. The reverse bordering method. *SIAM Journal on Matrix Analysis and Applications*, 15(3):922–937, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22776`.

**Berns-Muller:2006:III**

[BMS06] Jörg Berns-Müller and Alastair Spence. Inexact inverse iteration with variable shift for nonsymmetric generalized eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 28(4):1069–1082, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bjorstad:1992:EMM**

[BMSV92] P. Bjørstad, F. Manne, T. Sørevik, and M. Vajteršic. Efficient matrix multiplication on SIMD computers. *SIAM Journal on Matrix Analysis and Applications*, 13(1):386–401, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bru:1994:ASI**

[BMU94] Rafael Brú, José Mas, and Ana M. Urbano. An algorithm for the single-input pole assignment problem. *SIAM Journal on Matrix Analysis and Applications*, 15(2):393–407, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/16112`.

**Beckermann:2018:EAM**

[BMV18] Bernhard Beckermann, Clara Mertens, and Raf Vandebril. On an economic Arnoldi method for $BML$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 39(2):737–768, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bustamante:2020:SPS**

[BMV20] Miguel D. Bustamante, Pauline Mellon, and M. Victoria Velasco. Solving the problem of simultaneous diagonalization of complex symmetric matrices via congruence. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1616–1629, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Byers:1987:SVL**

[BN87] Ralph Byers and Stephen Nash. On the singular "vectors" of the Lyapunov operator. *SIAM Journal on Algebraic and Discrete Methods*, 8(1):59–66, 1987. CODEN SJAMDU. ISSN 0196-5212 (print), 2168-345X (electronic). See note [CT15].

**Bolz:1988:EMF**

[BN88] Heinrich Bolz and Wilhelm Niethammer. On the evaluation of matrix functions given by power series. *SIAM Journal on Matrix Analysis and Applications*, 9(2):202–209, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Blondel:2005:CEA**

[BN05] Vincent D. Blondel and Yurii Nesterov. Computationally efficient approximations of the joint spectral radius. *SIAM Journal on Matrix Analysis and Applications*, 27(1):256–272, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/60700`.

**Bardsley:2006:CPI**

[BN06a] Johnathan M. Bardsley and James G. Nagy. Covariance-preconditioned iterative methods for nonnegatively constrained astronomical imaging. *SIAM Journal on Matrix Analysis and Applications*, 27(4):1184–1197, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Benzi:2006:PIM**

[BN06b] Michele Benzi and Michael K. Ng. Preconditioned iterative methods for weighted Toeplitz least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 27(4):1106–1124, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Blondel:2010:PTC**

[BN10] Vincent D. Blondel and Yurii Nesterov. Polynomial-time computation of the joint spectral radius for some sets of nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(3):865–876, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Benner:2022:SEC**

[BNP22] Peter Benner, Yuji Nakatsukasa, and Carolin Penke. Stable and efficient computation of generalized polar decompositions. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1058–1083, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1411986`.

**Benner:2023:SPD**

[BNP23] Peter Benner, Yuji Nakatsukasa, and Carolin Penke. A structure-preserving divide-and-conquer method for pseudosymmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 44 (3):1245–1270, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1484985`.

**Bini:2013:LEM**

[BNS13] Dario A. Bini, Vanni Noferini, and Meisam Sharify. Locating the eigenvalues of matrix polynomials. *SIAM Journal on Matrix Analysis and Applications*, 34(4):1708–1727, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bai:2009:CPS**

[BNW09] Zhong-Zhi Bai, Michael K. Ng, and Zeng-Qi Wang. Constraint preconditioners for symmetric indefinite matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(2):410–433, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bar-On:1996:IPT**

[BO96] Ilan Bar-On. Interlacing properties of tridiagonal symmetric matrices with applications to parallel computing. *SIAM Journal on Matrix Analysis and Applications*, 17(3):548–562, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25200`.

**Bar-On:1997:FPC**

[BOCL97] Ilan Bar-On, Bruno Codenotti, and Mauro Leoncini. A fast parallel Cholesky decomposition algorithm for tridiagonal symmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 18(2):403–418, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28262`.

**Boley:1990:ESA**

[Bol90] Daniel Boley. Estimating the sensitivity of the algebraic structure of pencils with simple eigenvalue estimates. *SIAM Journal on Matrix Analysis*

*and Applications*, 11(4):632–643, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bomze:2000:LTC**

[Bom00] Immanuel M. Bomze. Linear-time copositivity detection for tridiagonal matrices and extension to block-tridiagonality. *SIAM Journal on Matrix Analysis and Applications*, 21(3): 840–848, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34148`.

**Borisov:2003:DMP**

[Bor03] V. S. Borisov. On discrete maximum principles for linear equation systems and monotonicity of difference schemes. *SIAM Journal on Matrix Analysis and Applications*, 24(4): 1110–1135, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40968`.

**Borovac:2009:GBA**

[Bor09] Stefan Borovac. A graph based approach to the convergence of one level Schwarz iterations for singular $M$-matrices and Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1371–1391, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bora:2010:SEC**

[Bor10] Shreemayee Bora. Structured eigenvalue condition number and backward error of a class of polynomial eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 31 (3):900–917, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Borsdorf:2014:AFO**

[Bor14] Rüdiger Borsdorf. An algorithm for finding an optimal projection of a symmetric matrix onto a diagonal matrix. *SIAM Journal on Matrix Analysis and Applications*, 35(1): 198–224, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bella:2013:NPD**

[BOS13] Tom Bella, Vadim Olshevsky, and Michael Stewart. Nested product decomposition of quasiseparable matrices. *SIAM Journal on Matrix Analysis and Applications*, 34(4):1520–1555, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Benner:2016:BDP**

[BOS16] Peter Benner, Akwum Onwunta, and Martin Stoll. Block-diagonal preconditioning for optimal control problems constrained by PDEs with uncertain inputs. *SIAM Journal on Matrix Analysis and*

*Applications*, 37(2):491–518, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bosner:2021:PPM**

[Bos21] Nela Bosner. Parallel Prony's method with multivariate matrix pencil approach and its numerical aspects. *SIAM Journal on Matrix Analysis and Applications*, 42(2):635–658, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bjorck:1992:LRO**

[BP92] Å. Björck and C. C. Paige. Loss and recapture of orthogonality in the modified Gram–Schmidt algorithm. *SIAM Journal on Matrix Analysis and Applications*, 13(1):176–190, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Berkolaiko:2021:LCD**

[BP21] Gregory Berkolaiko and Advait Parulekar. Locating conical degeneracies in the spectra of parametric self-adjoint matrices. *SIAM Journal on Matrix Analysis and Applications*, 42(1):224–242, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bjorck:1994:ADL**

[BPE94] Å. Björck, H. Park, and L. Eldén. Accurate downdating of least squares solutions. *SIAM Journal on Matrix Analysis and Applications*, 15(2):549–568, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22895`.

**Buczynski:2020:SRA**

[BPR20] Jarosław Buczyński, Elisa Postinghel, and Filip Rupniewski. On Strassen's rank additivity for small three-way tensors. *SIAM Journal on Matrix Analysis and Applications*, 41(1):106–133, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bru:2005:ASI**

[BPS05] Rafael Bru, Francisco Pedroche, and Daniel B. Szyld. Additive Schwarz iterations for Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 27(2):445–458, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/61654`.

**Blom:2005:KSM**

[BR05] Katarina Blom and Axel Ruhe. A Krylov subspace method for information retrieval. *SIAM Journal on Matrix Analysis and Applications*, 26(2):566–582, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/39226.

**Beckermann:2008:APG**

[BR08] Bernhard Beckermann and Lothar Reichel. The Arnoldi process and GMRES for nearly symmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 30(1):102–120, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Baragana:2019:WSE**

[BR19] Itziar Baragaña and Alicia Roca. Weierstrass structure and eigenvalue placement of regular matrix pencils under low rank perturbations. *SIAM Journal on Matrix Analysis and Applications*, 40(2):440–453, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Baragana:2022:CWC**

[BR22] Itziar Baragaña and Alicia Roca. On the change of the Weyr characteristics of matrix pencils after rank-one perturbations. *SIAM Journal on Matrix Analysis and Applications*, 43(2):981–1002, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL https://epubs.siam.org/doi/10.1137/21M1416497.

**Braden:1998:E**

[Bra98] H. W. Braden. The equations $A^T X \pm X^T A = B$. *SIAM Journal on Matrix Analysis and Applications*, 20(2):295–302, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/32327.

**Buchholz:2007:CCM**

[BrD07] Peter Buchholz and Tu rul Dayar. On the convergence of a class of multilevel methods for large sparse Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 29(3):1025–1049, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bakule:2000:SEC**

[BRR00] Lubomír Bakule, José Rodellar, and Josep M. Rossell. Structure of expansion-contraction matrices in the inclusion principle for dynamic systems. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1136–1155, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/34054.

**Brualdi:1988:D**

[Bru88] Richard A. Brualdi. Dedication. *SIAM Journal on Matrix Analysis and Applications*, 9(1):iv–v, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bryner:2017:EGS**

[Bry17] Darshan Bryner. Endpoint geodesics on the Stiefel manifold embedded in Euclidean space. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1139–1159, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Brezinski:2006:PVP**

[BRZ06] Claude Brezinski and Michela Redivo-Zaglia. The PageRank vector: Properties, computation, approximation, and acceleration. *SIAM Journal on Matrix Analysis and Applications*, 28(2):551–575, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Berman:1990:PMD**

[BS90] Piotr Berman and Georg Schnitger. On the performance of the minimum degree ordering for Gaussian elimination. *SIAM Journal on Matrix Analysis and Applications*, 11(1): 83–88, January 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Berman:1991:IPM**

[BS91] Abraham Berman and Dafna Shasha. Inertia-preserving matrices. *SIAM Journal on Matrix Analysis and Applications*, 12(2):209–219, April 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Berman:1994:SIP**

[BS94a] Abraham Berman and Dafna Shasha. Strongly inertia-preserving matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(3):729–732, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23397`.

**Brualdi:1994:SHM**

[BS94b] Richard A. Brualdi and Bryan L. Shader. Strong Hall matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(2):359–365, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22514`.

**Bischof:1996:TDS**

[BS96] Christian H. Bischof and Xiaobai Sun. On tridiagonalizing and diagonalizing symmetric matrices with repeated eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 17(4):869–885, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22760`.

**Bollhofer:2002:FAI**

[BS02a] Matthias Bollhöfer and Yousef Saad. A factored approximate inverse preconditioner with pivoting. *SIAM Journal on Matrix Analysis and Applications*, 23(3):692–705, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37212`.

**Bollhofer:2002:RBI**

[BS02b] Matthias Bollhöfer and Yousef Saad. On the relations between ILUs and factored approximate inverses. *SIAM Journal on Matrix Analysis and Applications*, 24(1):219–237, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37211`.

**Bai:2005:SSO**

[BS05] Zhaojun Bai and Yangfeng Su. SOAR: a second-order Arnoldi method for the solution of the quadratic eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 26(3):640–659, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43852`.

**Bonnabel:2010:RMG**

[BS10] Silvère Bonnabel and Rodolphe Sepulchre. Riemannian metric and geometric mean for positive semidefinite matrices of fixed rank. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1055–1070, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Benzi:2015:DBF**

[BS15] Michele Benzi and Valeria Simoncini. Decay bounds for functions of Hermitian matrices with banded or Kronecker structure. *SIAM Journal on Matrix Analysis and Applications*, 36(3):1263–1282, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bora:2016:DPH**

[BS16] Shreemayee Bora and Ravi Srivastava. Distance problems for Hermitian matrix pencils with eigenvalues of definite type. *SIAM Journal on Matrix Analysis and Applications*, 37(1):53–85, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bargiacchi-Soula:2010:LNL**

[BSFM10] Sandrine Bargiacchi-Soula, Jérôme Fehrenbach, and Mohamed Masmoudi. From linear to nonlinear large scale systems. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1552–1569, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bandeira:2013:CIG**

[BSS13] Afonso S. Bandeira, Amit Singer, and Daniel A. Spielman. A Cheeger inequality for the graph connection Laplacian. *SIAM Journal on Matrix Analysis and Applications*, 34 (4):1611–1630, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Beck:2016:ASM**

[BST16] Amir Beck, Shoham Sabach, and Marc Teboulle. An alternating semiproximal method for nonconvex regularized structured total least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 37(3):1129–1150, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bomze:2015:NLB**

[BSU15] Immanuel M. Bomze, Werner Schachinger, and Reinhard Ullrich. New lower bounds and asymptotics for the *cp*-rank. *SIAM Journal on Matrix Analysis and Applications*, 36(1):20–37, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bapat:1995:PPS**

[BSvdD95] R. B. Bapat, David P. Stanford, and P. van den Driessche. Pattern properties and spectral inequalities in max algebra. *SIAM Journal on Matrix Analysis and Applications*, 16(3):964–976, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25178`.

**Beigl:2020:RPM**

[BSZ20] Alexander Beigl, Jarle Sogn, and Walter Zulehner. Robust preconditioners for multiple saddle point problems and applications to optimal control problems. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1590–1615, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Borosh:1992:SBP**

[BT92] I. Borosh and L. B. Treybig. A sharp bound on positive solutions of linear Diophantine equations. *SIAM Journal on Matrix Analysis and Applications*, 13(2):454–458, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Brainman:2002:NDO**

[BT02] Igor Brainman and Sivan Toledo. Nested-dissection orderings for sparse *LU* with partial pivoting. *SIAM Journal on Matrix Analysis and Applications*, 23(4):998–1012, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/38503.

**Benitez:2006:GPM**

[BT06] Julio Benítez and Néstor Thome. $k$-group periodic matrices. *SIAM Journal on Matrix Analysis and Applications*, 28(1):9–25, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bah:2010:IBR**

[BT10a] Bubacarr Bah and Jared Tanner. Improved bounds on restricted isometry constants for Gaussian matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2882–2898, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/simax/resource/1/sjmael/v31/i5/p2882_s1.

**Beyn:2010:CIS**

[BT10b] Wolf Jürgen Beyn and Vera Thümmler. Continuation of invariant subspaces for parameterized quadratic eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1361–1381, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Berger:2012:QKF**

[BT12] Thomas Berger and Stephan Trenn. The quasi-Kronecker form for matrix pencils. *SIAM Journal on Matrix Analysis and Applications*, 33(2):336–368, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See addition [BT13].

**Berger:2013:AQK**

[BT13] Thomas Berger and Stephan Trenn. Addition to "The Quasi-Kronecker Form for Matrix Pencils". *SIAM Journal on Matrix Analysis and Applications*, 34(1):94–101, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See [BT12].

**Beckermann:2017:SVM**

[BT17] Bernhard Beckermann and Alex Townsend. On the singular values of matrices with displacement structure. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1227–1248, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Blondel:2003:ECF**

[BTV03] Vincent D. Blondel, Jacques Theys, and Alexander A. Vladimirov. An elementary counterexample to the finiteness conjecture. *SIAM Journal on Matrix Analysis and Applications*, 24(4):963–970, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/39784.

**Barthelme:2021:SPK**

[BU21] Simon Barthelmé and Konstantin Usevich. Spectral properties of kernel matrices in the flat limit. *SIAM Journal on Matrix Analysis and Applications*, 42(1):17–57, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Buchholz:2000:MSS**

[Buc00] Peter Buchholz. Multilevel solutions for structured Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 22(2):342–357, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34241`.

**Beelen:1988:PAE**

[BV88] T. Beelen and P. Van Dooren. A pencil approach for embedding a polynomial matrix into a unimodular matrix. *SIAM Journal on Matrix Analysis and Applications*, 9(1):77–89, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). SIAM Conference on Linear Algebra in Signals, Systems, and Control (Boston, Mass., 1986).

**Barlow:1990:IMO**

[BV90] Jesse L. Barlow and Udaya B. Vemulapati. An improved method for one-way dissection with singular diagonal blocks. *SIAM Journal on Matrix Analysis and Applications*, 11(4): 575–588, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Barlow:1992:RDM**

[BV92] Jesse L. Barlow and Udaya B. Vemulapati. Rank detection methods for sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 13(4): 1279–1297, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bultheel:1995:VOP**

[BV95] Adhemar Bultheel and Marc Van Barel. Vector orthogonal polynomials and least squares approximation. *SIAM Journal on Matrix Analysis and Applications*, 16(3):863–885, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24457`.

**Bernstein:2000:RMF**

[BV00] Daniel S. Bernstein and Charles F. Van Loan. Rational matrix functions and rank-1 updates. *SIAM Journal on Matrix Analysis and Applications*, 22(1):145–154, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33363`.

**Bobrovnikova:2001:ASW**

[BV01] Elena Y. Bobrovnikova and Stephen A. Vavasis. Accurate solution of weighted least squares by iterative methods. *SIAM Journal on Matrix Analysis and Applications*, 22(4): 1153–1174, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bottcher:2007:NTM**

[BV07] Albrecht Böttcher and Jani Virtanen. Norms of Toeplitz matrices with Fisher–Hartwig symbols. *SIAM Journal on Matrix Analysis and Applications*, 29(2):660–671, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Breiding:2018:CNJ**

[BV18] Paul Breiding and Nick Vannieuwenhoven. The condition number of join decompositions. *SIAM Journal on Matrix Analysis and Applications*, 39(1): 287–309, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bientinesi:2011:GOM**

[BvdG11] Paolo Bientinesi and Robert A. van de Geijn. Goal-oriented and modular stability analysis. *SIAM Journal on Matrix Analysis and Applications*, 32 (1):286–308, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p286_s1`.

**Bolshakov:1997:EIF**

[BvdMR+97] Yuri Bolshakov, Cornelis V. M. van der Mee, André C. M. Ran, Boris Reichstein, and Leiba Rodman. Extension of isometries in finite-dimensional indefinite scalar product spaces and polar decompositions. *SIAM Journal on Matrix Analysis and Applications*, 18(3):752–774, July 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29064`.

**Byrnes:1993:AIE**

[BW93] Christopher I. Byrnes and Xiaochang Wang. The additive inverse eigenvalue problem for Lie perturbations. *SIAM Journal on Matrix Analysis and Applications*, 14(1):113–117, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Bakonyi:1995:MEE**

[BW95] Mihály Bakonyi and Hugo J. Woerdeman. Maximum entropy elements in the intersection of an affine space and the cone of positive definite matrices. *SIAM Journal on Matrix Analysis and Applications*, 16(2):369–376, April 1995. CODEN SJMAEL.

ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24354`.

**Brown:1997:GNS**

[BW97] Peter N. Brown and Homer F. Walker. GMRES on (nearly) singular systems. *SIAM Journal on Matrix Analysis and Applications*, 18(1):37–51, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26233`.

**Botta:1999:MRI**

[BW99] E. F. F. Botta and F. W. Wubs. Matrix renumbering ILU: An effective algebraic multilevel ILU preconditioner for sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(4):1007–1026, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31930`.

**Bank:2006:KPM**

[BWQ06] Randolph E. Bank, Justin W. L. Wan, and Zhenpeng Qu. Kernel preserving multigrid methods for convection-diffusion equations. *SIAM Journal on Matrix Analysis and Applications*, 27(4):1150–1171, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Boyd:2005:LSC**

[BX05] Stephen Boyd and Lin Xiao. Least-squares covariance matrix adjustment. *SIAM Journal on Matrix Analysis and Applications*, 27(2):532–546, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/60990`.

**Byers:2008:NSN**

[BX08] Ralph Byers and Hongguo Xu. A new scaling for Newton's iteration for the polar decomposition and its backward stability. *SIAM Journal on Matrix Analysis and Applications*, 30 (2):822–843, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See note [KZ10].

**Barker:1988:SII**

[BY88] G. P. Barker and S.-J. Yang. Semi-iterative and iterative methods for singular $M$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 9(2):168–180, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Batselier:2018:CLR**

[BYDW18] Kim Batselier, Wenjian Yu, Luca Daniel, and Ngai Wong. Computing low-rank approximations of large-scale matrices with the tensor network randomized SVD. *SIAM Journal*

*on Matrix Analysis and Applications*, 39(3):1221–1244, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Barlow:1998:GGE**

[BZ98] Jesse L. Barlow and Hongyuan Zha. Growth in Gaussian elimination, orthogonal matrices, and the 2-norm. *SIAM Journal on Matrix Analysis and Applications*, 19(3):807–815, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30971`.

**Broker:2000:CCF**

[BZ00] Markus Bröker and Xinlong Zhou. Characterization of continuous, four-coefficient scaling functions via matrix spectral radius. *SIAM Journal on Matrix Analysis and Applications*, 22(1):242–257, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32375`.

**Bai:2007:SLH**

[BZ07] Z. D. Bai and L. X. Zhang. Semicircle law for Hadamard products. *SIAM Journal on Matrix Analysis and Applications*, 29(2):473–495, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cao:2000:CNI**

[Cao00a] Zhi-Hao Cao. Convergence of nested iterative methods for symmetric $P$-regular splittings. *SIAM Journal on Matrix Analysis and Applications*, 22(1):20–32, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33122`.

**Cao:2000:NRS**

[Cao00b] Zhi-Hao Cao. A note on $P$-regular splitting of Hermitian matrix. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1392–1393, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35469`.

**Cao:2002:NCP**

[Cao02] Zhi-Hao Cao. A note on constraint preconditioning for nonsymmetric indefinite matrices. *SIAM Journal on Matrix Analysis and Applications*, 24(1):121–125, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39142`.

**Cao:2008:CGS**

[Cao08] Zhi-Hao Cao. On the convergence of general stationary linear iterative methods for singu-

lar linear systems. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1382–1388, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cao:2009:NEM**

[Cao09] Zhi-Hao Cao. A note on eigenvalues of matrices which are self-adjoint in symmetric bilinear forms. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1421–1423, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Capizzano:1998:TPC**

[Cap98] Stefano Serra Capizzano. Toeplitz preconditioners constructed from linear approximation processes. *SIAM Journal on Matrix Analysis and Applications*, 20(2):446–465, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31690`.

**Capizzano:2000:LMS**

[Cap00] Stefano Serra Capizzano. Locally $X$ matrices, spectral distributions, preconditioning, and applications. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1354–1388, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33836`.

**Carlson:1994:CMP**

[Car94] David Carlson. On the controllability of matrix pairs ($A$, $K$) with $K$ positive semidefinite, II. *SIAM Journal on Matrix Analysis and Applications*, 15(1):129–133, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/19703`.

**Carson:2018:ASC**

[Car18] Erin C. Carson. The adaptive $s$-step conjugate gradient method. *SIAM Journal on Matrix Analysis and Applications*, 39(3):1318–1338, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cavers:1994:HTA**

[Cav94] Ian A. Cavers. A hybrid tridiagonalization algorithm for symmetric sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1363–1380, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22892`.

**Cybenko:1990:HHA**

[CB90] G. Cybenko and M. Berry. Hyperbolic Householder algorithms for factoring structured matrices. *SIAM Journal on Matrix Analysis and Applications*, 11(4):499–520, October

1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Couvreur:2000:OBG**

[CB00] Christophe Couvreur and Yoram Bresler. On the optimality of the backward greedy algorithm for the subset selection problem. *SIAM Journal on Matrix Analysis and Applications*, 21(3):797–808, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33292`.

**Cottle:1992:LIR**

[CC92] Richard W. Cottle and Yow Yieh Chang. Least-index resolution of degeneracy in linear complimentarity problems with sufficient matrices. *SIAM Journal on Matrix Analysis and Applications*, 13(4):1131–1141, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cheung:2009:CCN**

[CC09] Dennis Cheung and Felipe Cucker. Componentwise condition numbers of random sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(2):721–731, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chung:2017:ORI**

[CC17] Julianne Chung and Matthias Chung. Optimal regularized inverse matrices for inverse problems. *SIAM Journal on Matrix Analysis and Applications*, 38(2):458–477, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cambier:2020:ASN**

[CCB+20] Léopold Cambier, Chao Chen, Erik G. Boman, Sivasankaran Rajamanickam, Raymond S. Tuminaro, and Eric Darve. An algebraic sparsified nested dissection algorithm using low-rank approximations. *SIAM Journal on Matrix Analysis and Applications*, 41(2):715–746, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chiang:2009:CAD**

[CCG+09] Chun-Yueh Chiang, Eric King-Wah Chu, Chun-Hua Guo, Tsung-Ming Huang, Wen-Wei Lin, and Shu-Fang Xu. Convergence analysis of the doubling algorithm for several nonlinear matrix equations in the critical case. *SIAM Journal on Matrix Analysis and Applications*, 31(2):227–247, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:1998:RSS**

[CCH98] D. L. Chu, H. C. Chan, and D. W. C. Ho. Regulariza-

tion of singular systems by derivative and proportional output feedback. *SIAM Journal on Matrix Analysis and Applications*, 19(1):21–38, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27096`.

**Castillo:2000:OBP**

[CCJ+00] Enrique Castillo, Angel Cobo, Francisco Jubete, Rosa Eva Pruneda, and Carmen Castillo. An orthogonally based pivoting transformation of matrices and some applications. *SIAM Journal on Matrix Analysis and Applications*, 22(3):666–681, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34972`.

**Chu:2009:QMU**

[CCL09] Delin Chu, Moody Chu, and Wen-Wei Lin. Quadratic model updating with symmetry, positive definiteness, and no spill-over. *SIAM Journal on Matrix Analysis and Applications*, 31(2):546–564, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Canto:2005:DIP**

[CCS05] Begoña Cantó, Carmen Coll, and Elena Sánchez. Drazin inverse and periodic collection of matrices. *SIAM Journal on Matrix Analysis and Applications*, 27(2):413–423, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43596`.

**Ching:1997:CPM**

[CCZ97] Wai Ki Ching, Raymond H. Chan, and Xun Yu Zhou. Circulant preconditioners for Markov-modulated Poisson processes and their applications to manufacturing systems. *SIAM Journal on Matrix Analysis and Applications*, 18(2):464–481, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29344`.

**Cohen:1998:IBB**

[CD98] Nir Cohen and Jerome Dancis. Inertias of block band matrix completions. *SIAM Journal on Matrix Analysis and Applications*, 19(3):583–612, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29647`.

**Chern:2000:SPS**

[CD00] Jann-Long Chern and Luca Dieci. Smoothness and periodicity of some matrix decompositions. *SIAM Journal on Matrix Analysis and Applications*, 22(3):772–792,

2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35362`.

**Chen:2005:CNG**

[CD05] Zizhong Chen and Jack J. Dongarra. Condition numbers of Gaussian random matrices. *SIAM Journal on Matrix Analysis and Applications*, 27(3):603–620, July 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/61641`.

**Chiu:2013:SRA**

[CD13] Jiawei Chiu and Laurent Demanet. Sublinear randomized algorithms for skeleton decompositions. *SIAM Journal on Matrix Analysis and Applications*, 34(3):1361–1383, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Carson:2014:RRS**

[CD14] Erin Carson and James Demmel. A residual replacement strategy for improving the maximum attainable accuracy of $s$-step. *SIAM Journal on Matrix Analysis and Applications*, 35(1):22–43, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Carson:2015:ASL**

[CD15] Erin Carson and James W. Demmel. Accuracy of the $s$-step Lanczos method for the symmetric eigenproblem in finite precision. *SIAM Journal on Matrix Analysis and Applications*, 36(2):793–819, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:2017:CAM**

[CD17] Minghua Chen and Weihua Deng. Convergence analysis of a multigrid method for a nonlocal model. *SIAM Journal on Matrix Analysis and Applications*, 38(3):869–890, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:2000:CRS**

[CDD00] Delin Chu, Lieven De Lathauwer, and Bart De Moor. On the computation of the restricted singular value decomposition via the cosine-sine decomposition. *SIAM Journal on Matrix Analysis and Applications*, 22(2):580–601, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34698`.

**Chandrasekaran:2005:SFA**

[CDG+05] S. Chandrasekaran, P. Dewilde, M. Gu, T. Pals, X. Sun, A.-J. van der Veen, and D. White.

Some fast algorithms for sequentially semiseparable representations. *SIAM Journal on Matrix Analysis and Applications*, 27(2):341–364, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40588`.

**Chandrasekaran:2007:FSH**

[CDG+07] S. Chandrasekaran, P. Dewilde, M. Gu, W. Lyons, and T. Pals. A fast solver for HSS representations via sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 29 (1):67–81, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chandrasekaran:2010:NRD**

[CDGS10] S. Chandrasekaran, P. Dewilde, M. Gu, and N. Somasunderam. On the numerical rank of the off-diagonal blocks of Schur complements of discretized elliptic PDEs. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2261–2290, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Curtef:2012:ROT**

[CDH12] O. Curtef, G. Dirr, and U. Helmke. Riemannian optimization on tensor products of Grassmann manifolds: Applications to generalized Rayleigh-quotients. *SIAM Journal on Matrix Analysis and Applications*, 33(1):210–234, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:2005:LRA**

[CDLP05] M. Chu, N. Del Buono, L. Lopez, and T. Politi. On the low-rank approximation of data on the unit sphere. *SIAM Journal on Matrix Analysis and Applications*, 27(1):46–60, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43329`.

**Cui:2014:ARE**

[CDN14] Chun-Feng Cui, Yu-Hong Dai, and Jiawang Nie. All real eigenvalues of symmetric tensors. *SIAM Journal on Matrix Analysis and Applications*, 35 (4):1582–1601, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cowen:1994:NHM**

[CDP94] Carl C. Cowen, Michael A. Dritschel, and Richard C. Penney. Norms of Hadamard multipliers. *SIAM Journal on Matrix Analysis and Applications*, 15(1):313–320, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/20120`.

**Chhetry:1990:MCM**

[CdS90] Devendra Chhetry, Jan de Leeuw, and Allan R. Sampson. Monotone correlation and monotone disjunct pieces. *SIAM Journal on Matrix Analysis and Applications*, 11(3): 361–368, July 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:1994:STM**

[CE94] Moody T. Chu and Melissa A. Erbrecht. Symmetric Toeplitz matrices with two prescribed eigenpairs. *SIAM Journal on Matrix Analysis and Applications*, 15(2):623–635, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22175`.

**Censor:2002:BIA**

[CE02] Yair Censor and Tommy Elfving. Block-iterative algorithms with diagonally scaled oblique projections for the linear feasibility problem. *SIAM Journal on Matrix Analysis and Applications*, 24(1):40–58, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38705`.

**Carden:2012:RVL**

[CE12] Russell L. Carden and Mark Embree. Ritz value localization for non-Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 33 (4):1320–1338, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cipolloni:2022:CNS**

[CES22] Giorgio Cipolloni, László Erdös, and Dominik Schröder. On the condition number of the shifted real Ginibre ensemble. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1469–1487, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1424408`.

**Chen:2020:MMN**

[CESC20] Minghua Chen, Sven-Erik Ekström, and Stefano Serra-Capizzano. A multigrid method for nonlocal problems: Non-diagonally dominant or Toeplitz-plus-tridiagonal systems. *SIAM Journal on Matrix Analysis and Applications*, 41 (4):1546–1570, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:1989:SIO**

[CF89] Tongwen Chen and Bruce A. Francis. Spectral and inner-outer factorizations of rational matrices. *SIAM Journal on Matrix Analysis and Applications*, 10(1):1–17, ???? 1989. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic).

**Compta:2000:GAC**

[CF00] Albert Compta and Josep Ferrer. A geometric approach to the Carlson problem. *SIAM Journal on Matrix Analysis and Applications*, 22(1):258–275, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34914`.

**Chu:2002:CDR**

[CF02] Moody T. Chu and Robert E. Funderlic. The centroid decomposition: Relationships between discrete variational decompositions and SVDs. *SIAM Journal on Matrix Analysis and Applications*, 23(4):1025–1044, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38255`.

**Chu:1997:VFG**

[CFG97] Moody T. Chu, Robert E. Funderlic, and Gene H. Golub. On a variational formulation of the generalized singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 18(4):1082–1092, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28707`.

**Chu:1998:RMS**

[CFG98] Moody T. Chu, R. E. Funderlic, and Gene H. Golub. Rank modifications of semidefinite matrices associated with a secant update formula. *SIAM Journal on Matrix Analysis and Applications*, 20(2):428–436, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30602`.

**Charles:2013:NEH**

[CFJKS13] Zachary B. Charles, Miriam Farber, Charles R. Johnson, and Lee Kennedy-Shaffer. Nonpositive eigenvalues of hollow, symmetric, nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 34(3):1384–1400, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:2007:PGD**

[CFL07] Eric King-Wah Chu, Hung-Yuan Fan, and Wen-Wei Lin. Projected generalized discrete-time periodic Lyapunov equations and balanced realization of periodic descriptor systems. *SIAM Journal on Matrix Analysis and Applications*, 29(3):982–1006, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:2017:PRL**

[CFL17] Pengwen Chen, Albert Fannjiang, and Gi-Ren Liu. Phase retrieval by linear algebra. *SIAM Journal on Matrix Analysis and Applications*, 38(3): 854–868, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Carlberg:2016:KSR**

[CFT16] Kevin Carlberg, Virginia Forstall, and Ray Tuminaro. Krylov-subspace recycling via the POD-augmented conjugate-gradient method. *SIAM Journal on Matrix Analysis and Applications*, 37(3): 1304–1336, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:1990:SOD**

[CG90] Eleanor Chu and Alan George. Sparse orthogonal decomposition on a hypercube multiprocessor. *SIAM Journal on Matrix Analysis and Applications*, 11(3):453–465, July 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Sparse matrices (Gleneden Beach, OR, 1989).

**Chan:1992:RBO**

[CG92] Tony F. Chan and Danny Goovaerts. On the relationship between overlapping and nonoverlapping domain decomposition methods. *SIAM Journal on Matrix Analysis and Applications*, 13(2):663–670, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cullum:1996:RBG**

[CG96] Jane Cullum and Anne Greenbaum. Relations between Galerkin and norm-minimizing iterative methods for solving linear systems. *SIAM Journal on Matrix Analysis and Applications*, 17(2):223–247, April 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24676`.

**Chu:1998:NMI**

[CG98a] Moody T. Chu and Quanlin Guo. A numerical method for the inverse stochastic spectrum problem. *SIAM Journal on Matrix Analysis and Applications*, 19(4):1027–1039, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29241`.

**Chu:1998:LSA**

[CG98b] Moody T. Chu and Quanlin Guo. On the least squares approximation of symmetric-definite pencils subject to generalized spectral constraints. *SIAM Journal on Matrix Analysis and Applications*, 19(1): 1–20, January 1998. CODEN SJMAEL. ISSN 0895-4798

(print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28513`.

**Castillo:2003:MAA**

[CG03a] J. E. Castillo and R. D. Grone. A matrix analysis approach to higher-order approximations for divergence and gradients satisfying a global conservation law. *SIAM Journal on Matrix Analysis and Applications*, 25(1):128–142, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39802`.

**Chandrasekaran:2003:FSA**

[CG03b] S. Chandrasekaran and M. Gu. Fast and stable algorithms for banded plus semiseparable systems of linear equations. *SIAM Journal on Matrix Analysis and Applications*, 25(2):373–384, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35337`.

**Chu:2006:GEP**

[CG06] Delin Chu and Gene H. Golub. On a generalized eigenvalue problem for nonsquare pencils. *SIAM Journal on Matrix Analysis and Applications*, 28(3):770–787, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chang:2010:SEC**

[CG10] Xiao-Wen Chang and Gene H. Golub. Solving ellipsoid-constrained integer least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1071–1089, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Choi:2015:AFS**

[CG15a] Daeshik Choi and Anne Greenbaum. An algorithm for finding a 2-similarity transformation from a numerical contraction to a contraction. *SIAM Journal on Matrix Analysis and Applications*, 36(3):1248–1262, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Choi:2015:RMS**

[CG15b] Daeshik Choi and Anne Greenbaum. Roots of matrices in the study of GMRES convergence and Crouzeix's conjecture. *SIAM Journal on Matrix Analysis and Applications*, 36(1):289–301, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Crouzeix:2019:SSN**

[CG19] Michel Crouzeix and Anne Greenbaum. Spectral sets: Numerical range and beyond. *SIAM Journal on Matrix Analysis and Applications*, 40(3):1087–1101, ???? 2019. CO-

DEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Castro-Gonzalez:2013:ASS**

[CGCDM13] Nieves Castro-González, Johan Ceballos, Froilán M. Dopico, and Juan M. Molera. Accurate solution of structured least squares problems via rank-revealing decompositions. *SIAM Journal on Matrix Analysis and Applications*, 34(3): 1112–1128, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chandrasekaran:1998:PEP**

[CGGS98] S. Chandrasekaran, G. H. Golub, M. Gu, and A. H. Sayed. Parameter estimation in the presence of bounded data uncertainties. *SIAM Journal on Matrix Analysis and Applications*, 19(1):235–252, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30167`.

**Chandrasekaran:1999:EAB**

[CGGS99] S. Chandrasekaran, G. H. Golub, M. Gu, and A. H. Sayed. An efficient algorithm for a bounded errors-in-variables model. *SIAM Journal on Matrix Analysis and Applications*, 20(4):839–859, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30467`.

**Chu:2011:CAS**

[CGH11] Delin Chu, Siong Thye Goh, and Y. S. Hung. Characterization of all solutions for undersampled uncorrelated linear discriminant analysis problems. *SIAM Journal on Matrix Analysis and Applications*, 32 (3):820–844, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p820_s1`.

**Campos:2007:PBD**

[CGHR07] Carlos Campos, David Guerrero, Vicente Hernández, and Rui Ralha. Parallel bidiagonalization of a dense matrix. *SIAM Journal on Matrix Analysis and Applications*, 29(3): 826–837, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Constantine:2010:SMP**

[CGI10] Paul G. Constantine, David F. Gleich, and Gianluca Iaccarino. Spectral methods for parameterized matrix equations. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2681–2699, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Caldwell:2018:SEC**

[CGL18] Trevor Caldwell, Anne Greenbaum, and Kenan Li. Some extensions of the Crouzeix–Palencia result. *SIAM Journal on Matrix Analysis and Applications*, 39(2):769–780, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Comon:2008:STS**

[CGLM08] Pierre Comon, Gene Golub, Lek-Heng Lim, and Bernard Mourrain. Symmetric tensors and symmetric tensor rank. *SIAM Journal on Matrix Analysis and Applications*, 30(3): 1254–1279, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Carvalho:2011:FGC**

[CGLV11] L. M. Carvalho, S. Gratton, R. Lago, and X. Vasseur. A flexible generalized conjugate residual method with inner orthogonalization and deflated restarting. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1212–1235, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1212_s1`.

**Chen:2022:EBL**

[CGMM22] Tyler Chen, Anne Greenbaum, Cameron Musco, and Christopher Musco. Error bounds for Lanczos-based matrix function approximation. *SIAM Journal on Matrix Analysis and Applications*, 43(2):787–811, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1427784`.

**Chen:2023:LMK**

[CGMM23] Tyler Chen, Anne Greenbaum, Cameron Musco, and Christopher Musco. Low-memory Krylov subspace methods for optimal rational matrix function approximation. *SIAM Journal on Matrix Analysis and Applications*, 44(2):670–692, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1479853`.

**Christandl:2021:BRN**

[CGMZ21] M. Christandl, F. Gesmundo, M. Michałek, and J. Zuiddam. Border rank nonadditivity for higher order tensors. *SIAM Journal on Matrix Analysis and Applications*, 42(2): 503–527, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chandrasekaran:2006:FDS**

[CGP06] S. Chandrasekaran, M. Gu, and T. Pals. A fast *ULV* decomposition solver for hierarchically semiseparable representations. *SIAM Journal on*

*Matrix Analysis and Applications*, 28(3):603–622, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chang:2009:TBP**

[CGP09] X.-W. Chang, G. H. Golub, and C. C. Paige. Towards a backward perturbation analysis for data least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 30 (4):1281–1301, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Calandra:2020:ISE**

[CGRV20] Henri Calandra, Serge Gratton, Elisa Riccietti, and Xavier Vasseur. On iterative solution of the extended normal equations. *SIAM Journal on Matrix Analysis and Applications*, 41 (4):1571–1589, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Castro-Gonzalez:2008:CCM**

[CGRVC08] N. Castro-González, J. Robles, and J. Y. Vélez-Cerrada. Characterizations of a class of matrices and perturbation of the Drazin inverse. *SIAM Journal on Matrix Analysis and Applications*, 30(2):882–897, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cliffe:1994:EBM**

[CGS94] K. A. Cliffe, T. J. Garratt, and A. Spence. Eigenvalues of block matrices arising from problems in fluid mechanics. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1310–1318, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23323`.

**Chandrasekaran:1998:SEA**

[CGS98] S. Chandrasekaran, M. Gu, and A. H. Sayed. A stable and efficient algorithm for the indefinite linear least-squares problem. *SIAM Journal on Matrix Analysis and Applications*, 20(2):354–362, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30222`.

**Chandrasekaran:2008:SAT**

[CGS+08] S. Chandrasekaran, M. Gu, X. Sun, J. Xia, and J. Zhu. A superfast algorithm for Toeplitz systems of linear equations. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1247–1266, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chandrasekaran:2001:DBE**

[CGSS01] S. Chandrasekaran, M. Gu, A. H. Sayed, and K. E.

Schubert. The degenerate bounded errors-in-variables model. *SIAM Journal on Matrix Analysis and Applications*, 23(1):138–166, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35776`.

**Chahlaoui:2003:RCD**

[CGV03] Y. Chahlaoui, K. Gallivan, and P. Van Dooren. Recursive calculation of dominant singular subspaces. *SIAM Journal on Matrix Analysis and Applications*, 25(2):445–463, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37465`.

**Choudhury:1988:AST**

[CH88] Dipa Choudhury and Roger A. Horn. An analogue of the Schur triangular factorization for complex orthogonal similarity and consimilarity. *SIAM Journal on Matrix Analysis and Applications*, 9(1):90–95, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). SIAM Conference on Linear Algebra in Signals, Systems, and Control (Boston, Mass., 1986).

**Chan:1992:LAL**

[CH92] Tony F. Chan and Per Christian Hansen. A look-ahead Levinson algorithm for indefinite Toeplitz systems. *SIAM Journal on Matrix Analysis and Applications*, 13(2):490–506, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See erratum [CH93a].

**Chan:1993:ELA**

[CH93a] Tony F. Chan and Per Christian Hansen. Erratum: "A look-ahead Levinson algorithm for indefinite Toeplitz systems" [SIAM J. Matrix Anal. Appl. **13** (1992), no. 2, 490–506 and MR 93a:65032]. *SIAM Journal on Matrix Analysis and Applications*, 14(4):1191, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See [CH92].

**Chatterjee:1993:NEM**

[CH93b] Samprit Chatterjee and Glenn Heller. The numerical effect of measurement error in the explanatory variables on the observed least squares estimate. *SIAM Journal on Matrix Analysis and Applications*, 14(3):677–687, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:1993:NIP**

[CH93c] Bintong Chen and Patrick T. Harker. A non-interior-point continuation method for linear complementarity problems. *SIAM Journal on Matrix Analysis and Applications*, 14(4):1168–1190, October 1993. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic).

**Colella:1994:CSF**

[CH94] David Colella and Christopher Heil. Characterizations of scaling functions: Continuous solutions. *SIAM Journal on Matrix Analysis and Applications*, 15(2):496–518, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22533`.

**Collins:1997:ESL**

[CH97] Emmanuel G. Collins, Jr. and A. Scottedward Hodel. Efficient solution of linearly coupled Lyapunov equations. *SIAM Journal on Matrix Analysis and Applications*, 18(2): 291–304, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27017`.

**Cheng:1998:MCA**

[CH98] Sheung Hun Cheng and Nicholas J. Higham. A modified Cholesky algorithm based on a symmetric indefinite factorization. *SIAM Journal on Matrix Analysis and Applications*, 19(4):1097–1110, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30289`.

**Cox:1999:RWB**

[CH99] Anthony J. Cox and Nicholas J. Higham. Row-wise backward stable elimination methods for the equality constrained least squares problem. *SIAM Journal on Matrix Analysis and Applications*, 21(1):313–326, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33595`.

**Chu:2006:MPA**

[CH06] Delin Chu and Y. S. Hung. A matrix pencil approach to the row by row decoupling problem for descriptor systems. *SIAM Journal on Matrix Analysis and Applications*, 28(3):682–702, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:2023:KAS**

[CH23a] Tyler Chen and Eric Hallman. Krylov-aware stochastic trace estimation. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1218–1244, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1494257`.

**Connolly:2023:PRE**

[CH23b] Michael P. Connolly and Nicholas J. Higham. Probabilistic rounding error analysis of Householder QR factorization. *SIAM Journal on*

*Matrix Analysis and Applications*, 44(3):1146–1163, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1514817`.

**Chan:1989:CPH**

[Cha89] Raymond H. Chan. Circulant preconditioners for Hermitian Toeplitz systems. *SIAM Journal on Matrix Analysis and Applications*, 10(4):542–550, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chandrasekaran:2000:ESA**

[Cha00] S. Chandrasekaran. An efficient and stable algorithm for the symmetric-definite generalized eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1202–1228, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31630`.

**Chen:1992:CMD**

[Che92] Hsin-Chu Chen. Circulative matrices of degree $\theta$. *SIAM Journal on Matrix Analysis and Applications*, 13(4):1172–1188, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:1998:GRM**

[Che98] Hsin-Chu Chen. Generalized reflexive matrices: Special properties and applications. *SIAM Journal on Matrix Analysis and Applications*, 19(1):140–153, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28875`.

**Chen:2001:ASA**

[Che01a] Ke Chen. An analysis of sparse approximate inverse preconditioners for boundary integral equations. *SIAM Journal on Matrix Analysis and Applications*, 22(4):1058–1078, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:2001:RSE**

[Che01b] Yuming Chen. On real solutions of the equation $\Phi^t(A) = \frac{1}{n}J_n$. *SIAM Journal on Matrix Analysis and Applications*, 22(3):965–970, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37291`.

**Chern:2015:SVD**

[CHH+15] Ruey-Lin Chern, Han-En Hsieh, Tsung-Ming Huang, Wen-Wei Lin, and Weichung Wang. Singular value decompositions for single-curl operators in three-dimensional Maxwell's equations for complex media. *SIAM Journal on Matrix Analysis and Ap-*

*plications*, 36(1):203–224, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cheng:2001:ALM**

[CHKL01] Sheung Hun Cheng, Nicholas J. Higham, Charles S. Kenney, and Alan J. Laub. Approximating the logarithm of a matrix to specified accuracy. *SIAM Journal on Matrix Analysis and Applications*, 22(4): 1112–1125, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Crouzeix:2000:PSM**

[CHLS00] J.-P. Crouzeix, A. Hassouni, A. Lahlou, and S. Schaible. Positive subdefinite matrices, generalized monotonicity, and linear complementarity problems. *SIAM Journal on Matrix Analysis and Applications*, 22(1):66–85, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33184`.

**Cao:2023:ERB**

[CHLW23] Shengyu Cao, Simai He, Zhening Li, and Zhen Wang. Extreme ratio between spectral and Frobenius norms of nonnegative tensors. *SIAM Journal on Matrix Analysis and Applications*, 44(2):919–944, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1502951`.

**Coppe:2020:ALS**

[CHMW20] Vincent Coppé, Daan Huybrechs, Roel Matthysen, and Marcus Webb. The *AZ* algorithm for least squares systems with a known incomplete generalized inverse. *SIAM Journal on Matrix Analysis and Applications*, 41(3):1237–1259, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Choulakian:2010:SNR**

[Cho10] Vartan Choulakian. Some numerical results on the rank of generic three-way arrays over **R**. *SIAM Journal on Matrix Analysis and Applications*, 31 (4):1541–1551, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:1991:LSA**

[Chu91] Moody T. Chu. Least squares approximation by real normal matrices with specified spectrum. *SIAM Journal on Matrix Analysis and Applications*, 12(1):115–127, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:1995:CHM**

[Chu95] Moody T. Chu. Constructing a Hermitian matrix from

its diagonal entries and eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 16(1):207–217, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24317`.

**Chu:2010:IRC**

[CHW10] Delin Chu, Y. S. Hung, and Hugo J. Woerdeman. Inertia and rank characterizations of some matrix expressions. *SIAM Journal on Matrix Analysis and Applications*, 31(3): 1187–1226, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ciarlet:2003:SOG**

[CHZ03] P. Ciarlet, Jr., Jianguo Huang, and Jun Zou. Some observations on generalized saddle-point problems. *SIAM Journal on Matrix Analysis and Applications*, 25(1):224–236, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41082`.

**Chen:2016:CTE**

[CHZ16] Liping Chen, Lixing Han, and Liangmin Zhou. Computing tensor eigenvalues via homotopy methods. *SIAM Journal on Matrix Analysis and Applications*, 37(1):290–319, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chandrasekaran:1994:RRF**

[CI94] Shivkumar Chandrasekaran and Ilse C. F. Ipsen. On rank-revealing factorisations. *SIAM Journal on Matrix Analysis and Applications*, 15(2): 592–622, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22378`.

**Chandrasekaran:1995:AAC**

[CI95a] S. Chandrasekaran and I. C. F. Ipsen. Analysis of a $QR$ algorithm for computing singular values. *SIAM Journal on Matrix Analysis and Applications*, 16(2):520–535, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23653`.

**Chandrasekaran:1995:SSC**

[CI95b] S. Chandrasekaran and I. C. F. Ipsen. On the sensitivity of solution components in linear systems of equations. *SIAM Journal on Matrix Analysis and Applications*, 16(1):93–112, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23125`.

**Cifuentes:2021:CRC**

[Cif21] Diego Cifuentes. A convex relaxation to compute the nearest structured rank deficient matrix. *SIAM Journal on Matrix Analysis and Applications*, 42(2):708–729, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:2021:TSS**

[CJ21] Ke Chen and Ruhui Jin. Tensor-structured sketching for constrained least squares. *SIAM Journal on Matrix Analysis and Applications*, 42(4): 1703–1731, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cabay:1996:CNPa**

[CJL96a] Stan Cabay, Anthony R. Jones, and George Labahn. Computation of numerical Padé–Hermite and simultaneous Padé systems. I. near inversion of generalized Sylvester matrices. *SIAM Journal on Matrix Analysis and Applications*, 17(2):248–267, April 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26868`.

**Cabay:1996:CNPb**

[CJL96b] Stan Cabay, Anthony R. Jones, and George Labahn. Computation of numerical Padé–Hermite and simultaneous Padé systems. II. A weakly stable algorithm. *SIAM Journal on Matrix Analysis and Applications*, 17(2):268–297, April 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26869`.

**Claes:2022:LEN**

[CJMU22] Rob Claes, Elias Jarlebring, Karl Meerbergen, and Parikshit Upadhyaya. Linearizable eigenvector nonlinearities. *SIAM Journal on Matrix Analysis and Applications*, 43(2):764–786, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M142931X`.

**Chun:1991:DCS**

[CK91] J. Chun and T. Kailath. Divide-and-conquer solutions of least-squares problems for matrices with displacement structure. *SIAM Journal on Matrix Analysis and Applications*, 12(1):128–145, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cokus:2000:DTC**

[CK00] Shawn Cokus and Victor Klee. Decomposition theorems for conditional sign-solvability and sign-solvability of general systems. *SIAM Journal on Matrix Analysis and Appli-*

*cations*, 21(3):978–988, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33660`.

**Chi:2012:TSN**

[CK12] Eric C. Chi and Tamara G. Kolda. On tensors, sparsity, and nonnegative factorizations. *SIAM Journal on Matrix Analysis and Applications*, 33 (4):1272–1299, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cortinovis:2020:LRA**

[CK20] Alice Cortinovis and Daniel Kressner. Low-rank approximation in the Frobenius norm by column and row subset selection. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1651–1673, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:2004:IQE**

[CKL04] Moody T. Chu, Yuen-Cheng Kuo, and Wen-Wei Lin. On inverse quadratic eigenvalue problems with partially prescribed eigenstructure. *SIAM Journal on Matrix Analysis and Applications*, 25(4):995–1020, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40448`.

**Cances:2021:CAD**

[CKL21] Éric Cancès, Gaspard Kemlin, and Antoine Levitt. Convergence analysis of direct minimization and self-consistent iterations. *SIAM Journal on Matrix Analysis and Applications*, 42(1):243–274, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cortinovis:2022:DCM**

[CKM22] Alice Cortinovis, Daniel Kressner, and Stefano Massei. Divide-and-conquer methods for functions of matrices with banded or hierarchical low-rank structure. *SIAM Journal on Matrix Analysis and Applications*, 43(1):151–177, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1432594`.

**Camps:2022:AQC**

[CKO+22] Daan Camps, Efekan Kökcü, Lindsay Bassman Oftelie, Wibe A. de Jong, Alexander F. Kemper, and Roel Van Beeumen. An algebraic quantum circuit compression algorithm for Hamiltonian simulation. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1084–1108, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1439298`.

**Cvetkovic:2011:ELR**

[CKP11] Lj. Cvetković, V. Kostić, and J. M. Peña. Eigenvalue localization refinements for matrices related to positivity. *SIAM Journal on Matrix Analysis and Applications*, 32(3): 771–784, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p771_s1`.

**Calvetti:2005:QRB**

[CKR05] Daniela Calvetti, Sun-Mi Kim, and Lothar Reichel. Quadrature rules based on the Arnoldi process. *SIAM Journal on Matrix Analysis and Applications*, 26(3):765–781, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42382`.

**Canto:2008:FNT**

[CKRU08] Rafael Cantó, Plamen Koev, Beatriz Ricarte, and Ana M. Urbano. *LDU* factorization of nonsingular totally nonpositive matrices. *SIAM Journal on Matrix Analysis and Applications*, 30(2):777–782, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chan:1999:IIL**

[CL99] Onn Chan and T. K. Lam. Immanant inequalities for Laplacians of trees. *SIAM Journal on Matrix Analysis and Applications*, 21(1):129–144, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31842`.

**Chen:2009:NBE**

[CL09] Xiao-Shan Chen and Wen Li. A note on backward error analysis of the generalized singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1358–1370, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cai:2017:AAN**

[CL17] Yunfeng Cai and Chengyu Liu. An algebraic approach to nonorthogonal general joint block diagonalization. *SIAM Journal on Matrix Analysis and Applications*, 38(1):50–71, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Clayton:2010:QBD**

[Cla10] Aubrey Clayton. Quasi-birth-and-death processes and matrix-valued orthogonal polynomials. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2239–2260, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Clements:2000:SSA**

[Cle00] D. J. Clements. A state-space approach to indefinite spectral factorization. *SIAM Journal on Matrix Analysis and Applications*, 21(3):743–767, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32446`.

**Comon:1993:DRG**

[CLG93] Pierre Comon and Pascal Laurent-Gengoux. Displacement rank of generalized inverses of persymmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 14 (3):646–654, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:2020:TRD**

[CLL20] Ziang Chen, Yingzhou Li, and Jianfeng Lu. Tensor ring decomposition: Optimization landscape and one-loop convergence of alternating least squares. *SIAM Journal on Matrix Analysis and Applications*, 41(3):1416–1442, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:2012:PAA**

[CLN12] Xiao Shan Chen, Wen Li, and Michael K. Ng. Perturbation analysis for antitriangular Schur decomposition. *SIAM Journal on Matrix Analysis and Applications*, 33(2): 325–335, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cui:2014:BNT**

[CLN14] Lu-Bin Cui, Wen Li, and Michael K. Ng. Birkhoff–von Neumann theorem for multistochastic tensors. *SIAM Journal on Matrix Analysis and Applications*, 35(3):956–973, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:2020:SRS**

[CLNW20] Ke Chen, Qin Li, Kit Newton, and Stephen J. Wright. Structured random sketching for PDE inverse problems. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1742–1770, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Carson:2021:SBV**

[CLR21] Erin Carson, Kathryn Lund, and Miroslav Rozložník. The stability of block variants of classical Gram–Schmidt. *SIAM Journal on Matrix Analysis and Applications*, 42(3): 1365–1380, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:1988:HMG**

[CLS88] Moody T. Chu, T.-Y. Li, and Tim Sauer. Homotopy method for general $\lambda$-matrix problems. *SIAM Journal on Matrix Analysis and Applications*, 9(4): 528–536, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cox:1989:BEA**

[CM89] Christopher L. Cox and William F. Moss. Backward error analysis for a pole assignment algorithm. *SIAM Journal on Matrix Analysis and Applications*, 10(4):446–456, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chan:1992:IPT**

[CM92a] Tony F. C. Chan and Tarek P. Mathew. The interface probing technique in domain decomposition. *SIAM Journal on Matrix Analysis and Applications*, 13(1):212–238, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cox:1992:BEA**

[CM92b] Christopher L. Cox and William F. Moss. Backward error analysis for a pole assignment algorithm. II. The complex case. *SIAM Journal on Matrix Analysis and Applications*, 13(4):1159–1171, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cabay:1993:WSA**

[CM93] Stan Cabay and Ron Meleshko. A weakly stable algorithm for Padé approximants and the inversion of Hankel matrices. *SIAM Journal on Matrix Analysis and Applications*, 14(3): 735–765, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Clary:2003:SFM**

[CM03] Stuart Clary and Dale H. Mugler. Shifted Fourier matrices and their tridiagonal commutors. *SIAM Journal on Matrix Analysis and Applications*, 24(3):809–821, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37275`.

**Chen:2003:MFB**

[CMPX03] Qiuhui Chen, Charles A. Micchelli, Silong Peng, and Yuesheng Xu. Multivariate filter banks having matrix factorizations. *SIAM Journal on Matrix Analysis and Applications*, 25(2):517–531, January 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:2009:SFD**

[CMT09] Delin Chu, M. Malabre, and Roger C. E. Tan. State feedback decoupling problem

with stability for $(A, B, C, D)$ quadruples. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1735–1760, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Camps:2019:RM**

[CMV19] Daan Camps, Karl Meerbergen, and Raf Vandebril. A rational $QZ$ method. *SIAM Journal on Matrix Analysis and Applications*, 40(3):943–972, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Colley:2023:DET**

[CNG23] Charles Colley, Huda Nassar, and David F. Gleich. Dominant $Z$-eigenpairs of tensor Kronecker products decouple. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1006–1031, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1502008`.

**Chan:1994:CPT**

[CNP94] Raymond H. Chan, James G. Nagy, and Robert J. Plemmons. Circulant preconditioned Toeplitz least squares iterations. *SIAM Journal on Matrix Analysis and Applications*, 15(1):80–97, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22302`.

**Ching:2008:BDS**

[CNW08] Wai-Ki Ching, Michael K. Ng, and You-Wei Wen. Block diagonal and Schur complement preconditioners for block-Toeplitz systems with small size blocks. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1101–1119, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cai:2022:FDA**

[CNX22] Difeng Cai, James Nagy, and Yuanzhe Xi. Fast deterministic approximation of symmetric indefinite kernel matrices with high dimensional datasets. *SIAM Journal on Matrix Analysis and Applications*, 43(2):1003–1028, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1424627`.

**Chaisuriya:1999:ASA**

[CO99] Pachara Chaisuriya and Sing-Cheong Ong. Absolute Schur algebras and unbounded matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(3):596–605, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33000`.

**Chiantini:2012:GIT**

[CO12] Luca Chiantini and Giorgio Ottaviani. On generic identifiability of 3-tensors of small rank. *SIAM Journal on Matrix Analysis and Applications*, 33 (3):1018–1037, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:2020:BSR**

[COP20] Ximing Chen, Masaki Ogura, and Victor M. Preciado. Bounds on the spectral radius of digraphs from subgraph counts. *SIAM Journal on Matrix Analysis and Applications*, 41(2):525–553, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Correa:1993:NSC**

[Cor93] G. O. Corrêa. Necessary and sufficient conditions for bounded-input/bounded-state stability of discrete-time, bilinear systems. *SIAM Journal on Matrix Analysis and Applications*, 14(3):712–720, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chiantini:2014:AGL**

[COV14] Luca Chiantini, Giorgio Ottaviani, and Nick Vannieuwenhoven. An algorithm for generic and low-rank specific identifiability of complex tensors. *SIAM Journal on Matrix Analysis and Applications*, 35 (4):1265–1287, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chiantini:2017:ECS**

[COV17] Luca Chiantini, Giorgio Ottaviani, and Nick Vannieuwenhoven. Effective criteria for specific identifiability of tensors and forms. *SIAM Journal on Matrix Analysis and Applications*, 38(2):656–681, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chang:1998:PAC**

[CP98] Xiao-Wen Chang and Christopher C. Paige. Perturbation analyses for the Cholesky downdating problem. *SIAM Journal on Matrix Analysis and Applications*, 19(2):429–443, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30411`.

**Cao:2003:SEE**

[CP03a] Yang Cao and Linda Petzold. A subspace error estimate for linear systems. *SIAM Journal on Matrix Analysis and Applications*, 24(3):787–801, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39064`.

**Capizzano:2003:SPF**

[CP03b] Stefano Serra Capizzano and Cristina Tablino Possio. Superlinear preconditioners for finite differences linear systems. *SIAM Journal on Matrix Analysis and Applications*, 25(1): 152–164, January 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:2003:RVL**

[CP03c] Moody T. Chu and Robert J. Plemmons. Real-valued, low rank, circulant approximation. *SIAM Journal on Matrix Analysis and Applications*, 24(3):645–659, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38316`.

**Crouzeix:2017:NRS**

[CP17] M. Crouzeix and C. Palencia. The numerical range is a $(1 + \sqrt{2})$-spectral set. *SIAM Journal on Matrix Analysis and Applications*, 38(2):649–655, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cvetkovic:2020:MAS**

[CP20] Aleksandar Cvetković and Vladimir Yu. Protasov. Maximal acyclic subgraphs and closest stable matrices. *SIAM Journal on Matrix Analysis and Applications*, 41(3):1167–1182, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chang:1997:PAF**

[CPS97] Xiao-Wen Chang, Christopher C. Paige, and G. W. Stewart. Perturbation analyses for the $QR$ factorization. *SIAM Journal on Matrix Analysis and Applications*, 18(3):775–791, July 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29772`.

**Chan:2000:PNH**

[CPS00] Raymond H. Chan, Daniel Potts, and Gabriele Steidl. Preconditioners for nondefinite Hermitian Toeplitz systems. *SIAM Journal on Matrix Analysis and Applications*, 22(3):647–665, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36252`.

**Chang:2009:CMC**

[CPTP09a] X.-W. Chang, C. C. Paige, and D. Titley-Peloquin. Characterizing matrices that are consistent with given solutions. *SIAM Journal on Matrix Analysis and Applications*, 30(4): 1406–1420, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chang:2009:SCI**

[CPTP09b] X.-W. Chang, C. C. Paige, and D. Titley-Peloquin. Stopping criteria for the iterative solution of linear least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 31(2):831–852, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chang:2011:PCN**

[CPZ11] Kung-Ching Chang, Kelly J. Pearson, and Tan Zhang. Primitivity, the convergence of the NQZ method, and the largest eigenvalue for nonnegative tensors. *SIAM Journal on Matrix Analysis and Applications*, 32(3): 806–819, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p806_s1`. See minor correction to authors' address [Ano11].

**Calvetti:1996:AAI**

[CR96] D. Calvetti and L. Reichel. Application of ADI iterative methods to the restoration of noisy images. *SIAM Journal on Matrix Analysis and Applications*, 17(1):165–186, January 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27368`.

**Curtain:2010:ASM**

[CR10] Ruth Curtain and Leiba Rodman. Analytic solutions of matrix Riccati equations with analytic coefficients. *SIAM Journal on Matrix Analysis and Applications*, 31(4):2075–2092, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cardoso:2016:MAG**

[CR16] João R. Cardoso and Rui Ralha. Matrix arithmetic–geometric mean and the computation of the logarithm. *SIAM Journal on Matrix Analysis and Applications*, 37(2): 719–743, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Casulli:2021:RSQ**

[CR21] Angelo Casulli and Leonardo Robol. Rank-structured $QR$ for Chebyshev rootfinding. *SIAM Journal on Matrix Analysis and Applications*, 42(3): 1148–1171, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cristi:1988:PPA**

[Cri88] Roberto Cristi. Parallel processing in the adaptive control of linear systems. *SIAM Journal on Matrix Analysis and Applications*, 9(1):96–105, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162

(electronic). SIAM Conference on Linear Algebra in Signals, Systems, and Control (Boston, Mass., 1986).

**Crouzeix:2016:SCR**

[Cro16] Michel Crouzeix. Some constants related to numerical ranges. *SIAM Journal on Matrix Analysis and Applications*, 37(1):420–442, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Choi:1993:LAR**

[CRR93] Man Duen Choi, Jeffrey S. Rosenthal, and Peter Rosenthal. Linear-algebraic results associated with antiferromagnetic Heisenberg chains. *SIAM Journal on Matrix Analysis and Applications*, 14(3):830–852, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cohen:1999:PUC**

[CRS99] Adam L. Cohen, Leiba Rodman, and David P. Stanford. Pointwise and uniformly convergent sets of matrices. *SIAM Journal on Matrix Analysis and Applications*, 21(1):93–105, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33843`. See erratum [CRS01].

**Cohen:2001:EPU**

[CRS01] Adam L. Cohen, Leiba Rodman, and David P. Stanford. Erratum: "Pointwise and Uniformly Convergent Sets of Matrices". *SIAM Journal on Matrix Analysis and Applications*, 22(3):971, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37467`. See [CRS99].

**Chen:2021:FAG**

[CRY+21] Chao Chen, Severin Reiz, Chenhan D. Yu, Hans-Joachim Bungartz, and George Biros. Fast approximation of the Gauss–Newton Hessian matrix for the multilayer perceptron. *SIAM Journal on Matrix Analysis and Applications*, 42(1):165–184, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:1989:MDM**

[CS89] Hsin-Chu Chen and Ahmed H. Sameh. A matrix decomposition method for orthotropic elasticity problems. *SIAM Journal on Matrix Analysis and Applications*, 10(1):39–64, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cardoso:1996:JAS**

[CS96a] Jean-François Cardoso and Antoine Souloumiac. Jacobi

angles for simultaneous diagonalization. *SIAM Journal on Matrix Analysis and Applications*, 17(1):161–164, January 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25954`.

**Chandrasekaran:1996:SGS**

[CS96b] S. Chandrasekaran and Ali H. Sayed. Stabilizing the generalized Schur algorithm. *SIAM Journal on Matrix Analysis and Applications*, 17(4):950–983, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28741`.

**Crouzeix:1996:GMA**

[CS96c] Jean-Pierre Crouzeix and Siegfried Schaible. Generalized monotone affine maps. *SIAM Journal on Matrix Analysis and Applications*, 17(4):992–997, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29097`.

**Chandrasekaran:1998:FSS**

[CS98] S. Chandrasekaran and Ali H. Sayed. A fast stable solver for nonsymmetric Toeplitz and quasi-Toeplitz systems of linear equations. *SIAM Journal on Matrix Analysis and Applications*, 19(1):107–139, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29645`.

**Cao:2001:DMP**

[CS01] Liyu Cao and Howard M. Schwartz. A decomposition method for positive semidefinite matrices and its application to recursive parameter estimation. *SIAM Journal on Matrix Analysis and Applications*, 22(4):1095–1111, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:2009:TSO**

[CS09] Jie Chen and Yousef Saad. On the tensor SVD and the optimal low rank orthogonal approximation of tensors. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1709–1734, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chang:2010:RPB**

[CS10a] X.-W. Chang and D. Stehlé. Rigorous perturbation bounds of some matrix factorizations. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2841–2859, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chun:2010:CCM**

[CS10b] So Yeon Chun and A. Shapiro. Construction of covariance matrices with a specified discrepancy function minimizer, with application to factor analysis. *SIAM Journal on Matrix Analysis and Applications*, 31(4): 1570–1583, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:2021:ARN**

[CSEP21] Delin Chu, Weya Shi, Srinivas Eswar, and Haesun Park. An Alternating Rank-$k$ Nonnegative Least Squares Framework (ARkNLS) for nonnegative matrix factorization. *SIAM Journal on Matrix Analysis and Applications*, 42(4):1451–1479, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Constantinescu:1995:DSC**

[CSK95] Tiberiu Constantinescu, Ali H. Sayed, and Thomas Kailath. Displacement structure and completion problems. *SIAM Journal on Matrix Analysis and Applications*, 16(1):58–78, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23766`.

**Cai:2015:MPS**

[CSX15] Yunfeng Cai, Decai Shi, and Shufang Xu. A matrix polynomial spectral approach for general joint block diagonalization. *SIAM Journal on Matrix Analysis and Applications*, 36 (2):839–863, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cover:1988:DII**

[CT88] Thomas M. Cover and Joy A. Thomas. Determinant inequalities via information theory. *SIAM Journal on Matrix Analysis and Applications*, 9(3): 384–392, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Campbell:1991:OLT**

[CT91] Stephen L. Campbell and William J. Terrell. Observability of linear time-varying descriptor systems. *SIAM Journal on Matrix Analysis and Applications*, 12(3):484–496, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:1993:IUF**

[CT93] Min Chen and Roger Temam. Incremental unknowns in finite differences: Condition number of the matrix. *SIAM Journal on Matrix Analysis and Applications*, 14(2):432–455, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Capizzano:1999:CLP**

[CT99] S. Serra Capizzano and E. Tyrtyshnikov. Any circulant-like preconditioner for multilevel matrices is not superlinear. *SIAM Journal on Matrix Analysis and Applications*, 21(2):431–439, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33194`.

**Chu:2008:ACP**

[CT08] Delin Chu and Roger C. E. Tan. Algebraic characterizations for positive realness of descriptor systems. *SIAM Journal on Matrix Analysis and Applications*, 30(1):197–222, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chen:2015:NSV**

[CT15] Sheng Chen and Yunbo Tian. Note on "On the Singular 'Vectors' of the Lyapunov Operator" by R. Byers and S. Nash. *SIAM Journal on Matrix Analysis and Applications*, 36(3):1069–1072, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See [BN87].

**Cullum:1996:PCE**

[CW96] Jane K. Cullum and Ralph A. Willoughby. A $QL$ procedure for computing the eigenvalues of complex symmetric tridiagonal matrices. *SIAM Journal on Matrix Analysis and Applications*, 17(1):83–109, January 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/13763`.

**Che:2020:CLM**

[CWY20] Maolin Che, Yimin Wei, and Hong Yan. The computation of low multilinear rank approximations of tensors via power scheme and random projection. *SIAM Journal on Matrix Analysis and Applications*, 41(2):605–636, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cools:2018:AEL**

[CYA+18] Siegfried Cools, Emrullah Fatih Yetkin, Emmanuel Agullo, Luc Giraud, and Wim Vanroose. Analyzing the effect of local rounding error propagation on the maximal attainable accuracy of the pipelined conjugate gradient method. *SIAM Journal on Matrix Analysis and Applications*, 39(1):426–450, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Cullum:2002:TSA**

[CZ02] Jane Cullum and Tong Zhang. Two-sided Arnoldi and nonsymmetric Lanczos algorithms. *SIAM Journal on Matrix Analysis and Applications*, 24(2):303–319, 2002. CODEN

SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33901`.

**Chung:2003:EES**

[CZ03] Eric T. Chung and Jun Zou. The eigenvalues and eigenspaces of some discrete div- and curl-related operators. *SIAM Journal on Matrix Analysis and Applications*, 24(4):1149–1160, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38248`.

**Cai:2018:EDN**

[CZBL18] Yunfeng Cai, Lei-Hong Zhang, Zhaojun Bai, and Ren-Cang Li. On an eigenvector-dependent nonlinear eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 39(3):1360–1382, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dayar:2005:CMF**

[DA05] Tugrul Dayar and Nail Akar. Computing moments of first passage times to a subset of states in Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 27(2):396–412, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/44246`.

**Dancis:1991:DAS**

[Dan91] Jerome Dancis. Diagonalizing the adaptive SOR iteration method. *SIAM Journal on Matrix Analysis and Applications*, 12(4):661–678, October 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dancis:1993:CIC**

[Dan93] Jerome Dancis. Choosing the inertias for completions of certain partially specified matrices. *SIAM Journal on Matrix Analysis and Applications*, 14 (3):813–829, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Davies:2008:AD**

[Dav08] E. B. Davies. Approximate diagonalization. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1051–1064, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dax:2008:ODM**

[Dax08] Achiya Dax. Orthogonalization via deflation: a minimum norm approach for low-rank approximations of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 30 (1):236–260, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Day:1997:EIN**

[Day97] David Day. An efficient implementation of the nonsymmetric Lanczos algorithm. *SIAM Journal on Matrix Analysis and Applications*, 18(3):566–589, July 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29250`.

**DeBrunner:1988:SAD**

[DB88] Victor E. DeBrunner and A. A. (Louis) Beex. Sensitivity analysis of digital filter structures. *SIAM Journal on Matrix Analysis and Applications*, 9(1):106–125, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). SIAM Conference on Linear Algebra in Signals, Systems, and Control (Boston, Mass., 1986).

**Das:2020:NMP**

[DB20] Biswajit Das and Shreemayee Bora. Nearest matrix polynomials with a specified elementary divisor. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1505–1527, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**dAspremont:2008:FOM**

[dBG08] Alexandre d'Aspremont, Onureena Banerjee, and Laurent El Ghaoui. First-order methods for sparse covariance selection. *SIAM Journal on Matrix Analysis and Applications*, 30(1):56–66, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dai:2015:SCN**

[DBW15] Hua Dai, Zhong-Zhi Bai, and Ying Wei. On the solvability condition and numerical algorithm for the parameterized generalized inverse eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 36(2):707–726, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**DeLathauwer:2008:SIT**

[DCM08] Lieven De Lathauwer, Pierre Comon, and Nicola Mastronardi. Special issue on tensor decompositions and applications. *SIAM Journal on Matrix Analysis and Applications*, 30(3):vii, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Davis:1997:UPM**

[DD97] Timothy A. Davis and Iain S. Duff. An unsymmetric-pattern multifrontal method for sparse *LU* factorization. *SIAM Journal on Matrix Analysis and Applications*, 18(1):140–158, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.`

org/sam-bin/dbq/article/24690.

**DeSchutter:1998:DSV**

[DD98] Bart De Schutter and Bart De Moor. The $QR$ decomposition and the singular value decomposition in the symmetrized max-plus algebra. *SIAM Journal on Matrix Analysis and Applications*, 19(2):378–406, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/30478.

**DeSchutter:1999:SCP**

[DD99] Bart De Schutter and Bart De Moor. On the sequence of consecutive powers of a matrix in a Boolean algebra. *SIAM Journal on Matrix Analysis and Applications*, 21(1):328–354, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/32607.

**DeTeran:2007:LRP**

[DD07] Fernando De Terán and Froilán M. Dopico. Low rank perturbation of Kronecker structures without full rank. *SIAM Journal on Matrix Analysis and Applications*, 29(2):496–529, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**DeTeran:2008:NGK**

[DD08] Fernando De Terán and Froilán M. Dopico. A note on generic Kronecker orbits of matrix pencils with fixed rank. *SIAM Journal on Matrix Analysis and Applications*, 30(2):491–496, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Delvaux:2010:EPL**

[DD10] Steven Delvaux and Maurice Duits. An equilibrium problem for the limiting eigenvalue distribution of rational Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1894–1914, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dickinson:2012:LTC**

[DD12] Peter J. C. Dickinson and Mirjam Dür. Linear-time complete positivity detection and decomposition of sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 33 (3):701–720, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Domanov:2013:UCPa**

[DD13a] Ignat Domanov and Lieven De Lathauwer. On the uniqueness of the canonical polyadic decomposition of third-order tensors — Part I: Basic results and

uniqueness of one factor matrix. *SIAM Journal on Matrix Analysis and Applications*, 34 (3):855–875, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Domanov:2013:UCPb**

[DD13b] Ignat Domanov and Lieven De Lathauwer. On the uniqueness of the canonical polyadic decomposition of third-order tensors — Part II: Uniqueness of the overall decomposition. *SIAM Journal on Matrix Analysis and Applications*, 34(3): 876–903, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Domanov:2014:CPD**

[DD14] Ignat Domanov and Lieven De Lathauwer. Canonical polyadic decomposition of third-order tensors: Reduction to generalized eigenvalue decomposition. *SIAM Journal on Matrix Analysis and Applications*, 35(2): 636–660, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**DeTeran:2016:GCP**

[DD16] Fernando De Terán and Froilán M. Dopico. Generic change of the partial multiplicities of regular matrix pencils under low-rank perturbations. *SIAM Journal on Matrix Analysis and Applications*, 37(3):823–835, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Domanov:2020:UCD**

[DD20] Ignat Domanov and Lieven De Lathauwer. On uniqueness and computation of the decomposition of a tensor into multilinear rank-$(1, L_r, L_r)$ terms. *SIAM Journal on Matrix Analysis and Applications*, 41(2): 747–803, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Domanov:2021:CCT**

[DD21] Ignat Domanov and Lieven De Lathauwer. From computation to comparison of tensor decompositions. *SIAM Journal on Matrix Analysis and Applications*, 42(2):449–474, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**DeTeran:2020:GSM**

[DDD20] Fernando De Terán, Andrii Dmytryshyn, and Froilán M. Dopico. Generic symmetric matrix polynomials with bounded rank and fixed odd grade. *SIAM Journal on Matrix Analysis and Applications*, 41(3):1033–1058, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Daniilidis:2014:OII**

[DDL14] A. Daniilidis, D. Drusvyatskiy, and A. S. Lewis. Orthogonal invariance and identifiability. *SIAM Journal on Matrix Analysis and Applications*, 35 (2):580–598, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**DeTeran:2010:FCL**

[DDM10] Fernando De Terán, Froilán M. Dopico, and D. Steven Mackey. Fiedler companion linearizations and the recovery of minimal indices. *SIAM Journal on Matrix Analysis and Applications*, 31(4):2181–2204, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Davis:2020:DIP**

[DDN20] Timothy A. Davis, Iain S. Duff, and Stojce Nakov. Design and implementation of a parallel Markowitz threshold algorithm. *SIAM Journal on Matrix Analysis and Applications*, 41(2):573–590, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**DeLathauwer:2000:MSV**

[DDV00a] Lieven De Lathauwer, Bart De Moor, and Joos Vandewalle. A multilinear singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1253–1278, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30569`.

**DeLathauwer:2000:BRR**

[DDV00b] Lieven De Lathauwer, Bart De Moor, and Joos Vandewalle. On the best rank-1 and rank-($R_1$, $R_2$, ..., $R_N$) approximation of higher-order tensors. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1324–1342, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34699`.

**DeLathauwer:2004:CCD**

[DDV04] Lieven De Lathauwer, Bart De Moor, and Joos Vandewalle. Computation of the canonical decomposition by means of a simultaneous generalized Schur decomposition. *SIAM Journal on Matrix Analysis and Applications*, 26(2):295–327, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39786`.

**Dailey:2014:NPB**

[DDY14a] Megan Dailey, Froilán M. Dopico, and Qiang Ye. A new perturbation bound for the LDU factorization of diagonally dominant matrices. *SIAM Journal on Matrix Analysis and Applications*, 35(3):

904–930, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dailey:2014:RPT**

[DDY14b] Megan Dailey, Froilán M. Dopico, and Qiang Ye. Relative perturbation theory for diagonally dominant matrices. *SIAM Journal on Matrix Analysis and Applications*, 35(4): 1303–1328, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**deHoyos:1990:PCK**

[de 90] Inmaculada de Hoyos. Points of continuity of the Kronecker canonical form. *SIAM Journal on Matrix Analysis and Applications*, 11(2):278–300, April 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**dePillis:1992:PIM**

[de 92] John de Pillis. A parallel iteration method and the convection-diffusion equation. *SIAM Journal on Matrix Analysis and Applications*, 13(1): 248–273, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**deMesnard:1994:UB**

[de 94a] Louis de Mesnard. Unicity of biproportion. *SIAM Journal on Matrix Analysis and Applications*, 15(2):490–495, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22250`.

**DeMoor:1994:SGS**

[De 94b] Bart De Moor. On the structure of generalized singular value and $QR$ decompositions. *SIAM Journal on Matrix Analysis and Applications*, 15(1):347–358, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/20095`.

**DeLathauwer:2006:LBC**

[De 06] Lieven De Lathauwer. A link between the canonical decomposition in multilinear algebra and simultaneous matrix diagonalization. *SIAM Journal on Matrix Analysis and Applications*, 28(3):642–666, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**DeLathauwer:2008:DHOa**

[De 08a] Lieven De Lathauwer. Decompositions of a higher-order tensor in block terms—Part I: Lemmas for partitioned matrices. *SIAM Journal on Matrix Analysis and Applications*, 30 (3):1022–1032, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**DeLathauwer:2008:DHOb**

[De 08b] Lieven De Lathauwer. Decompositions of a higher-order tensor in block terms—Part II: Definitions and uniqueness. *SIAM Journal on Matrix Analysis and Applications*, 30(3): 1033–1066, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**DeLathauwer:2011:BSE**

[De 11] Lieven De Lathauwer. Blind separation of exponential polynomials and the decomposition of a tensor in rank-$(L_r, L_r, 1)$ terms. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1451–1474, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1451_s1`.

**DeTeran:2018:GDS**

[De 18] Fernando De Terán. A geometric description of the sets of palindromic and alternating matrix pencils with bounded rank. *SIAM Journal on Matrix Analysis and Applications*, 39 (3):1116–1134, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dieci:1999:SDM**

[DE99] Luca Dieci and Timo Eirola. On smooth decompositions of matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(3):800–819, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33018`.

**Demmel:1999:SAS**

[DEG+99] James W. Demmel, Stanley C. Eisenstat, John R. Gilbert, Xiaoye S. Li, and Joseph W. H. Liu. A supernodal approach to sparse partial pivoting. *SIAM Journal on Matrix Analysis and Applications*, 20(3):720–755, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29176`.

**DelCorso:1997:EEP**

[Del97] Gianna M. Del Corso. Estimating an eigenvector by the power method with a random start. *SIAM Journal on Matrix Analysis and Applications*, 18(4):913–937, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29668`.

**Demmel:1992:CDN**

[Dem92] James Demmel. The componentwise distance to the nearest singular matrix. *SIAM Journal on Matrix Analysis and Applications*, 13(1):10–19, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Demmel:1999:ASV**

[Dem99] James Demmel. Accurate singular value decompositions of structured matrices. *SIAM Journal on Matrix Analysis and Applications*, 21(2):562–580, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32871`.

**Demmel:2023:NOB**

[Dem23] James Demmel. Nearly optimal block-Jacobi preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 44(1):408–413, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1504901`.

**daFonseca:2005:IPH**

[dF05] C. M. da Fonseca. Interlacing properties for Hermitian matrices whose graph is a given tree. *SIAM Journal on Matrix Analysis and Applications*, 27(1):130–141, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/44035`.

**Damm:2020:SHJ**

[DF20] Tobias Damm and Heike Faßbender. Simultaneous hollowization, joint numerical range, and stabilization by noise. *SIAM Journal on Matrix Analysis and Applications*, 41(2):637–656, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**DAzevedo:1992:OMP**

[DFT92] E. F. D'Azevedo, P. A. Forsyth, and Wei Pai Tang. Ordering methods for preconditioned conjugate gradient methods applied to unstructured grid problems. *SIAM Journal on Matrix Analysis and Applications*, 13(3):944–961, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Iterative methods in numerical linear algebra (Copper Mountain, CO, 1990).

**DeMoor:1991:RSV**

[DG91a] Bart L. R. De Moor and Gene H. Golub. The restricted singular value decomposition: Properties and applications. *SIAM Journal on Matrix Analysis and Applications*, 12(3):401–425, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Delsarte:1991:TAAa**

[DG91b] P. Delsarte and Y. Genin. Tridiagonal approach to the algebraic environment of Toeplitz matrices. Part I: Basic results. *SIAM Journal on Matrix Analysis and Applications*, 12(2):220–238, April 1991. CODEN

SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Delsarte:1991:TAAb**

[DG91c] P. Delsarte and Y. Genin. Tridiagonal approach to the algebraic environment of Toeplitz matrices. Part II: Zero and eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 12(3):432–448, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dokmanic:2019:CFN**

[DG19] Ivan Dokmanić and Rémi Gribonval. Concentration of the Frobenius norm of generalized matrix inverses. *SIAM Journal on Matrix Analysis and Applications*, 40(1):92–121, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dong:2022:NRP**

[DGGG22] Shuyu Dong, Bin Gao, Yu Guan, and François Glineur. New Riemannian preconditioned algorithms for tensor completion via polyadic decomposition. *SIAM Journal on Matrix Analysis and Applications*, 43(2):840–866, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1394734`.

**Demmel:2015:CAR**

[DGGX15] James W. Demmel, Laura Grigori, Ming Gu, and Hua Xiang. Communication avoiding rank revealing $QR$ factorization with column pivoting. *SIAM Journal on Matrix Analysis and Applications*, 36 (1):55–89, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Delgado:2006:TVO**

[DGIM06] Antonia M. Delgado, Jeffrey S. Geronimo, Plamen Iliev, and Francisco Marcellán. Two variable orthogonal polynomials and structured matrices. *SIAM Journal on Matrix Analysis and Applications*, 28(1): 118–147, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dorpinghaus:2015:LIR**

[DGIM15] Meik Dörpinghaus, Norbert Gaffke, Lorens A. Imhof, and Rudolf Mathar. A log-Det inequality for random matrices. *SIAM Journal on Matrix Analysis and Applications*, 36(3): 1164–1179, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Demmel:1999:APS**

[DGL99] James W. Demmel, John R. Gilbert, and Xiaoye S. Li. An asynchronous parallel supernodal algorithm for sparse

Gaussian elimination. *SIAM Journal on Matrix Analysis and Applications*, 20(4):915–952, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31768`.

**DeDona:2000:CES**

[DGMR00] José A. De Doná, Graham C. Goodwin, Richard H. Middleton, and Iain Raeburn. Convergence of eigenvalues in state-discretization of linear stochastic systems. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1102–1111, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32987`.

**Demmel:2023:IAU**

[DGR23] James Demmel, Laura Grigori, and Alexander Rusciano. An improved analysis and unified perspective on deterministic and randomized low-rank matrix approximation. *SIAM Journal on Matrix Analysis and Applications*, 44(2):559–591, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1391316`.

**Dollar:2006:IFP**

[DGSW06] H. Sue Dollar, Nicholas I. M. Gould, Wil H. A. Schilders, and Andrew J. Wathen. Implicit-factorization preconditioning and iterative solvers for regularized saddle-point systems. *SIAM Journal on Matrix Analysis and Applications*, 28(1):170–189, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Demmel:1993:IEB**

[DH93] James W. Demmel and Nicholas J. Higham. Improved error bounds for underdetermined system solvers. *SIAM Journal on Matrix Analysis and Applications*, 14(1):1–14, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Drmac:1997:RRB**

[DH97] Zlatko Drmač and Vjeran Hari. Relative residual bounds for the eigenvalues of a Hermitian semidefinite matrix. *SIAM Journal on Matrix Analysis and Applications*, 18(1):21–29, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28400`.

**Davis:1999:MSC**

[DH99] Timothy A. Davis and William W. Hager. Modifying a sparse Cholesky factorization. *SIAM Journal on Matrix Analysis and Applications*, 20(3):606–627, 1999. CODEN SJMAEL.

ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32107`.

**Davis:2001:MRM**

[DH01] Timothy A. Davis and William W. Hager. Multiple-rank modifications of a sparse Cholesky factorization. *SIAM Journal on Matrix Analysis and Applications*, 22(4):997–1013, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35734`.

**Davies:2003:SPA**

[DH03] Philip I. Davies and Nicholas J. Higham. A Schur–Parlett algorithm for computing matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 25(2):464–485, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41081`.

**Davis:2005:RMS**

[DH05] Timothy A. Davis and William W. Hager. Row modifications of a sparse Cholesky factorization. *SIAM Journal on Matrix Analysis and Applications*, 26(3):621–639, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43641`.

**DeSterck:2022:LAC**

[DH22] Hans De Sterck and Yunhui He. Linear asymptotic convergence of Anderson acceleration: Fixed-point analysis. *SIAM Journal on Matrix Analysis and Applications*, 43(4):1755–1783, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1449579`.

**Dhillon:1998:RCC**

[Dhi98] Inderjit S. Dhillon. Reliable computation of the condition number of a tridiagonal matrix in $O(n)$ time. *SIAM Journal on Matrix Analysis and Applications*, 19(3):776–796, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31474`.

**Dolz:2019:BAH**

[DHM19] Jürgen Dölz, Helmut Harbrecht, and Michael D. Multerer. On the best approximation of the hierarchical matrix product. *SIAM Journal on Matrix Analysis and Applications*, 40(1):147–174, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dhillon:2005:GFA**

[DHST05] Inderjit S. Dhillon, Robert W. Heath, Jr., Mátyás A. Sustik,

and Joel A. Tropp. Generalized finite algorithms for constructing Hermitian matrices with prescribed diagonal and spectrum. *SIAM Journal on Matrix Analysis and Applications*, 27(1):61–71, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43818`.

**Davies:2001:ACM**

[DHT01] Philip I. Davies, Nicholas J. Higham, and Françoise Tisseur. Analysis of the Cholesky method with iterative refinement for solving the symmetric definite generalized eigenproblem. *SIAM Journal on Matrix Analysis and Applications*, 23(2):472–493, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37349`.

**Dongarra:1992:NCC**

[DHW92] Jack J. Dongarra, Sven Hammarling, and James H. Wilkinson. Numerical considerations in computing invariant subspaces. *SIAM Journal on Matrix Analysis and Applications*, 13(1):145–161, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Deng:2003:LSS**

[DHZ03] Yuan-Bei Deng, Xi-Yan Hu, and Lei Zhang. Least squares solution of $BXA^T = T$ over symmetric, skew-symmetric, and positive semidefinite $X$. *SIAM Journal on Matrix Analysis and Applications*, 25(2): 486–494, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40249`.

**DiFiore:2000:MAD**

[Di 00] Carmine Di Fiore. Matrix algebras and displacement decompositions. *SIAM Journal on Matrix Analysis and Applications*, 21(2):646–667, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30074`.

**DiBenedetto:2009:GMF**

[Di 09] Fabio Di Benedetto. Gram matrices of fast algebras have a rank structure. *SIAM Journal on Matrix Analysis and Applications*, 31(2):526–545, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Drineas:2019:LRM**

[DI19] Petros Drineas and Ilse C. F. Ipsen. Low-rank matrix approximations do not need a singular value gap. *SIAM Journal on Matrix Analysis and Applications*, 40(1):299–319, ???? 2019. CODEN SJMAEL. ISSN

0895-4798 (print), 1095-7162 (electronic).

**Drineas:2018:SCR**

[DIKMI18] Petros Drineas, Ilse C. F. Ipsen, Eugenia-Maria Kontopoulou, and Malik Magdon-Ismail. Structural convergence results for approximation of dominant subspaces from block Krylov spaces. *SIAM Journal on Matrix Analysis and Applications*, 39(2):567–586, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ding:1998:PRP**

[Din98] Jiu Ding. Perturbation results for projecting a point onto a linear manifold. *SIAM Journal on Matrix Analysis and Applications*, 19(3):696–700, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30660`.

**Dreesen:2015:DMP**

[DIS15] Philippe Dreesen, Mariya Ishteva, and Johan Schoukens. Decoupling multivariate polynomials using first-order information and tensor decompositions. *SIAM Journal on Matrix Analysis and Applications*, 36 (2):864–879, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Drmac:2000:AQS**

[DJ00] Zlatko Drmac and Elizabeth R. Jessup. On accurate quotient singular value computation in floating-point arithmetic. *SIAM Journal on Matrix Analysis and Applications*, 22(3):853–873, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31054`.

**Dopico:2009:PMS**

[DJ09] Froilán M. Dopico and Charles R. Johnson. Parametrization of the matrix symplectic group and applications. *SIAM Journal on Matrix Analysis and Applications*, 31(2):650–673, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dmytryshyn:2017:CST**

[DJK17] Andrii Dmytryshyn, Stefan Johansson, and Bo Kågström. Canonical structure transitions of system pencils. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1249–1267, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Djordjevic:2008:FRR**

[Djo08] Dragan S. Djordjević. Further results on the reverse order law for generalized inverses. *SIAM Journal on Matrix Analysis and Applications*, 29(4):

1242–1246, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Drzisga:2018:ABS**

[DJR+18] Daniel Drzisga, Lorenz John, Ulrich Rüde, Barbara Wohlmuth, and Walter Zulehner. On the analysis of block smoothers for saddle point problems. *SIAM Journal on Matrix Analysis and Applications*, 39(2):932–960, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Demmel:1988:ASI**

[DK88] James Demmel and Bo Kågström. Accurate solutions of ill-posed problems in control theory. *SIAM Journal on Matrix Analysis and Applications*, 9(1): 126–145, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). SIAM Conference on Linear Algebra in Signals, Systems, and Control (Boston, Mass., 1986).

**Druskin:1998:EKS**

[DK98] Vladimir Druskin and Leonid Knizhnerman. Extended Krylov subspaces: Approximation of the matrix square root and related functions. *SIAM Journal on Matrix Analysis and Applications*, 19(3): 755–771, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29240`.

**Duff:1999:DUA**

[DK99] Iain S. Duff and Jacko Koster. The design and use of algorithms for permuting large entries to the diagonal of sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(4):889–901, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31766`.

**Diaz:2000:IMC**

[DK00] J. C. Diaz and K. Komara. Incomplete multilevel Cholesky factorizations. *SIAM Journal on Matrix Analysis and Applications*, 22(3):895–911, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31112`.

**Duff:2001:APL**

[DK01] I. S. Duff and J. Koster. On algorithms for permuting large entries to the diagonal of a sparse matrix. *SIAM Journal on Matrix Analysis and Applications*, 22(4):973–996, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35844`.

**Demmel:2005:AES**

[DK05] James Demmel and Plamen Koev. The accurate and efficient solution of a totally positive generalized Vandermonde linear system. *SIAM Journal on Matrix Analysis and Applications*, 27(1):142–152, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/44033`.

**Dopico:2006:ASR**

[DK06] Froilán M. Dopico and Plamen Koev. Accurate symmetric rank revealing and eigendecompositions of symmetric structured matrices. *SIAM Journal on Matrix Analysis and Applications*, 28(4):1126–1156, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Duits:2008:EPL**

[DK08a] Maurice Duits and Arno B. J. Kuijlaars. An equilibrium problem for the limiting eigenvalue distribution of banded Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 30(1):173–196, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dumitriu:2008:DEE**

[DK08b] Ioana Dumitriu and Plamen Koev. Distributions of the extreme eigenvalues of beta–Jacobi random matrices. *SIAM Journal on Matrix Analysis and Applications*, 30(1):1–6, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dolgov:2013:TLQ**

[DK13] Sergey Dolgov and Boris Khoromskij. Two-level QTT–Tucker format for optimized tensor calculus. *SIAM Journal on Matrix Analysis and Applications*, 34(2):593–623, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See erratum [EDK16].

**Dmytryshyn:2014:OCH**

[DK14] Andrii Dmytryshyn and Bo Kågström. Orbit closure hierarchies of skew-symmetric matrix pencils. *SIAM Journal on Matrix Analysis and Applications*, 35 (4):1429–1443, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dmytryshyn:2015:CST**

[DK15] Andrii Dmytryshyn and Bo Kågström. Coupled Sylvester-type matrix equations and block diagonalization. *SIAM Journal on Matrix Analysis and Applications*, 36(2):580–593, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**deKerchove:2010:IFR**

[dKV10] Cristobald de Kerchove and Paul Van Dooren. Iterative fil-

tering in reputation systems. *SIAM Journal on Matrix Analysis and Applications*, 31(4): 1812–1834, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dodson:1992:TTE**

[DL92] David S. Dodson and Stewart A. Levin. A tricyclic tridiagonal equation solver. *SIAM Journal on Matrix Analysis and Applications*, 13(4):1246–1254, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**DelBuono:2002:GIM**

[DL02] N. Del Buono and L. Lopez. Geometric integration on manifold of square oblique rotation matrices. *SIAM Journal on Matrix Analysis and Applications*, 23(4):974–989, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37768`.

**Dieci:2003:LES**

[DL03] Luca Dieci and Luciano Lopez. Lyapunov exponents of systems evolving on quadratic groups. *SIAM Journal on Matrix Analysis and Applications*, 24(4):1175–1185, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39101`.

**Domanov:2015:GUC**

[DL15] Ignat Domanov and Lieven De Lathauwer. Generic uniqueness conditions for the canonical polyadic decomposition and INDSCAL. *SIAM Journal on Matrix Analysis and Applications*, 36(4):1567–1589, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Diaz:2017:DFT**

[DL17a] Steven P. Diaz and Adam Lutoborski. Discrete Fourier transform tensors and their ranks. *SIAM Journal on Matrix Analysis and Applications*, 38(3):1010–1027, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dutta:2017:PWL**

[DL17b] Aritra Dutta and Xin Li. On a problem of weighted low-rank approximation of matrices. *SIAM Journal on Matrix Analysis and Applications*, 38 (2):530–553, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dendievel:2022:SPM**

[DLLT22] Sarah Dendievel, Guy Latouche, Yuanyuan Liu, and Yingchun Tang. Singularly perturbed Markov modulated fluid queues. *SIAM Journal on Matrix Analysis and Applications*, 43(1):377–404, ????

2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1395387`.

**Diele:2004:SIE**

[DLM04] Fasma Diele, Teresa Laudadio, and Nicola Mastronardi. On some inverse eigenvalue problems with Toeplitz-related structure. *SIAM Journal on Matrix Analysis and Applications*, 26(1):285–294, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43068`.

**Du:2013:SRS**

[DLMT13] Nguyen Huu Du, Vu Hoang Linh, Volker Mehrmann, and Do Duc Thuan. Stability and robust stability of linear time-invariant delay differential-algebraic equations. *SIAM Journal on Matrix Analysis and Applications*, 34(4):1631–1654, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Drusvyatskiy:2015:CRC**

[DLT15] Dmitriy Drusvyatskiy, Hon-Leung Lee, and Rekha R. Thomas. Counting real critical points of the distance to orthogonally invariant matrix sets. *SIAM Journal on Matrix Analysis and Applications*, 36 (3):1360–1380, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dopico:2004:NMB**

[DM04] Froilán M. Dopico and Julio Moro. A note on multiplicative backward errors of accurate SVD algorithms. *SIAM Journal on Matrix Analysis and Applications*, 25(4):1021–1031, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42700`.

**Dopico:2005:PTF**

[DM05] Froilán M. Dopico and Juan M. Molera. Perturbation theory for factorizations of *LU* type through series expansions. *SIAM Journal on Matrix Analysis and Applications*, 27(2):561–581, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/61214`.

**Dharmawansa:2013:DDR**

[DMC13] Prathapasinghe Dharmawansa, Matthew R. McKay, and Yang Chen. Distributions of Demmel and related condition numbers. *SIAM Journal on Matrix Analysis and Applications*, 34 (1):257–279, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Goulart:2014:ASC**

[dMGF14] J. H. de M. Goulart and G. Favier. An algebraic solution for the Candecomp/PARAFAC decomposition with circulant factors. *SIAM Journal on Matrix Analysis and Applications*, 35(4):1543–1562, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dopico:2003:OHR**

[DMM03] Froilán M. Dopico, Juan M. Molera, and Julio Moro. An orthogonal high relative accuracy algorithm for the symmetric eigenproblem. *SIAM Journal on Matrix Analysis and Applications*, 25(2):301–351, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39371`.

**Drineas:2008:REM**

[DMM08] Petros Drineas, Michael W. Mahoney, and S. Muthukrishnan. Relative-error $CUR$ matrix decompositions. *SIAM Journal on Matrix Analysis and Applications*, 30(2):844–881, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dieci:1996:CTR**

[DMP96] Luca Dieci, Benedetta Morini, and Alessandra Papini. Computational techniques for real logarithms of matrices. *SIAM Journal on Matrix Analysis and Applications*, 17(3):570–593, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27361`.

**Diele:2009:EEP**

[DMR09] Fasma Diele, Igor Moret, and Stefania Ragni. Error estimates for polynomial Krylov approximations to matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1546–1565, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dellacherie:2009:HFI**

[DMS09] Claude Dellacherie, Servet Martinez, and Jaime San Martín. Hadamard functions of inverse $M$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(2):289–315, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dellacherie:2012:HFP**

[DMS12] Claude Dellacherie, Servet Martinez, and Jaime San Martin. Hadamard functions that preserve inverse $M$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 33(2):501–522, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dellacherie:2013:CIM**

[DMS13] Claude Dellacherie, Servet Martinez, and Jaime San Martin. The class of inverse $M$-matrices associated to random walks. *SIAM Journal on Matrix Analysis and Applications*, 34(2):831–854, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Duchin:2023:MSA**

[DMW23] Moon Duchin, James M. Murphy, and Thomas Weighill. Measuring segregation via analysis on graphs. *SIAM Journal on Matrix Analysis and Applications*, 44 (1):80–105, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1466773`.

**DeLathauwer:2008:DHOc**

[DN08] Lieven De Lathauwer and Dimitri Nion. Decompositions of a higher-order tensor in block terms—Part III: Alternating least squares algorithms. *SIAM Journal on Matrix Analysis and Applications*, 30(3):1067–1083, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Domes:2011:REE**

[DN11] Ferenc Domes and Arnold Neumaier. Rigorous enclosures of ellipsoids and directed Cholesky factorizations. *SIAM Journal on Matrix Analysis and Applications*, 32(1): 262–285, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p262_s1`.

**Dollar:2007:CSP**

[Dol07] H. S. Dollar. Constraint-style preconditioners for regularized saddle point problems. *SIAM Journal on Matrix Analysis and Applications*, 29(2): 672–684, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Drmac:1994:PCF**

[DOV94] Zlatko Drmač, Matjaž Omladič, and Krešimir Veselić. On the perturbation of the Cholesky factorization. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1319–1332, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24471`.

**Dieci:2000:CPA**

[DP00] Luca Dieci and Alessandra Papini. Conditioning and Padé approximation of the logarithm of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 21(3):913–930, 2000. CODEN SJMAEL.

ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34531`.

**Dhillon:2004:OER**

[DP04] Inderjit S. Dhillon and Beresford N. Parlett. Orthogonal eigenvectors and relative gaps. *SIAM Journal on Matrix Analysis and Applications*, 25(3):858–899, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37011`.

**Duff:2005:SSP**

[DP05] Iain S. Duff and Stéphane Pralet. Strategies for scaling and pivoting for sparse symmetric indefinite problems. *SIAM Journal on Matrix Analysis and Applications*, 27(2):313–340, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/61043`.

**Duff:2007:TSM**

[DP07] Iain S. Duff and Stéphane Pralet. Towards stable mixed pivoting strategies for the sequential and parallel solution of sparse symmetric indefinite systems. *SIAM Journal on Matrix Analysis and Applications*, 29(3):1007–1024, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dieci:2009:TPS**

[DP09] Luca Dieci and Alessandro Pugliese. Two-parameter SVD: Coalescing singular values and periodicity. *SIAM Journal on Matrix Analysis and Applications*, 31(2):375–403, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Delgado:2010:OCB**

[DP10] Jorge Delgado and J. M. Peña. Optimal conditioning of Bernstein collocation matrices. *SIAM Journal on Matrix Analysis and Applications*, 31 (3):990–996, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Delgado:2015:ACC**

[DP15] Jorge Delgado and J. M. Penña. Accurate computations with collocation matrices of $q$-Bernstein polynomials. *SIAM Journal on Matrix Analysis and Applications*, 36 (2):880–893, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dieci:2013:ACP**

[DPP13] Luca Dieci, Alessandra Papini, and Alessandro Pugliese. Approximating coalescing points for eigenvalues of Hermitian matrices of three parameters.

*SIAM Journal on Matrix Analysis and Applications*, 34(2): 519–541, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dieci:2022:TFM**

[DPP22] Luca Dieci, Alessandra Papini, and Alessandro Pugliese. Takagi factorization of matrices depending on parameters and locating degeneracies of singular values. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1148–1161, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1456273`.

**Dayar:2002:QBD**

[DQ02] Tuugrul Dayar and Franck Quessette. Quasi-birth-and-death processes with level-geometric distribution. *SIAM Journal on Matrix Analysis and Applications*, 24(1):281–291, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38914`.

**Dopico:2022:DSE**

[DQV22a] Froilán M. Dopico, María C. Quintana, and Paul Van Dooren. Diagonal scalings for the eigenstructure of arbitrary pencils. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1213–1237, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M1364011`.

**Dopico:2022:SMS**

[DQV22b] Froilán M. Dopico, María C. Quintana, and Paul Van Dooren. Strongly minimal self-conjugate linearizations for polynomial and rational matrices. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1354–1381, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1453542`.

**Desai:1993:CRM**

[DR93] Madhav P. Desai and Vasant B. Rao. On the convergence of reversible Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 14(4):950–966, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Drissi:2006:SIS**

[Dri06] Driss Drissi. Sharp inequalities for some operator means. *SIAM Journal on Matrix Analysis and Applications*, 28(3): 822–828, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Drmac:1996:CBJ**

[Drm96] Zlatko Drmač. On the condition behaviour in the Jacobi method. *SIAM Journal on Matrix Analysis and Applications*, 17(3):509–514, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26171`.

**Drmac:2000:NAA**

[Drm00a] Zlatko Drmac. New accurate algorithms for singular value decomposition of matrix triplets. *SIAM Journal on Matrix Analysis and Applications*, 21(3):1026–1050, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32120`.

**Drmac:2000:PAB**

[Drm00b] Zlatko Drmac. On principal angles between subspaces of Euclidean space. *SIAM Journal on Matrix Analysis and Applications*, 22(1):173–194, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32082`.

**Drmac:2010:GCP**

[Drm10] Zlatko Drmač. A global convergence proof for cyclic Jacobi methods with block rotations. *SIAM Journal on Matrix Analysis and Applications*, 31 (3):1329–1350, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dette:2007:MMR**

[DRSZ07] Holger Dette, Bettina Reuther, W. J. Studden, and M. Zygmunt. Matrix measures and random walks with a block tridiagonal transition matrix. *SIAM Journal on Matrix Analysis and Applications*, 29(1): 117–142, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Deift:1991:MPT**

[DRTW91] P. A. Deift, S. Rivera, C. Tomei, and D. S. Watkins. A monotonicity property for Toda-type flows. *SIAM Journal on Matrix Analysis and Applications*, 12(3):463–468, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dorschky:2021:BTM**

[DRV21] Ines Dorschky, Timo Reis, and Matthias Voigt. Balanced truncation model reduction for symmetric second order systems — a passivity-based approach. *SIAM Journal on Matrix Analysis and Applications*, 42(4):1602–1635, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Driessel:1995:LOM**

[DS95] Kenneth R. Driessel and Wasin So. Linear operators on matrices: preserving spectrum and displacement structure. *SIAM Journal on Matrix Analysis and Applications*, 16(2):488–501, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23444`.

**Dayar:1997:QLL**

[DS97] Tuğrul Dayar and William J. Stewart. Quasi lumpability, lower-bounding coupling matrices, and nearly completely decomposable Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 18(2):482–498, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29427`.

**Dodig:2010:CCM**

[DS10] Marija Dodig and Marko Stošić. Combinatorics of column minimal indices and matrix pencil completion problems. *SIAM Journal on Matrix Analysis and Applications*, 31 (5):2318–2346, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Draganescu:2016:OOP**

[DS16] Andrei Draganescu and Jyoti Saraswat. Optimal-order preconditioners for linear systems arising in the semismooth Newton solution of a class of control-constrained problems. *SIAM Journal on Matrix Analysis and Applications*, 37(3): 1038–1070, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Donelan:2017:HPK**

[DS17] P. Donelan and J. M. Selig. Hyperbolic pseudoinverses for kinematics in the Euclidean group. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1541–1559, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Drmac:2018:DEI**

[DS18] Zlatko Drmac and Arvind Krishna Saibaba. The discrete empirical interpolation method: Canonical structure and formulation in weighted inner product spaces. *SIAM Journal on Matrix Analysis and Applications*, 39(3):1152–1180, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dodig:2019:GMP**

[DS19] Marija Dodig and Marko Stosić. The general matrix pencil completion problem: a

minimal case. *SIAM Journal on Matrix Analysis and Applications*, 40(1):347–369, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Damle:2020:UBI**

[DS20a] Anil Damle and Yuekai Sun. Uniform bounds for invariant subspace perturbations. *SIAM Journal on Matrix Analysis and Applications*, 41(3):1208–1236, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dodig:2020:ROP**

[DS20b] Marija Dodig and Marko Stosić. Rank one perturbations of matrix pencils. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1889–1911, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Donnelly:2023:AIA**

[DS23] Jon Donnelly and Peter Stechlinski. Analyzing the influence of agents in trust networks: Applying nonsmooth eigensensitivity theory to a graph centrality problem. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1271–1298, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M146884X`.

**Domanov:2017:LMS**

[DSD17] Ignat Domanov, Alwin Stegeman, and Lieven De Lathauwer. On the largest multilinear singular values of higher-order tensors. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1434–1453, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**deSilva:2008:TRI**

[dSL08] Vin de Silva and Lek-Heng Lim. Tensor rank and the ill-posedness of the best low-rank approximation problem. *SIAM Journal on Matrix Analysis and Applications*, 30(3):1084–1127, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Donatelli:2011:AMP**

[DSSC11] Marco Donatelli, Matteo Semplice, and Stefano Serra-Capizzano. Analysis of multigrid preconditioning for implicit PDE solvers for degenerate parabolic equations. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1125–1148, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1125_s1`.

**deSa:2001:SIP**

[dSV01] E. Marques de Sá and João David Vieira. On the

similarity invariant polynomials of matrices and principal submatrices. *SIAM Journal on Matrix Analysis and Applications*, 23(2):563–580, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36742`.

**Druskin:2014:ATI**

[DSZ14] V. Druskin, V. Simoncini, and M. Zaslavsky. Adaptive tangential interpolation in rational Krylov subspaces for MIMO dynamical systems. *SIAM Journal on Matrix Analysis and Applications*, 35(2): 476–498, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dhillon:2008:MNP**

[DT08] Inderjit S. Dhillon and Joel A. Tropp. Matrix nearness problems with Bregman divergences. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1120–1146, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Druinsky:2011:GFB**

[DT11] Alex Druinsky and Sivan Toledo. The growth-factor bound for the Bunch–Kaufman factorization is tight. *SIAM Journal on Matrix Analysis and Applications*, 32(3): 928–937, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p928_s1`.

**deTeran:2008:LRP**

[dTDM08] Fernando de Terán, Froilán M. Dopico, and Julio Moro. Low rank perturbation of Weierstrass structure. *SIAM Journal on Matrix Analysis and Applications*, 30(2):538–547, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Diaz-Toca:2005:GCR**

[DTGVL05] Gema M. Diaz-Toca, Laureano Gonzalez-Vega, and Henri Lombardi. Generalizing Cramer's rule: Solving uniformly linear systems of equations. *SIAM Journal on Matrix Analysis and Applications*, 27(3):621–637, July 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41886`.

**Dubrulle:2000:HTR**

[Dub00] A. A. Dubrulle. Householder transformations revisited. *SIAM Journal on Matrix Analysis and Applications*, 22(1):33–40, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33856`.

**DeMoor:1992:GSV**

[DV92a] Bart De Moor and Paul Van Dooren. Generalizations of the singular value and $QR$ decompositions. *SIAM Journal on Matrix Analysis and Applications*, 13(4):993–1014, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Demmel:1992:JMM**

[DV92b] James Demmel and Krešimir Veselić. Jacobi's method is more accurate than $QR$. *SIAM Journal on Matrix Analysis and Applications*, 13(4):1204–1245, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Delvaux:2006:SPM**

[DV06a] Steven Delvaux and Marc Van Barel. Structures preserved by matrix inversion. *SIAM Journal on Matrix Analysis and Applications*, 28(1):213–228, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Delvaux:2006:SPS**

[DV06b] Steven Delvaux and Marc Van Barel. Structures preserved by Schur complementation. *SIAM Journal on Matrix Analysis and Applications*, 28(1):229–252, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Delvaux:2007:HRA**

[DV07] Steven Delvaux and Marc Van Barel. A Hessenberg reduction algorithm for rank structured matrices. *SIAM Journal on Matrix Analysis and Applications*, 29(3):895–926, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Delvaux:2008:BSR**

[DV08a] Steven Delvaux and Marc Van Barel. A $QR$-based solver for rank structured matrices. *SIAM Journal on Matrix Analysis and Applications*, 30(2):464–490, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Delvaux:2008:GWR**

[DV08b] Steven Delvaux and Marc Van Barel. A Givens-weight representation for rank structured matrices. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1147–1170, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Drmac:2008:NFAa**

[DV08c] Zlatko Drmač and Krešimir Veselić. New fast and accurate Jacobi SVD algorithm. I. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1322–1342, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Drmac:2008:NFAb**

[DV08d] Zlatko Drmač and Krešimir Veselić. New fast and accurate Jacobi SVD algorithm. II. *SIAM Journal on Matrix Analysis and Applications*, 29(4): 1343–1362, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**David:2006:EIM**

[DW06] Roden J. A. David and David S. Watkins. Efficient implementation of the multishift $QR$ algorithm for the unitary eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 28(3):623–633, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ding:2015:GTE**

[DW15] Weiyang Ding and Yimin Wei. Generalized tensor eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 36(3):1073–1099, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Duan:2020:ALN**

[DWWY20] Yaqi Duan, Mengdi Wang, Zaiwen Wen, and Yaxiang Yuan. Adaptive low-nonnegative-rank approximation for state aggregation of Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 41(1): 244–278, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Davis:1990:NPA**

[DY90] Timothy A. Davis and Pen-Chung Yew. A nondeterministic parallel algorithm for general unsymmetric sparse $LU$ factorization. *SIAM Journal on Matrix Analysis and Applications*, 11(3):383–402, July 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Sparse matrices (Gleneden Beach, OR, 1989).

**Drton:2010:PPS**

[DY10] Mathias Drton and Josephine Yu. On a parametrization of positive semidefinite matrices with zeros. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2665–2680, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**DeSterck:2006:RCP**

[DYH06] Hans De Sterck, Ulrike Meier Yang, and Jeffrey J. Heys. Reducing complexity in parallel algebraic multigrid preconditioners. *SIAM Journal on Matrix Analysis and Applications*, 27(4):1019–1039, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Dong:2016:HMF**

[DYY16] Bo Dong, Bo Yu, and Yan Yu. A homotopy method for find-

ing all solutions of a multiparameter eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 37(2): 550–571, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ding:2001:UOC**

[DZ01] Fan Ding and Xingzhi Zhan. On the unitary orbit of complex matrices. *SIAM Journal on Matrix Analysis and Applications*, 23(2):511–516, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38159`.

**Edelman:1998:GAO**

[EAS98] Alan Edelman, Tomás A. Arias, and Steven T. Smith. The geometry of algorithms with orthogonality constraints. *SIAM Journal on Matrix Analysis and Applications*, 20(2): 303–353, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29095`.

**Evert:2022:GEB**

[ED22] Eric Evert and Lieven De Lathauwer. Guarantees for existence of a best canonical polyadic approximation of a noisy low-rank tensor. *SIAM Journal on Matrix Analysis and Applications*, 43(1):328–369, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M1381046`.

**Evert:2023:BLR**

[ED23] Eric Evert and Lieven De Lathauwer. On best low rank approximation of positive definite tensors. *SIAM Journal on Matrix Analysis and Applications*, 44(2):867–893, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1494178`.

**Edelman:1988:ECN**

[Ede88] Alan Edelman. Eigenvalues and condition numbers of random matrices. *SIAM Journal on Matrix Analysis and Applications*, 9(4):543–560, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Etter:2016:ETL**

[EDK16] Simon Etter, Sergey Dolgov, and Boris N. Khoromskij. Erratum: Two-level QTT–Tucker format for optimized tensor calculus. *SIAM Journal on Matrix Analysis and Applications*, 37(2):818–822, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See [DK13].

**Eiermann:2011:DRM**

[EEG11] M. Eiermann, O. G. Ernst, and S. Güttel. Deflated restarting for matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 32(2): 621–641, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p621_s1`.

**Edelman:1997:GAP**

[EEK97] Alan Edelman, Erik Elmroth, and Bo Kågström. A geometric approach to perturbation theory of matrices and matrix pencils. Part I: Versal deformations. *SIAM Journal on Matrix Analysis and Applications*, 18(3):653–692, July 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28463`.

**Edelman:1999:GAP**

[EEK99] Alan Edelman, Erik Elmroth, and Bo Kågström. A geometric approach to perturbation theory of matrices and matrix pencils. Part II: a stratification-enhanced staircase algorithm. *SIAM Journal on Matrix Analysis and Applications*, 20(3):667–699, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31018`.

**Effenberger:2013:RSC**

[Eff13] C. Effenberger. Robust successive computation of eigenpairs for nonlinear eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 34 (3):1231–1256, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Erhel:2000:ACG**

[EG00] Jocelyne Erhel and Frédéric Guyomarc'h. An augmented conjugate gradient method for solving consecutive symmetric positive definite linear systems. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1279–1299, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33019`.

**Estrin:2015:NSP**

[EG15] Ron Estrin and Chen Greif. On nonsingular saddle-point systems with a maximally rank deficient leading block. *SIAM Journal on Matrix Analysis and Applications*, 36(2):367–384, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Elsworth:2020:BRA**

[EG20] Steven Elsworth and Stefan Güttel. The block rational Arnoldi method. *SIAM Journal on Matrix Analysis*

*and Applications*, 41(2):365–388, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Elhay:1999:SEE**

[EGGR99] S. Elhay, G. M. L. Gladwell, G. H. Golub, and Y. M. Ram. On some eigenvector-eigenvalue relations. *SIAM Journal on Matrix Analysis and Applications*, 20(3):563–574, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31072`.

**Elhay:1991:UDO**

[EGK91] Sylvan Elhay, Gene H. Golub, and Jaroslav Kautský. Updating and downdating of orthogonal polynomials with data fitting applications. *SIAM Journal on Matrix Analysis and Applications*, 12(2):327–353, April 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Eisenstat:2017:SCR**

[EGTP17] Stanley C. Eisenstat, Serge Gratton, and David Titley-Peloquin. On the symmetric componentwise relative backward error for linear systems of equations. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1100–1115, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Eirola:2004:SML**

[EHvP04] Timo Eirola, Marko Huhtanen, and Jan von Pfaler. Solution methods for $\mathbf{R}$-linear problems in $\mathbf{C}^n$. *SIAM Journal on Matrix Analysis and Applications*, 25(3):804–828, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41594`.

**Ewald:2010:CET**

[EHW10] Brian D. Ewald, Jeffrey Humpherys, and Jeremy M. West. Computing expected transition events in reducible Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1040–1054, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Eisenstat:1998:TAP**

[EI98] Stanley C. Eisenstat and Ilse C. F. Ipsen. Three absolute perturbation bounds for matrix eigenvalues imply relative bounds. *SIAM Journal on Matrix Analysis and Applications*, 20(1):149–158, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32328`.

**Eirola:2000:RPD**

[Eir00] Timo Eirola. A refined polar decomposition: $A =$

*UPD*. *SIAM Journal on Matrix Analysis and Applications*, 22(3):824–836, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36921`.

**Edelman:2023:FTM**

[EJ23] Alan Edelman and Sungwoo Jeong. Fifty three matrix factorizations: a systematic approach. *SIAM Journal on Matrix Analysis and Applications*, 44(2):415–480, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1416035`.

**Elmroth:2009:SCO**

[EJK09] Erik Elmroth, Stefan Johansson, and Bo Kågström. Stratification of controllability and observability pairs—theory and use in applications. *SIAM Journal on Matrix Analysis and Applications*, 31(2): 203–226, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Elmroth:1996:SMP**

[EK96] Erik Elmroth and Bo Kågström. The set of 2-by-3 matrix pencils — Kronecker structures and their transitions under perturbations. *SIAM Journal on Matrix Analysis and Applications*, 17(1):1–34, January 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26090`.

**Embree:2017:PMP**

[EK17] Mark Embree and Blake Keeler. Pseudospectra of matrix pencils for transient analysis of differential-algebraic equations. *SIAM Journal on Matrix Analysis and Applications*, 38(3):1028–1054, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Elsner:1993:ACP**

[EKNX93] L. Elsner, I. Koltracht, M. Neumann, and D. Xiao. On accurate computations of the Perron root. *SIAM Journal on Matrix Analysis and Applications*, 14(2):456–467, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Evans:1991:NSC**

[EL91] D. J. Evans and C. Li. New stopping criteria for some iterative methods for a class of unsymmetric linear systems. *SIAM Journal on Matrix Analysis and Applications*, 12(3): 549–551, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Eisenstat:1992:ESS**

[EL92] Stanley C. Eisenstat and Joseph W. H. Liu. Exploiting

structural symmetry in unsymmetric sparse symbolic factorization. *SIAM Journal on Matrix Analysis and Applications*, 13(1):202–211, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**ElGhaoui:1997:RSL**

[EL97] Laurent El Ghaoui and Hervé Lebret. Robust solutions to least-squares problems with uncertain data. *SIAM Journal on Matrix Analysis and Applications*, 18(4):1035–1064, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29813`.

**Eisenstat:2005:TET**

[EL05] Stanley C. Eisenstat and Joseph W. H. Liu. The theory of elimination trees for sparse unsymmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 26(3):686–705, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40563`.

**Eisenstat:2008:AAE**

[EL08] Stanley C. Eisenstat and Joseph W. H. Liu. Algorithmic aspects of elimination trees for sparse unsymmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 29 (4):1363–1381, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Elman:1997:PEP**

[Elm97] Howard C. Elman. Perturbation of eigenvalues of preconditioned Navier–Stokes operators. *SIAM Journal on Matrix Analysis and Applications*, 18(3):733–751, July 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29487`.

**Epperly:2022:TQS**

[ELN22] Ethan N. Epperly, Lin Lin, and Yuji Nakatsukasa. A theory of quantum subspace diagonalization. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1263–1290, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M145954X`.

**Eltinge:1992:ECP**

[Elt92] John L. Eltinge. Exponential convergence properties of autocovariance matrix inverses and latent vector prediction coefficients. *SIAM Journal on Matrix Analysis and Applications*, 13(4):1067–1084, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Edelman:2000:SFE**

[EM00] Alan Edelman and Yanyuan Ma. Staircase failures explained by orthogonal versal forms. *SIAM Journal on Matrix Analysis and Applications*, 21(3):1004–1025, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33574`.

**Eubanks:2010:GSB**

[EM10] S. D. Eubanks and J. J. McDonald. On a generalization of Soules bases. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1227–1234, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Erway:2015:ECE**

[EM15] Jennifer B. Erway and Roummel F. Marcia. On efficiently computing the eigenvalues of limited-memory quasi-Newton matrices. *SIAM Journal on Matrix Analysis and Applications*, 36(3):1338–1359, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Embree:2009:AEI**

[Emb09] Mark Embree. The Arnoldi eigenvalue iteration with exact shifts can fail. *SIAM Journal on Matrix Analysis and Applications*, 31(1):1–10, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Escobedo:2017:REF**

[EMC17] Adolfo R. Escobedo and Erick Moreno-Centeno. Roundoff-error-free basis updates of *LU* factorizations for the efficient validation of optimality certificates. *SIAM Journal on Matrix Analysis and Applications*, 38(3):829–853, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Erlangga:2008:DBP**

[EN08] Yogi A. Erlangga and Reinhard Nabben. Deflation and balancing preconditioners for Krylov subspace methods applied to nonsymmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 30 (2):684–699, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Eiermann:1992:ARM**

[ENV92] M. Eiermann, W. Niethammer, and R. S. Varga. Acceleration of relaxation methods for non-Hermitian linear systems. *SIAM Journal on Matrix Analysis and Applications*, 13(3):979–991, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Iterative methods in numerical linear algebra (Copper Mountain, CO, 1990).

**Estrin:2019:ENE**

[EOS19a] Ron Estrin, Dominique Orban, and Michael Saunders. Euclidean-norm error bounds for SYMMLQ and CG. *SIAM Journal on Matrix Analysis and Applications*, 40(1):235–253, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Estrin:2019:LIMb**

[EOS19b] Ron Estrin, Dominique Orban, and Michael A. Saunders. LNLQ: an iterative method for least-norm problems with an error minimization property. *SIAM Journal on Matrix Analysis and Applications*, 40(3):1102–1124, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Estrin:2019:LIMa**

[EOS19c] Ron Estrin, Dominique Orban, and Michael A. Saunders. LSLQ: an iterative method for linear least-squares with an error minimization property. *SIAM Journal on Matrix Analysis and Applications*, 40(1):254–275, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Elden:1994:BDL**

[EP94] L. Eldén and H. Park. Block downdating of least squares solutions. *SIAM Journal on Matrix Analysis and Applications*, 15(3):1018–1034, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23691`.

**Ernst:2000:RMK**

[Ern00] Oliver G. Ernst. Residual-minimizing Krylov subspace methods for stabilized discretizations of convection-diffusion equations. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1079–1101, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32576`.

**Eldersveld:1992:BLU**

[ES92] Samuel K. Eldersveld and Michael A. Saunders. A block-LU update for large-scale linear programming. *SIAM Journal on Matrix Analysis and Applications*, 13(1):191–201, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Edelman:2005:TCN**

[ES05] Alan Edelman and Brian D. Sutton. Tails of condition number distributions. *SIAM Journal on Matrix Analysis and Applications*, 27(2):547–560, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/61425`.

**El-Shehawey:2008:ITM**

[ES08] Mohamed A. El-Shehawey. On inverses of tridiagonal matrices arising from Markov chain-random walk I. *SIAM Journal on Matrix Analysis and Applications*, 30(2):497–508, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Elden:2009:NGM**

[ES09] Lars Eldén and Berkant Savas. A Newton–Grassmann method for computing the best multilinear rank-$(r_1, r_2, r_3)$ approximation of a tensor. *SIAM Journal on Matrix Analysis and Applications*, 31(2):248–271, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Elden:2011:PTO**

[ES11] Lars Eldén and Berkant Savas. Perturbation theory and optimality conditions for the best multilinear rank approximation of a tensor. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1422–1450, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1422_s1`.

**Elden:2012:SIP**

[ES12] Lars Eldén and Valeria Simoncini. Solving ill-posed linear systems with GMRES and a singular preconditioner. *SIAM Journal on Matrix Analysis and Applications*, 33(4):1369–1394, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Elman:2018:LRM**

[ES18] Howard C. Elman and Tengfei Su. A low-rank multigrid method for the stochastic steady-state diffusion problem. *SIAM Journal on Matrix Analysis and Applications*, 39(1):492–509, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**El-Sayed:2001:IMS**

[ESR01] Salah M. El-Sayed and André C. M. Ran. On an iteration method for solving a class of nonlinear matrix equations. *SIAM Journal on Matrix Analysis and Applications*, 23(3):632–645, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34557`.

**Embree:2012:STR**

[ESS+12] Mark Embree, Josef A. Sifuentes, Kirk M. Soodhalter, Daniel B. Szyld, and Fei Xue. Short-term recurrence Krylov subspace methods for nearly Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 33(2):480–

500, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ephraim:2010:ISC**

[ET10] Yariv Ephraim and Michael Tinston. Iterative Schur complement and multistage Wiener filtering. *SIAM Journal on Matrix Analysis and Applications*, 31(4):2222–2238, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ernst:2010:SGM**

[EU10] Oliver G. Ernst and Elisabeth Ullmann. Stochastic Galerkin matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1848–1872, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Elssel:2006:PBA**

[EV06] Kolja Elssel and Heinrich Voss. An A priori bound for automated multilevel substructuring. *SIAM Journal on Matrix Analysis and Applications*, 28(2):386–397, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Evert:2022:REC**

[EVD22] Eric Evert, Michiel Vandecappelle, and Lieven De Lathauwer. A recursive eigenspace computation for the canonical polyadic decomposition. *SIAM Journal on Matrix Analysis and Applications*, 43 (1):274–300, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1423026`.

**Elman:2013:LII**

[EW13] Howard C. Elman and Minghao Wu. Lyapunov inverse iteration for computing a few rightmost eigenvalues of large generalized eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 34 (4):1685–1707, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Edelman:2020:GWE**

[EW20] Alan Edelman and Yuyang Wang. The GSVD: Where are the ellipses? Matrix trigonometry, and more. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1826–1856, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Elman:1995:AAH**

[EZ95] Howard C. Elman and Xuejun Zhang. Algebraic analysis of the hierarchical basis preconditioner. *SIAM Journal on Matrix Analysis and Applications*, 16(1):192–206, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/23693.

**Fontan:2023:PSL**

[FA23] Angela Fontan and Claudio Altafini. Pseudoinverses of signed Laplacian matrices. *SIAM Journal on Matrix Analysis and Applications*, 44(2):622–647, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL https://epubs.siam.org/doi/10.1137/22M1493392.

**Farrell:2016:NDE**

[Far16] P. E. Farrell. The number of distinct eigenvalues of a matrix after perturbation. *SIAM Journal on Matrix Analysis and Applications*, 37(2):572–576, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fairag:2016:BPT**

[FAT16] Faisal Fairag, Mohammed Alshahrani, and Hattan Tawfiq. Bramble–Pasciak-type conjugate gradient method for Darcy's equations. *SIAM Journal on Matrix Analysis and Applications*, 37(1):469–489, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Faybusovich:1995:MGA**

[Fay95] Leonid Faybusovich. On a matrix generalization of affine-scaling vector fields. *SIAM Journal on Matrix Analysis and Applications*, 16(3):886–897, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/25193.

**Fierro:1994:CTL**

[FB94] Ricardo D. Fierro and James R. Bunch. Collinearity and total least squares. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1167–1181, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/22407.

**Fierro:1995:BSR**

[FB95] Ricardo D. Fierro and James R. Bunch. Bounding the subspaces from rank revealing two-sided orthogonal decompositions. *SIAM Journal on Matrix Analysis and Applications*, 16(3):743–759, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/24600.

**Frangioni:2001:SAS**

[FC01] Antonio Frangioni and Stefano Serra Capizzano. Spectral analysis of (sequences of) graph matrices. *SIAM Journal on Matrix Analysis and Applications*, 23(2):339–348, 2001. CODEN SJMAEL.

ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35366`.

**Feiveson:1994:FBR**

[Fei94] Alan H. Feiveson. Finding the best regression subset by reduction in nonfull-rank cases. *SIAM Journal on Matrix Analysis and Applications*, 15(1):194–204, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22172`.

**Fernando:1997:CET**

[Fer97] K. V. Fernando. On computing an eigenvector of a tridiagonal matrix. Part I: Basic results. *SIAM Journal on Matrix Analysis and Applications*, 18(4):1013–1034, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29448`.

**Fernando:1998:ACS**

[Fer98] K. V. Fernando. Accurately counting singular values of bidiagonal matrices and eigenvalues of skew-symmetric tridiagonal matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(2):373–399, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31175`.

**Frenzen:1993:CPP**

[FF93] C. L. Frenzen and I. Fischer. On a conjecture of Pierce for permanents of singular correlation matrices. *SIAM Journal on Matrix Analysis and Applications*, 14(1):74–81, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fausett:1994:LLS**

[FF94] Donald W. Fausett and Charles T. Fulton. Large least squares problems involving Kronecker products. *SIAM Journal on Matrix Analysis and Applications*, 15(1):219–227, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22210`. See comments [Zha95].

**Fill:1999:MPG**

[FF99] James Allen Fill and Donniell E. Fishkind. The Moore–Penrose generalized inverse for sums of matrices. *SIAM Journal on Matrix Analysis and Applications*, 21(2):629–635, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32969`.

**Ferrari:2019:EDS**

[FFH+19] Paola Ferrari, Isabella Furci, Sean Hon, Mohammad Ayman Mursaleen, and Stefano Serra-Capizzano. The eigenvalue distribution of special 2-by-2 block matrix-sequences with applications to the case of symmetrized Toeplitz structures. *SIAM Journal on Matrix Analysis and Applications*, 40 (3):1066–1086, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Friedland:1994:UBR**

[FG94] Shmuel Friedland and Leonid Gurvits. An upper bound for the real part of nonmaximal eigenvalues of nonnegative irreducible matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(3):1015–1017, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22891`.

**Flagg:2015:MVS**

[FG15] Garret Flagg and Serkan Gugercin. Multipoint Volterra series interpolation and $\mathcal{H}_\in$ optimal model reduction of bilinear systems. *SIAM Journal on Matrix Analysis and Applications*, 36(2):549–579, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fallat:2000:SSI**

[FGJ00] Shaun M. Fallat, Michael I. Gekhtman, and Charles R. Johnson. Spectral structures of irreducible totally nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 22(2):627–645, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36701`.

**Fuchs:2022:SKC**

[FGK+22] Tim Fuchs, David Gross, Felix Krahmer, Richard Kueng, and Dustin Mixon. Sketching with Kerdock's crayons: Fast sparsifying transforms for arbitrary linear maps. *SIAM Journal on Matrix Analysis and Applications*, 43(2):939–952, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1438992`.

**Fazzi:2021:FNP**

[FGL21] Antonio Fazzi, Nicola Guglielmi, and Christian Lubich. Finding the nearest passive or nonpassive system via Hamiltonian eigenvalue optimization. *SIAM Journal on Matrix Analysis and Applications*, 42(4): 1553–1580, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Forsgren:1991:ILM**

[FGM91] A. L. Forsgren, P. E. Gill, and W. Murray. On the identification of local minimizers in inertia-controlling methods for quadratic programming. *SIAM Journal on Matrix Analysis and Applications*, 12(4):730–746, October 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ferrer:2000:RBK**

[FGP00] J. Ferrer, M. I. García, and F. Puerta. Regularity of the Brunovsky–Kronecker stratification. *SIAM Journal on Matrix Analysis and Applications*, 21(3):724–742, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31905`.

**Forsgren:1996:SSI**

[FGS96] Anders Forsgren, Philip E. Gill, and Joseph R. Shinnerl. Stability of symmetric ill-conditioned systems arising in interior methods for constrained optimization. *SIAM Journal on Matrix Analysis and Applications*, 17(1):187–211, January 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27065`.

**Frommer:2014:CRK**

[FGS14a] Andreas Frommer, Stefan Güttel, and Marcel Schweitzer. Convergence of restarted Krylov subspace methods for Stieltjes functions of matrices. *SIAM Journal on Matrix Analysis and Applications*, 35(4):1602–1624, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Frommer:2014:ESA**

[FGS14b] Andreas Frommer, Stefan Güttel, and Marcel Schweitzer. Efficient and stable Arnoldi restarts for matrix functions based on quadrature. *SIAM Journal on Matrix Analysis and Applications*, 35(2):661–683, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Flowe:1993:NGV**

[FH93] Randolph P. Flowe and Gary A. Harris. A note on generalized Vandermonde determinants. *SIAM Journal on Matrix Analysis and Applications*, 14(4):1146–1151, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Frommer:2010:VCS**

[FH10] Andreas Frommer and Behnam Hashemi. Verified computation of square roots of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1279–1302, ???? 2010. CO-

DEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fenu:2017:BMF**

[FH17] Caterina Fenu and Desmond J. Higham. Block matrix formulations for evolving networks. *SIAM Journal on Matrix Analysis and Applications*, 38(2): 343–360, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fasi:2018:MAC**

[FH18] Massimiliano Fasi and Nicholas J. Higham. Multiprecision algorithms for computing the matrix logarithm. *SIAM Journal on Matrix Analysis and Applications*, 39(1):472–491, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fasi:2019:APS**

[FH19] Massimiliano Fasi and Nicholas J. Higham. An arbitrary precision scaling and squaring algorithm for the matrix exponential. *SIAM Journal on Matrix Analysis and Applications*, 40 (4):1233–1256, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Frommer:2020:CEM**

[FH20] Andreas Frommer and Behnam Hashemi. Computing enclosures for the matrix exponential. *SIAM Journal on Matrix Analysis and Applications*, 41 (4):1674–1703, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fasi:2021:MTI**

[FH21] Massimiliano Fasi and Nicholas J. Higham. Matrices with tunable infinity-norm condition number and no need for pivoting in $LU$ factorization. *SIAM Journal on Matrix Analysis and Applications*, 42(1):417–435, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fallat:2006:CTP**

[FHGJ06] Shaun M. Fallat, Allen Herman, Michael I. Gekhtman, and Charles R. Johnson. Compressions of totally positive matrices. *SIAM Journal on Matrix Analysis and Applications*, 28(1):68–80, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fasi:2015:AML**

[FHI15] Massimiliano Fasi, Nicholas J. Higham, and Bruno Iannazzo. An algorithm for the matrix Lambert $W$ function. *SIAM Journal on Matrix Analysis and Applications*, 36(2):669–685, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fasi:2023:CSR**

[FHL23] Massimiliano Fasi, Nicholas J. Higham, and Xiaobo Liu. Computing the square root of a low-rank perturbation of the scaled identity matrix. *SIAM Journal on Matrix Analysis and Applications*, 44(1):156–174, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1471559`.

**Fosner:2013:LMP**

[FHLS13] Ajda Fosner, Zejun Huang, Chi-Kwong Li, and Nung-Sing Sze. Linear maps preserving Ky fan norms and Schatten norms of tensor products of matrices. *SIAM Journal on Matrix Analysis and Applications*, 34(2):673–685, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Friedland:1994:RSI**

[FHS+94] Shmuel Friedland, Rohan Hemasinha, Hans Schneider, Jeffrey Stuart, and James Weaver. Row sums and inverse row sums for nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1157–1166, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23500`.

**Feitzinger:2009:IKN**

[FHS09] F. Feitzinger, T. Hylla, and E. W. Sachs. Inexact Kleinman–Newton method for Riccati equations. *SIAM Journal on Matrix Analysis and Applications*, 31(2):272–288, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fasi:2018:CWG**

[FI18] Massimiliano Fasi and Bruno Iannazzo. Computing the weighted geometric mean of two large-scale matrices and its inverse times a vector. *SIAM Journal on Matrix Analysis and Applications*, 39(1):178–203, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fiedler:1995:SCG**

[Fie95] Miroslav Fiedler. On a special class of generalized doubly stochastic matrices and its relation to Bézier polygons. *SIAM Journal on Matrix Analysis and Applications*, 16(3):735–742, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25879`.

**Fierro:1996:PAT**

[Fie96] Ricardo D. Fierro. Perturbation analysis for two-sided (or complete) orthogonal decompositions. *SIAM Journal on Matrix Analysis and*

*Applications*, 17(2):383–400, April 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26449`.

**Fiedler:2000:SUM**

[Fie00] Miroslav Fiedler. Special ultrametric matrices and graphs. *SIAM Journal on Matrix Analysis and Applications*, 22(1): 106–113, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35098`.

**Fiori:2011:SMD**

[Fio11] Simone Fiori. Solving minimal-distance problems over the manifold of real-symplectic matrices. *SIAM Journal on Matrix Analysis and Applications*, 32(3):938–968, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p938_s1`.

**Furtado:2001:PRM**

[FIS01] Susana Furtado, Laura Iglésias, and Fernando C. Silva. Products of real matrices with prescribed characteristic polynomials. *SIAM Journal on Matrix Analysis and Applications*, 23(3):656–672, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38169`.

**Fitch:2019:ERP**

[Fit19] Katherine Fitch. Effective resistance preserving directed graph symmetrization. *SIAM Journal on Matrix Analysis and Applications*, 40(1):49–65, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fletcher:1997:SNS**

[FJ97] Roger Fletcher and Tom Johnson. On the stability of null-space methods for KKT systems. *SIAM Journal on Matrix Analysis and Applications*, 18(4):938–958, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29773`.

**Furtado:2006:PMD**

[FJ06] Susana Furtado and Charles R. Johnson. Perturbation of matrices diagonalizable under congruence. *SIAM Journal on Matrix Analysis and Applications*, 28(1):81–88, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fogel:2015:CRP**

[FJBd15] F. Fogel, R. Jenatton, F. Bach, and A. d'Aspremont. Convex relaxations for permutation problems. *SIAM Journal*

*on Matrix Analysis and Applications*, 36(4):1465–1488, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Faber:1996:MRM**

[FJKM96] V. Faber, W. Joubert, E. Knill, and T. Manteuffel. Minimal residual method stronger than polynomial preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 17(4):707–729, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28674`.

**Farenick:1996:NTM**

[FKKL96] Douglas R. Farenick, Mark Krupnik, Naum Krupnik, and Woo Young Lee. Normal Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 17(4):1037–1043, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28708`. See comments [Ikr97].

**Frommer:2013:NEB**

[FKLR13] A. Frommer, K. Kahl, Th. Lippert, and H. Rittich. 2-norm error bounds and estimates for Lanczos approximations to linear systems and rational matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 34(3):1046–1065, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Frommer:2023:KSR**

[FKST23] A. Frommer, K. Kahl, M. Schweitzer, and M. Tsolakis. Krylov subspace restarting for matrix Laplace transforms. *SIAM Journal on Matrix Analysis and Applications*, 44 (2):693–717, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1499674`.

**Fan:2023:SMJ**

[FKZ23] Yifeng Fan, Yuehaw Khoo, and Zhizhen Zhao. A spectral method for joint community detection and orthogonal group synchronization. *SIAM Journal on Matrix Analysis and Applications*, 44(2):781–821, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1467845`.

**Freitas:1999:OVS**

[FL99] Pedro Freitas and Peter Lancaster. On the optimal value of the spectral abscissa for a system of linear oscillators. *SIAM Journal on Matrix Analysis and Applications*, 21(1):195–208, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/33185.

**Fan:2002:AME**

[FL02] Yi-Zheng Fan and Jiong-Sheng Li. Algebraic multiplicity of the eigenvalues of a bipartite tournament matrix. *SIAM Journal on Matrix Analysis and Applications*, 24(2):475–483, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/38654.

**Feppon:2018:GAD**

[FL18] Florian Feppon and Pierre F. J. Lermusiaux. A geometric approach to dynamical model order reduction. *SIAM Journal on Matrix Analysis and Applications*, 39(1):510–538, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Feppon:2019:EGD**

[FL19] Florian Feppon and Pierre F. J. Lermusiaux. The extrinsic geometry of dynamical systems tracking nonlinear matrix projections. *SIAM Journal on Matrix Analysis and Applications*, 40(2):814–844, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Favati:2010:SLA**

[FLM10] P. Favati, G. Lotti, and O. Menchi. Stability of the Levinson algorithm for Toeplitz-like systems. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2531–2552, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Favati:2012:DCA**

[FLM12] Paola Favati, Grazia Lotti, and Ornella Menchi. A divide and conquer algorithm for the superfast solution of Toeplitz-like systems. *SIAM Journal on Matrix Analysis and Applications*, 33(4):1039–1056, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Frommer:2020:BKS**

[FLS20] Andreas Frommer, Kathryn Lund, and Daniel B. Szyld. Block Krylov subspace methods for functions of matrices II: Modified block FOM. *SIAM Journal on Matrix Analysis and Applications*, 41(2):804–837, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Frommer:2017:RLM**

[FLSS17] Andreas Frommer, Kathryn Lund, Marcel Schweitzer, and Daniel B. Szyld. The Radau–Lanczos method for matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 38(3):710–732, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Faber:2010:CPM**

[FLT10] Vance Faber, Jörg Liesen, and Petr Tichý. On Chebyshev polynomials of matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(4):2205–2221, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Faber:2013:PWC**

[FLT13] Vance Faber, Jörg Liesen, and Petr Tichý. Properties of worst-case GMRES. *SIAM Journal on Matrix Analysis and Applications*, 34(4):1500–1519, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fan:2004:NSS**

[FLV04] Hung-Yuan Fan, Wen-Wei Lin, and Paul Van Dooren. Normwise scaling of second order polynomial matrices. *SIAM Journal on Matrix Analysis and Applications*, 26(1):252–256, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43491`.

**Fiedler:1988:RHP**

[FM88] Miroslav Fiedler and Thomas L. Markham. On the range of the Hadamard product of a positive definite matrix and its inverse. *SIAM Journal on Matrix Analysis and Applications*, 9(3):343–347, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Forsgren:1993:NML**

[FM93a] A. Forsgren and W. Murray. Newton methods for large-scale linear equality-constrained minimization. *SIAM Journal on Matrix Analysis and Applications*, 14(2):560–587, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Frommer:1993:NCG**

[FM93b] A. Frommer and G. Mayer. A new criterion to guarantee the feasibility of the interval Gaussian algorithm. *SIAM Journal on Matrix Analysis and Applications*, 14(2):408–419, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Franceschini:2018:RMA**

[FMFJ18] Andrea Franceschini, Victor Antonio Paludetto Magri, Massimiliano Ferronato, and Carlo Janna. A robust multilevel approximate inverse preconditioner for symmetric positive definite matrices. *SIAM Journal on Matrix Analysis and Applications*, 39(1):123–147, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fenu:2013:BGA**

[FMRR13] C. Fenu, D. Martin, L. Reichel, and G. Rodriguez. Block

Gauss and anti-Gauss quadrature with application to networks. *SIAM Journal on Matrix Analysis and Applications*, 34(4):1655–1684, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Floater:2021:BLR**

[FMSS21] Michael S. Floater, Carla Manni, Espen Sande, and Hendrik Speleers. Best low-rank approximations and Kolmogorov $n$-widths. *SIAM Journal on Matrix Analysis and Applications*, 42(1):330–350, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Freiling:2002:EUP**

[FMX02] Gerhard Freiling, Volker Mehrmann, and Hongguo Xu. Existence, uniqueness, and parametrization of Lagrangian invariant subspaces. *SIAM Journal on Matrix Analysis and Applications*, 23(4):1045–1069, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37722`.

**Forster:2004:CBR**

[FN04] K.-H. Förster and B. Nagy. Connections between realizations of a transfer function. *SIAM Journal on Matrix Analysis and Applications*, 25(4):1032–1045, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41001`.

**Frommer:2008:CSI**

[FNS08] Andreas Frommer, Reinhard Nabben, and Daniel B. Szyld. Convergence of stationary iterative methods for Hermitian semidefinite linear systems and applications to Schwarz methods. *SIAM Journal on Matrix Analysis and Applications*, 30(2):925–938, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fraikin:2008:OCB**

[FNV08] Catherine Fraikin, Yurii Nesterov, and Paul Van Dooren. Optimizing the coupling between two isometric projections of matrices. *SIAM Journal on Matrix Analysis and Applications*, 30(1):324–345, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Forsgren:1996:LLS**

[For96] Anders Forsgren. On linear least-squares problems with diagonally dominant weight matrices. *SIAM Journal on Matrix Analysis and Applications*, 17(4):763–788, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28401`.

**Ford:2003:IDW**

[For03] Judith M. Ford. An improved discrete wavelet transform preconditioner for dense matrix problems. *SIAM Journal on Matrix Analysis and Applications*, 25(3):642–661, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41652`.

**Foster:1994:GEP**

[Fos94] Leslie V. Foster. Gaussian elimination with partial pivoting can fail in practice. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1354–1362, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23975`.

**Foster:2003:SRD**

[Fos03] Leslie V. Foster. Solving rank-deficient and ill-posed problems using $UTV$ and $QR$ factorizations. *SIAM Journal on Matrix Analysis and Applications*, 25(2):582–600, January 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Foucart:2018:CMI**

[Fou18] Simon Foucart. Concave Mirsky inequality and low-rank recovery. *SIAM Journal on Matrix Analysis and Applications*, 39(1):99–103, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ferrer:1998:GBS**

[FP98] Josep Ferrer and Ferran Puerta. Global block-similarity and pole assignment of class $C^p$. *SIAM Journal on Matrix Analysis and Applications*, 19(4):924–932, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24401`.

**Franchi:2016:IMF**

[FP16] Massimo Franchi and Paolo Paruolo. Inverting a matrix function around a singularity via local rank factorization. *SIAM Journal on Matrix Analysis and Applications*, 37(2):774–797, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Farrell:2017:POK**

[FP17] Patrick E. Farrell and John W. Pearson. A preconditioner for the Ohta–Kawasaki equation. *SIAM Journal on Matrix Analysis and Applications*, 38(1):217–225, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ferreira:2020:EWM**

[FP20] Carla Ferreira and Beresford Parlett. Eigenpairs of Wilkin-

son matrices. *SIAM Journal on Matrix Analysis and Applications*, 41(3):1388–1415, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fazel:2013:HMR**

[FPST13] Maryam Fazel, Ting Kei Pong, Defeng Sun, and Paul Tseng. Hankel matrix rank minimization with applications to system identification and realization. *SIAM Journal on Matrix Analysis and Applications*, 34 (3):946–977, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fritzsche:2023:UCO**

[FR23] Klemens Fritzsche and Klaus Röbenack. Unimodular completions and orthogonal complements of matrices over univariate Ore extensions. *SIAM Journal on Matrix Analysis and Applications*, 44 (1):128–155, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1477027`.

**Friedland:1992:IEP**

[Fri92] Shmuel Friedland. Inverse eigenvalue problems for symmetric Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 13(4): 1142–1153, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Friedland:2002:NMC**

[Fri02] Shmuel Friedland. Normal matrices and the completion problem. *SIAM Journal on Matrix Analysis and Applications*, 23(3):896–902, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38644`.

**Friedland:2005:NAG**

[Fri05] Shmuel Friedland. A new approach to generalized singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 27(2):434–444, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43979`.

**Friedland:2016:RSR**

[Fri16] Shmuel Friedland. Remarks on the symmetric rank of symmetric tensors. *SIAM Journal on Matrix Analysis and Applications*, 37(1):320–337, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Frommer:1997:URT**

[FS97] Andreas Frommer and Hartmut Schwandt. A unified representation and theory of algebraic additive Schwarz and

multisplitting methods. *SIAM Journal on Matrix Analysis and Applications*, 18(4):893–912, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30121`.

**Forsgren:2001:WLL**

[FS01] Anders Forsgren and Göran Sporre. On weighted linear least-squares problems related to interior methods for convex quadratic programming. *SIAM Journal on Matrix Analysis and Applications*, 23(1):42–56, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37229`.

**Freitag:2010:SIA**

[FS10] Melina A. Freitag and Alastair Spence. Shift-invert Arnoldi's method with preconditioned iterative solves. *SIAM Journal on Matrix Analysis and Applications*, 31(3):942–969, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Frommer:2021:APT**

[FSS21] Andreas Frommer, Claudia Schimmel, and Marcel Schweitzer. Analysis of probing techniques for sparse approximation and trace estimation of decaying matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 42(3):1290–1318, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fishkind:2013:CAS**

[FST+13] Donniell E. Fishkind, Daniel L. Sussman, Minh Tang, Joshua T. Vogelstein, and Carey E. Priebe. Consistent adjacency-spectral partitioning for the stochastic block model when the model parameters are unknown. *SIAM Journal on Matrix Analysis and Applications*, 34(1):23–39, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Freitag:2014:CNU**

[FSV14] Melina A. Freitag, Alastair Spence, and Paul Van Dooren. Calculating the $H_\infty$-norm using the implicit determinant method. *SIAM Journal on Matrix Analysis and Applications*, 35(2):619–635, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ford:2014:DEI**

[FSZ14] Neville J. Ford, Dmitry V. Savostyanov, and Nickolai L. Zamarashkin. On the decay of the elements of inverse triangular Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 35(4):1288–1302, ???? 2014. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic).

**Friedland:2007:GRC**

[FT07] Shmuel Friedland and Anatoli Torokhti. Generalized rank-constrained matrix approximations. *SIAM Journal on Matrix Analysis and Applications*, 29 (2):656–659, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fasino:2014:AAG**

[FT14] Dario Fasino and Francesco Tudisco. An algebraic analysis of the graph modularity. *SIAM Journal on Matrix Analysis and Applications*, 35(3): 997–1018, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fritscher:2016:ESD**

[FT16] Eliseu Fritscher and Vilmar Trevisan. Exploring symmetries to decompose matrices and graphs preserving the spectrum. *SIAM Journal on Matrix Analysis and Applications*, 37(1):260–289, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Frangella:2023:RNP**

[FTU23] Zachary Frangella, Joel A. Tropp, and Madeleine Udell. Randomized Nyström preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 44(2):718–752, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1466244`.

**Fuhrmann:1988:ASC**

[Fuh88] Daniel R. Fuhrmann. An algorithm for subspace computation, with applications in signal processing. *SIAM Journal on Matrix Analysis and Applications*, 9(2):213–220, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). SIAM Conference on Linear Algebra in Signals, Systems, and Control (Boston, Mass., 1986).

**Fuhrmann:2007:NSI**

[Fuh07] Daniel R. Fuhrmann. Numerically stable implementations of the structured covariance expectation-maximization algorithm. *SIAM Journal on Matrix Analysis and Applications*, 29(3):855–869, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fornasini:1998:PPM**

[FV98] Ettore Fornasini and Maria Elena Valcher. Primitivity of positive matrix pairs: Algebraic characterization, graph theoretic description, and 2D systems interpretation. *SIAM Journal on Matrix Analysis and Applications*, 19(1):71–88, Jan-

uary 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29409`.

**Xu:1996:JMI**

[fX96] Shu fang Xu. On the Jacobi matrix inverse eigenvalue problem with mixed given data. *SIAM Journal on Matrix Analysis and Applications*, 17(3):632–639, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22065`.

**Feng:2018:RCP**

[FXG18] Yuehua Feng, Jianwei Xiao, and Ming Gu. Randomized complete pivoting for solving symmetric indefinite linear systems. *SIAM Journal on Matrix Analysis and Applications*, 39 (4):1616–1641, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Fan:2016:CMA**

[FZ16] Jinyan Fan and Anwa Zhou. The CP-matrix approximation problem. *SIAM Journal on Matrix Analysis and Applications*, 37(1):171–194, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ghosh:2018:SBP**

[GA18] Arnab Ghosh and Rafikul Alam. Sensitivity and backward perturbation analysis of multiparameter eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 39(4):1750–1775, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gugercin:2008:MRL**

[GAB08] S. Gugercin, A. C. Antoulas, and C. Beattie. $\mathcal{H}_\in$ model reduction for large-scale linear dynamical systems. *SIAM Journal on Matrix Analysis and Applications*, 30(2):609–638, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gader:1988:NSC**

[Gad88] Paul D. Gader. Necessary and sufficient conditions for the existence of local matrix decompositions. *SIAM Journal on Matrix Analysis and Applications*, 9(3):305–313, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Garloff:1990:BMS**

[Gar90] Jürgen Garloff. Block methods for the solution of linear interval equations. *SIAM Journal on Matrix Analysis and Applications*, 11(1):89–106, January 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Garloff:2009:IGE**

[Gar09] Jürgen Garloff. Interval Gaussian elimination with pivot tightening. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1761–1772, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gawlik:2019:ZIM**

[Gaw19] Evan S. Gawlik. Zolotarev iterations for the matrix square root. *SIAM Journal on Matrix Analysis and Applications*, 40 (2):696–719, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gu:1989:CGC**

[GBCW89] Chong Gu, Douglas M. Bates, Ze Hua Chen, and Grace Wahba. The computation of generalized cross-validation functions through Householder tridiagonalization with applications to the fitting of interaction spline models. *SIAM Journal on Matrix Analysis and Applications*, 10(4):457–480, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guan:2019:NCO**

[GC19] Yu Guan and Delin Chu. Numerical computation for orthogonal low-rank approximation of tensors. *SIAM Journal on Matrix Analysis and Applications*, 40(3):1047–1065, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guan:2018:SBA**

[GCC18] Yu Guan, Moody T. Chu, and Delin Chu. SVD-based algorithms for the best rank-1 approximation of a symmetric tensor. *SIAM Journal on Matrix Analysis and Applications*, 39(3):1095–1115, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Greenbaum:2016:NND**

[GCL16] Anne Greenbaum, Trevor Caldwell, and Kenan Li. Near normal dilations of nonnormal matrices and linear operators. *SIAM Journal on Matrix Analysis and Applications*, 37(4): 1365–1381, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gnanasekaran:2022:HOF**

[GD22] Abeynaya Gnanasekaran and Eric Darve. Hierarchical orthogonal factorization: Sparse square matrices. *SIAM Journal on Matrix Analysis and Applications*, 43(1):94–123, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M1373475`.

**Gusak:2001:SAN**

[GDF01] Oleg Gusak, Tuugrul Dayar, and Jean-Michel Fourneau. Stochastic automata networks and near complete decomposability. *SIAM Journal on Matrix Analysis and Applications*, 23(2):581–599, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36975`.

**Grunbaum:2008:MVO**

[GdlI08] F. Alberto Grünbaum and Manuel D. de la Iglesia. Matrix valued orthogonal polynomials arising from group representation theory and a family of quasi-birth-and-death processes. *SIAM Journal on Matrix Analysis and Applications*, 30(2):741–761, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Grigori:2011:CCO**

[GDX11] Laura Grigori, James W. Demmel, and Hua Xiang. CALU: a communication optimal *LU* factorization algorithm. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1317–1350, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1317_s1`.

**Gu:1994:SEA**

[GE94] Ming Gu and Stanley C. Eisenstat. A stable and efficient algorithm for the rank-one modification of the symmetric eigenproblem. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1266–1276, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23924`.

**Gu:1995:DCAa**

[GE95a] Ming Gu and Stanley C. Eisenstat. A divide-and-conquer algorithm for the bidiagonal SVD. *SIAM Journal on Matrix Analysis and Applications*, 16(1):79–92, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24223`.

**Gu:1995:DCAb**

[GE95b] Ming Gu and Stanley C. Eisenstat. A divide-and-conquer algorithm for the symmetric tridiagonal eigenproblem. *SIAM Journal on Matrix Analysis and Applications*, 16(1):172–191, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24128`.

**Gu:1995:DSV**

[GE95c] Ming Gu and Stanley C. Eisenstat. Downdating the singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 16(3):793–810, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25147`.

**Govindarajan:2022:DSC**

[GED22] Nithin Govindarajan, Ethan N. Epperly, and Lieven De Lathauwer. $(L_r, L_r, 1)$-decompositions, sparse component analysis, and the blind separation of sums of exponentials. *SIAM Journal on Matrix Analysis and Applications*, 43 (2):912–938, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1426444`.

**Geist:1991:RGM**

[Gei91] George A. Geist. Reduction of a general matrix to tridiagonal form. *SIAM Journal on Matrix Analysis and Applications*, 12 (2):362–373, April 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gemignani:1998:CFP**

[Gem98] Luca Gemignani. Computing a factor of a polynomial by means of multishift $LR$ algorithms. *SIAM Journal on Matrix Analysis and Applications*, 19(1):161–181, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27744`.

**Gerontidis:1992:CSE**

[Ger92] Ioannis I. Gerontidis. Cyclic strong ergodicity in nonhomogeneous Markov systems. *SIAM Journal on Matrix Analysis and Applications*, 13(2): 550–566, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gangsong:2002:IFH**

[GG02] Leng Gangsong and Zhou GuoBiao. Inverse forms of Hadamard inequality. *SIAM Journal on Matrix Analysis and Applications*, 23(4):990–997, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38727`.

**Gilbert:2003:NCE**

[GG03] John R. Gilbert and Laura Grigori. A note on the column elimination tree. *SIAM Journal on Matrix Analysis and Applications*, 25(1):143–151, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/39377.

**Giraud:2006:SSS**

[GG06] L. Giraud and S. Gratton. On the sensitivity of some spectral preconditioners. *SIAM Journal on Matrix Analysis and Applications*, 27(4):1089–1105, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gillis:2011:LRM**

[GG11] Nicolas Gillis and François Glineur. Low-rank matrix approximation with weights or missing data is NP-hard. *SIAM Journal on Matrix Analysis and Applications*, 32(4): 1149–1165, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1149_s1.

**Gharbia:2013:ACM**

[GG13] I. Ben Gharbia and J. Ch. Gilbert. An algorithmic characterization of $P$-matricity. *SIAM Journal on Matrix Analysis and Applications*, 34(3): 904–916, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gockler:2014:UAF**

[GG14] Tanja Göckler and Volker Grimm. Uniform approximation of $\varphi$-functions in exponential integrators by a rational Krylov subspace method with simple poles. *SIAM Journal on Matrix Analysis and Applications*, 35(4):1467–1489, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gu:2003:SDC**

[GGbCC03] Ming Gu, Robert Guzzo, Xue bin Chi, and Xing-Qin Cao. A stable divide and conquer algorithm for the unitary eigenproblem. *SIAM Journal on Matrix Analysis and Applications*, 25(2):385–404, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/35953.

**Grigori:2009:SES**

[GGC09] Laura Grigori, John R. Gilbert, and Michel Cosnard. Symbolic and exact structure prediction for sparse Gaussian elimination with partial pivoting. *SIAM Journal on Matrix Analysis and Applications*, 30 (4):1520–1545, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gerencser:2018:PSN**

[GGJ18] Balázs Gerencsér, Vladimir V. Gusev, and Raphaël M. Jungers. Primitive sets of nonnegative matrices and synchronizing automata. *SIAM Journal on Matrix Analysis and Applications*, 39(1):83–98, ????

2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Giraud:2004:RUP**

[GGL04] Luc Giraud, Serge Gratton, and Julien Langou. A rank-$k$ update procedure for reorthogonalizing the orthogonal factor from modified Gram–Schmidt. *SIAM Journal on Matrix Analysis and Applications*, 25(4):1163–1177, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42434`.

**Gaul:2013:FDA**

[GGLN13] André Gaul, Martin H. Gutknecht, Jörg Liesen, and Reinhard Nabben. A framework for deflated and augmented Krylov subspace methods. *SIAM Journal on Matrix Analysis and Applications*, 34 (2):495–518, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guglielmi:2017:ARS**

[GGMO17] N. Guglielmi, M. Gürbüzbalaban, T. Mitchell, and M. L. Overton. Approximating the real structured stability radius with Frobenius-norm bounded perturbations. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1323–1353, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guglielmi:2013:FAN**

[GGO13] Nicola Guglielmi, Mert Gürbüzbalaban, and Michael L. Overton. Fast approximation of the $H_\infty$ norm via optimization over spectral value sets. *SIAM Journal on Matrix Analysis and Applications*, 34(2):709–737, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Golub:2005:AAB**

[GGV05] Gene H. Golub, Chen Greif, and James M. Varah. An algebraic analysis of a block diagonal preconditioner for saddle point systems. *SIAM Journal on Matrix Analysis and Applications*, 27(3):779–792, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gasso:1991:FPN**

[GH91] Maite Gassó and Vicente Hernández. Factorization problems for nonmonic matrix polynomials. *SIAM Journal on Matrix Analysis and Applications*, 12(3):565–576, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Galanis:1992:BCR**

[GH92] Sofoklis Galanis and Apostolos Hadjidimos. Best cyclic repartitioning for optimal successive overrelaxation conver-

gence. *SIAM Journal on Matrix Analysis and Applications*, 13(1):102–120, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guo:2006:SNM**

[GH06] Chun-Hua Guo and Nicholas J. Higham. A Schur–Newton method for the matrix $p$th root and its inverse. *SIAM Journal on Matrix Analysis and Applications*, 28(3):788–804, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Grasedyck:2007:MMS**

[GH07a] Lars Grasedyck and Wolfgang Hackbusch. A multigrid method to solve large scale Sylvester equations. *SIAM Journal on Matrix Analysis and Applications*, 29(3):870–894, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guo:2007:ISN**

[GH07b] Chun-Hua Guo and Nicholas J. Higham. Iterative solution of a nonsymmetric algebraic Riccati equation. *SIAM Journal on Matrix Analysis and Applications*, 29(2):396–412, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Glunt:1990:APA**

[GHHW90] W. Glunt, T. L. Hayden, S. Hong, and J. Wells. An alternating projection algorithm for computing the nearest Euclidean distance matrix. *SIAM Journal on Matrix Analysis and Applications*, 11(4):589–600, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guillaume:2003:BCA**

[GHL03] Ph. Guillaume, A. Huard, and C. Le Calvez. A block constant approximate inverse for preconditioning large linear systems. *SIAM Journal on Matrix Analysis and Applications*, 24(3):822–851, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40151`.

**Grindrod:2018:DGL**

[GHN18] Peter Grindrod, Desmond J. Higham, and Vanni Noferini. The deformed graph Laplacian and its applications to network centrality analysis. *SIAM Journal on Matrix Analysis and Applications*, 39(1):310–341, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Genin:2003:OPP**

[GHNV03] Y. Genin, Y. Hachez, Yu. Nesterov, and P. Van Dooren. Optimization problems over positive pseudopolynomial matrices. *SIAM Journal on Matrix Analysis and Applications*, 25(1):57–79, 2003.

CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37484`.

**Golub:1999:TRT**

[GHO99] Gene H. Golub, Per Christian Hansen, and Dianne P. O'Leary. Tikhonov regularization and total least squares. *SIAM Journal on Matrix Analysis and Applications*, 21(1): 185–194, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32643`.

**Guler:1995:ASS**

[GHR95] Osman Güler, Alan J. Hoffman, and Uriel G. Rothblum. Approximations to solutions to systems of linear inequalities. *SIAM Journal on Matrix Analysis and Applications*, 16(2):688–696, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23774`.

**Gernandt:2021:LRA**

[GHR21] Hannes Gernandt, Frédéric Enrico Haller, and Timo Reis. A linear relation approach to port-Hamiltonian differential-algebraic equations. *SIAM Journal on Matrix Analysis and Applications*, 42(2):1011–1044, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guo:2009:DSH**

[GHT09] Chun-Hua Guo, Nicholas J. Higham, and Françoise Tisseur. Detecting and solving hyperbolic quadratic eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1593–1613, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guo:2010:IAA**

[GHT10] Chun-Hua Guo, Nicholas J. Higham, and Françoise Tisseur. An improved arc algorithm for detecting definite Hermitian pairs. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1131–1151, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Geist:1999:EA**

[GHW99] G. A. Geist, G. W. Howell, and D. S. Watkins. The *BR* eigenvalue algorithm. *SIAM Journal on Matrix Analysis and Applications*, 20(4):1083–1098, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31707`.

**George:1996:PDF**

[GI96] Alan George and Kh. Ikramov. Is the polar decomposition finitely computable? *SIAM*

*Journal on Matrix Analysis and Applications*, 17(2):348–354, April 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27454`.

**George:1997:APD**

[GI97] Alan George and Kh. Ikramov. Addendum: "Is the polar decomposition finitely computable?" [SIAM J. Matrix Anal. Appl. **17** (1996), no. 2, 348–354,MR 96m:15023]. *SIAM Journal on Matrix Analysis and Applications*, 18(1): 264, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30326`.

**George:2000:CSQ**

[GI00] Alan George and Kh. Ikramov. On the condition of symmetric quasi-definite matrices. *SIAM Journal on Matrix Analysis and Applications*, 21(3):970–977, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33324`.

**Gazagnadou:2022:RFS**

[GIG22] Nidham Gazagnadou, Mark Ibrahim, and Robert M. Gower. RidgeSketch: a fast sketching based solver for large scale ridge regression. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1440–1468, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1422963`.

**George:2000:SPS**

[GIK00] Alan George, Kh. Ikramov, and A. B. Kucherov. Some properties of symmetric quasi-definite matrices. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1318–1323, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32940`.

**George:1995:FPT**

[GIKT95] A. George, K. Ikramov, A. N. Krivoshapova, and W.-P. Tang. A finite procedure for the tridiagonalization of a general matrix. *SIAM Journal on Matrix Analysis and Applications*, 16(2):377–387, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23494`.

**Gilbert:1994:PSS**

[Gil94] John R. Gilbert. Predicting structure in sparse matrix computations. *SIAM Journal on Matrix Analysis and Applications*, 15(1):62–79, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-

7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/13945`.

**Gillis:2013:RAH**

[Gil13] Nicolas Gillis. Robustness analysis of Hottopixx, a linear programming model for factoring nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 34(3): 1189–1212, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guo:2008:DAS**

[GIM08] Chun-Hua Guo, Bruno Iannazzo, and Beatrice Meini. On the doubling algorithm for a (shifted) nonsymmetric algebraic Riccati equation. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1083–1100, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**George:1995:LAS**

[GIMT95] A. George, Kh. D. Ikramov, E. V. Matushkina, and W.-P. Tang. On a $QR$-like algorithm for some structured eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1107–1126, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25519`.

**George:1996:DST**

[GITT96] A. George, Kh. Ikramov, W.-P. Tang, and V. N. Tchugunov. On doubly symmetric tridiagonal forms for complex matrices and tridiagonal inverse eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 17(3):680–690, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27463`.

**Gratton:2012:AKW**

[GJTP12] Serge Gratton, Pavel Jiránek, and David Titley-Peloquin. On the accuracy of the Karlson–Waldén estimate of the backward error for linear least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 33(3):822–836, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Giraud:2022:BMR**

[GJX22] Luc Giraud, Yan-Fei Jing, and Yanfei Xiang. A block minimum residual norm subspace solver with partial convergence management for sequences of linear systems. *SIAM Journal on Matrix Analysis and Applications*, 43(2):710–739, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1401127`.

**Gohberg:1993:MCS**

[GK93] I. Gohberg and I. Koltracht. Mixed, componentwise, and structured condition numbers. *SIAM Journal on Matrix Analysis and Applications*, 14(3): 688–704, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Granat:2006:DER**

[GK06] Robert Granat and Bo Kågström. Direct eigenvalue reordering in a product of matrices in periodic Schur form. *SIAM Journal on Matrix Analysis and Applications*, 28(1):285–300, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gillis:2015:EHA**

[GK15] Nicolas Gillis and Abhishek Kumar. Exact and heuristic algorithms for semi-nonnegative matrix factorization. *SIAM Journal on Matrix Analysis and Applications*, 36(4):1404–1424, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gohberg:1999:CLP**

[GKK99] I. Gohberg, M. A. Kaashoek, and J. Kos. Classification of linear periodic difference equations under periodic or kinematic similarity. *SIAM Journal on Matrix Analysis and Applications*, 21(2):481–507, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33430`.

**Gudmundsson:1995:SSS**

[GKL95] T. Gudmundsson, C. S. Kenney, and A. J. Laub. Small-sample statistical estimates for matrix norms. *SIAM Journal on Matrix Analysis and Applications*, 16(3):776–792, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24387`.

**Gudmundsson:1997:SSS**

[GKL97] Thorkell Gudmundsson, Charles Kenney, and Alan J. Laub. Small-sample statistical estimates for the sensitivity of eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 18(4):868–886, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29602`.

**Guo:2012:NME**

[GKL12] Chun-Hua Guo, Yueh-Cheng Kuo, and Wen-Wei Lin. On a nonlinear matrix equation arising in nano research. *SIAM Journal on Matrix Analysis and Applications*, 33(1):235–262, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guglielmi:2014:CEP**

[GKL14] Nicola Guglielmi, Daniel Kressner, and Christian Lubich. Computing extremal points of symplectic pseudospectra and solving symplectic matrix nearness problems. *SIAM Journal on Matrix Analysis and Applications*, 35(4):1407–1428, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Glader:2018:CCH**

[GKL18] Christer Glader, Mikael Kurula, and Mikael Lindström. Crouzeix's conjecture holds for tridiagonal $3 \times 3$ matrices with elliptic numerical range centered at an eigenvalue. *SIAM Journal on Matrix Analysis and Applications*, 39(1):346–364, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gohberg:1989:PPZ**

[GKR89] I. Gohberg, M. A. Kaashoek, and A. C. M. Ran. Partial pole and zero displacement by cascade connection. *SIAM Journal on Matrix Analysis and Applications*, 10(3):316–325, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Golub:1990:DVK**

[GKRV90] Gene Golub, Bo Kågström, Axel Ruhe, and Paul Van Dooren. Dedication to Vera N. Kublanovskaya on her 70th birthday. *SIAM Journal on Matrix Analysis and Applications*, 11(4):vii–ix, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gohberg:1994:CAA**

[GKX94] I. Gohberg, I. Koltracht, and D. Xiao. Condition and accuracy of algorithms for computing Schur coefficients of Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1290–1309, ???? 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gilbert:1993:ESU**

[GL93] John R. Gilbert and Joseph W. H. Liu. Elimination structures for unsymmetric sparse *LU* factors. *SIAM Journal on Matrix Analysis and Applications*, 14(2):334–352, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ghavimi:1996:NMN**

[GL96] Ali R. Ghavimi and Alan J. Laub. Numerical methods for nearly singular constrained matrix Sylvester equations. *SIAM Journal on Matrix Analysis and Applications*, 17(1):212–221, January 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/27209.

**George:1999:OOA**

[GL99] Alan George and Joseph Liu. An object-oriented approach to the design of a user interface for a sparse matrix package. *SIAM Journal on Matrix Analysis and Applications*, 20(4):953–969, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/31773.

**Guo:2000:NLM**

[GL00a] Chun-Hua Guo and Alan J. Laub. On a Newton-like method for solving algebraic Riccati equations. *SIAM Journal on Matrix Analysis and Applications*, 21(2):694–698, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/34851.

**Guo:2000:ISC**

[GL00b] Chun-Hua Guo and Alan J. Laub. On the iterative solution of a class of nonsymmetric algebraic Riccati equations. *SIAM Journal on Matrix Analysis and Applications*, 22(2):376–391, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/34980.

**Gemignani:2003:ESS**

[GL03] Luca Gemignani and Grazia Lotti. Efficient and Stable solution of M-matrix linear systems of (block) Hessenberg form. *SIAM Journal on Matrix Analysis and Applications*, 24(3):852–876, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/38708.

**Grosser:2005:SEI**

[GL05] Benedikt Grosser and Bruno Lang. On symmetric eigenproblems induced by the bidiagonal SVD. *SIAM Journal on Matrix Analysis and Applications*, 26(3):599–620, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/39482.

**Guo:2010:SSQ**

[GL10] Chun-Hua Guo and Wen-Wei Lin. Solving a structured quadratic eigenvalue problem by a structure-preserving doubling algorithm. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2784–2801, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guglielmi:2013:LRD**

[GL13] Nicola Guglielmi and Christian Lubich. Low-rank dynamics

for computing extremal points of real pseudospectra. *SIAM Journal on Matrix Analysis and Applications*, 34(1):40–66, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gawlik:2017:ICF**

[GL17] Evan S. Gawlik and Melvin Leok. Iterative computation of the Fréchet derivative of the polar decomposition. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1354–1379, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gawlik:2018:HOR**

[GL18] Evan S. Gawlik and Melvin Leok. High-order retractions on matrix manifolds using projected polynomials. *SIAM Journal on Matrix Analysis and Applications*, 39(2):801–828, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gazzola:2021:RIK**

[GL21] Silvia Gazzola and Malena Sabaté Landman. Regularization by inexact Krylov methods with applications to blind deblurring. *SIAM Journal on Matrix Analysis and Applications*, 42 (4):1528–1552, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gouveia:2023:SDP**

[GL23] João Gouveia and Bruno F. Lourenço. Self-dual polyhedral cones and their slack matrices. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1096–1121, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1519869`.

**Guglielmi:2017:NSM**

[GLM17] Nicola Guglielmi, Christian Lubich, and Volker Mehrmann. On the nearest singular matrix pencil. *SIAM Journal on Matrix Analysis and Applications*, 38(3):776–806, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guu:2001:IPF**

[GLP01] Sy-Ming Guu, Yung-Yih Lur, and Chin-Tzong Pang. On infinite products of fuzzy matrices. *SIAM Journal on Matrix Analysis and Applications*, 22 (4):1190–1203, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gau:2011:HRN**

[GLPS11] Hwa-Long Gau, Chi-Kwong Li, Yiu-Tung Poon, and Nung-Sing Sze. Higher rank numerical ranges of normal matrices. *SIAM Journal on Matrix Analysis and Applications*, 32

(1):23–43, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p23_s1`.

**Grimes:1994:SBL**

[GLS94] Roger G. Grimes, John G. Lewis, and Horst D. Simon. A shifted block Lanczos algorithm for solving sparse symmetric generalized eigenproblems. *SIAM Journal on Matrix Analysis and Applications*, 15(1):228–272, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/15111`.

**Gander:2012:OBI**

[GLS12] Martin J. Gander, Sébastien Loisel, and Daniel B. Szyld. An optimal block iterative method and preconditioner for banded matrices with applications to PDEs on irregular domains. *SIAM Journal on Matrix Analysis and Applications*, 33(2):653–680, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Goberna:1996:STL**

[GLT96] M. A. Goberna, M. A. Lopez, and M. Todorov. Stability theory for linear inequality systems. *SIAM Journal on Matrix Analysis and Applications*, 17(4):730–743, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25976`.

**Gu:2010:DPS**

[GLV10] Ming Gu, Xiaoye S. Li, and Panayot S. Vassilevski. Direction-preserving and schur-monotonic semiseparable approximations of symmetric positive definite matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2650–2664, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gleich:2015:MP**

[GLY15] David F. Gleich, Lek-Heng Lim, and Yongyang Yu. Multilinear PageRank. *SIAM Journal on Matrix Analysis and Applications*, 36(4):1507–1541, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guattery:1998:QSS**

[GM98] Stephen Guattery and Gary L. Miller. On the quality of spectral separators. *SIAM Journal on Matrix Analysis and Applications*, 19(3):701–719, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31226`.

**Guattery:2000:GEL**

[GM00] Stephen Guattery and Gary L. Miller. Graph embeddings and Laplacian eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 21(3):703–723, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32982`.

**Guo:2012:UMP**

[GMBS12] Xijing Guo, Sebastian Miron, David Brie, and Alwin Stegeman. Uni-mode and partial uniqueness conditions for CANDECOMP/PARAFAC of three-way arrays with linearly dependent loadings. *SIAM Journal on Matrix Analysis and Applications*, 33(1):111–129, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v33/i1/p111_s1`.

**Gower:2021:ASP**

[GMMN21] Robert M. Gower, Denali Molitor, Jacob Moorman, and Deanna Needell. On adaptive sketch-and-project for solving linear systems. *SIAM Journal on Matrix Analysis and Applications*, 42(2):954–989, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Grigori:2016:EKS**

[GMN16] Laura Grigori, Sophie Moufawad, and Frederic Nataf. Enlarged Krylov subspace conjugate gradient methods for reducing communication. *SIAM Journal on Matrix Analysis and Applications*, 37(2):744–773, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Garvey:2018:SVD**

[GMN18] Clarissa Garvey, Chang Meng, and James G. Nagy. Singular value decomposition approximation via Kronecker summations for imaging applications. *SIAM Journal on Matrix Analysis and Applications*, 39(4):1836–1857, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gazzola:2020:KML**

[GMN20] Silvia Gazzola, Chang Meng, and James G. Nagy. Krylov methods for low-rank regularization. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1477–1504, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gu:2006:FME**

[GMO+06] M. Gu, E. Mengi, M. L. Overton, J. Xia, and J. Zhu. Fast methods for estimating the distance to uncontrollability. *SIAM Journal on Matrix Analysis and Applications*,

28(2):477–502, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gill:1992:PIS**

[GMPS92] Philip E. Gill, Walter Murray, Dulce B. Ponceleón, and Michael A. Saunders. Preconditioners for indefinite systems arising in optimization. *SIAM Journal on Matrix Analysis and Applications*, 13(1): 292–311, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Goodman:2000:CFG**

[GMRS00] Tim N. T. Goodman, Charles A. Micchelli, Giuseppe Rodriguez, and Sebastiano Seatzu. On the Cholesky factorization of the Gram matrix of multivariate functions. *SIAM Journal on Matrix Analysis and Applications*, 22(2):501–526, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34327`.

**Grone:1990:LSG**

[GMS90] Robert Grone, Russell Merris, and V. S. Sunder. The Laplacian spectrum of a graph. *SIAM Journal on Matrix Analysis and Applications*, 11(2): 218–238, April 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gilbert:1992:SMM**

[GMS92] John R. Gilbert, Cleve Moler, and Robert Schreiber. Sparse matrices in MATLAB: Design and implementation. *SIAM Journal on Matrix Analysis and Applications*, 13(1):333–356, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Goldberg:2003:DSE**

[GN03] G. Goldberg and M. Neumann. Distribution of subdominant eigenvalues of matrices with random rows. *SIAM Journal on Matrix Analysis and Applications*, 24(3):747–761, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38910`.

**Gavish:2013:NCA**

[GN13] Matan Gavish and Boaz Nadler. Normalized cuts are approximately inverse exit times. *SIAM Journal on Matrix Analysis and Applications*, 34(2):757–772, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guttel:2016:SSS**

[GN16] Stefan Güttel and Yuji Nakatsukasa. Scaled and squared subdiagonal Padé approximation for the matrix exponential. *SIAM Journal on Matrix Analysis and Applications*, 37

(1):145–170, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gilbert:1994:EAC**

[GNP94] John R. Gilbert, Esmond G. Ng, and Barry W. Peyton. An efficient algorithm to compute row and column counts for sparse Cholesky factorization. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1075–1091, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23692`.

**Gawlik:2018:BSA**

[GNS18] Evan S. Gawlik, Yuji Nakatsukasa, and Brian D. Sutton. A backward stable algorithm for computing the CS decomposition via the polar decomposition. *SIAM Journal on Matrix Analysis and Applications*, 39 (3):1448–1469, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gillespie:1995:OGR**

[GO95] M. I. Gillespie and D. D. Olesky. Ordering Givens rotations for sparse $QR$ factorization. *SIAM Journal on Matrix Analysis and Applications*, 16(3):1024–1041, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25334`.

**Gu:2006:ACB**

[GO06] Ming Gu and Michael L. Overton. An algorithm to compute $\mathbf{Sep}_{\boldsymbol{\lambda}}$. *SIAM Journal on Matrix Analysis and Applications*, 28(2):348–359, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guglielmi:2011:FAA**

[GO11] Nicola Guglielmi and Michael L. Overton. Fast algorithms for the approximation of the pseudospectral abscissa and pseudospectral radius of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 32(4): 1166–1192, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1166_s1`.

**Gould:2014:PKM**

[GOR14] Nick Gould, Dominique Orban, and Tyrone Rees. Projected Krylov methods for saddle-point systems. *SIAM Journal on Matrix Analysis and Applications*, 35(4):1329–1343, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guglielmi:2015:EAC**

[GOS15] Nicola Guglielmi, Michael L. Overton, and G. W. Stewart. An efficient algorithm for

computing the generalized null space decomposition. *SIAM Journal on Matrix Analysis and Applications*, 36(1):38–54, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gould:1991:GGE**

[Gou91] Nick Gould. On growth in Gaussian elimination with complete pivoting. *SIAM Journal on Matrix Analysis and Applications*, 12(2):354–361, April 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Govaerts:1991:SSB**

[Gov91a] W. Govaerts. Stable solvers and block elimination for bordered systems. *SIAM Journal on Matrix Analysis and Applications*, 12(3):469–483, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gover:1991:PIG**

[Gov91b] M. J. C. Gover. Properties of the inverse of the Gaussian matrix. *SIAM Journal on Matrix Analysis and Applications*, 12 (3):541–548, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gesmundo:2019:PSV**

[GOV19] Fulvio Gesmundo, Alessandro Oneto, and Emanuele Ventura. Partially symmetric variants of Comon's problem via simultaneous rank. *SIAM Journal on Matrix Analysis and Applications*, 40(4):1453–1477, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gowda:1990:APM**

[Gow90] M. Seetharama Gowda. Affine pseudomonotone mappings and the linear complementarity problem. *SIAM Journal on Matrix Analysis and Applications*, 11(3):373–380, July 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gowda:1996:AZS**

[Gow96] M. Seetharama Gowda. An analysis of zero set and global error bound properties of a piecewise affine function via its recession function. *SIAM Journal on Matrix Analysis and Applications*, 17(3):594–609, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27894`.

**Grone:1988:PIC**

[GP88] Robert Grone and Stephen Pierce. Permanental inequalities for correlation matrices. *SIAM Journal on Matrix Analysis and Applications*, 9(2): 194–201, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gasca:1993:TPF**

[GP93] M. Gasca and J. M. Peña. Total positivity, $QR$ factorization, and Neville elimination. *SIAM Journal on Matrix Analysis and Applications*, 14(4): 1132–1140, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**George:1997:ASE**

[GP97] Alan George and Alex Pothen. An analysis of spectral envelope reduction via quadratic assignment problems. *SIAM Journal on Matrix Analysis and Applications*, 18(3):706–732, July 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27470`.

**Garcia-Planas:1998:KSS**

[GP98] M. I. García-Planas. Kronecker stratification of the space of quadruples of matrices. *SIAM Journal on Matrix Analysis and Applications*, 19(4):872–885, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28925`.

**Gu:2003:CRT**

[GP03] Caixing Gu and Linda Patton. Commutation relations for Toeplitz and Hankel matrices. *SIAM Journal on Matrix Analysis and Applications*, 24(3):728–746, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37732`.

**Guu:2004:CZI**

[GP04] Sy-Ming Guu and Chin-Tzong Pang. On the convergence to zero of infinite products of interval matrices. *SIAM Journal on Matrix Analysis and Applications*, 25(3):739–751, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40884`.

**Gasca:2006:CDA**

[GP06] M. Gasca and J. M. Peña. Characterizations and decompositions of almost strictly positive matrices. *SIAM Journal on Matrix Analysis and Applications*, 28(1):1–8, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guglielmi:2016:IPS**

[GP16] Nicola Guglielmi and Vladimir Yu. Protasov. Invariant polytopes of sets of matrices with application to regularity of wavelets and subdivisions. *SIAM Journal on Matrix Analysis and Applications*, 37(1):18–52, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guglielmi:2018:CSU**

[GP18] Nicola Guglielmi and Vladimir Yu. Protasov. On the closest stable/unstable nonnegative matrix and related stability radii. *SIAM Journal on Matrix Analysis and Applications*, 39(4): 1642–1669, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Garcia-Planas:2003:RVD**

[GPM03] M. I. García-Planas and A. A. Mailybaev. Reduction to versal deformations of matrix pencils and matrix pairs with application to control theory. *SIAM Journal on Matrix Analysis and Applications*, 24(4):943–962, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39201`.

**Gernandt:2023:CIM**

[GPPT23] H. Gernandt, F. Martínez Pería, F. Philipp, and C. Trunk. On characteristic invariants of matrix pencils and linear relations. *SIAM Journal on Matrix Analysis and Applications*, 44(4):1510–1539, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1535449`.

**Grimes:1990:NAF**

[GPS90] Roger G. Grimes, Daniel J. Pierce, and Horst D. Simon. A new algorithm for finding a pseudoperipheral node in a graph. *SIAM Journal on Matrix Analysis and Applications*, 11(2):323–335, April 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Greenbaum:1996:NCC**

[GPS96] Anne Greenbaum, Vlastimil Pták, and Zdeněk Strakoš. Any nonincreasing convergence curve is possible for GMRES. *SIAM Journal on Matrix Analysis and Applications*, 17(3):465–469, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27503`.

**Greif:2016:NEA**

[GPTPV16] C. Greif, C. C. Paige, D. Titley-Peloquin, and J. M. Varah. Numerical equivalences among Krylov subspace algorithms for skew-symmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 37(3):1071–1087, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Goldfarb:2014:RLR**

[GQ14] Donald Goldfarb and Zhiwei (Tony) Qin. Robust low-rank tensor recovery: Models and algorithms. *SIAM Journal on Matrix Analysis and Applications*, 35(1):225–253, ????

2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gross:1993:ASR**

[GR93] Orna Gross and Uriel G. Rothblum. Approximations of the spectral radius, corresponding eigenvector, and second largest modulus of an eigenvalue for square, nonnegative, irreducible matrices. *SIAM Journal on Matrix Analysis and Applications*, 14(1): 15–32, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gurvits:1997:CPB**

[GR97] Leonid Gurvits and Leiba Rodman. Convergence of polynomially bounded semigroups of matrices. *SIAM Journal on Matrix Analysis and Applications*, 18(2):360–368, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28939`.

**Gutknecht:2000:LAP**

[GR00] Martin H. Gutknecht and Klaus J. Ressel. Look-ahead procedures for Lanczos-type product methods based on three-term Lanczos recurrences. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1051–1078, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30674`.

**Gurvits:2005:MPR**

[GR05] Leonid Gurvits and Leiba Rodman. On matrix polynomials with real roots. *SIAM Journal on Matrix Analysis and Applications*, 26(3):758–764, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/60608`.

**Gower:2015:RIM**

[GR15] Robert M. Gower and Peter Richtárik. Randomized iterative methods for linear systems. *SIAM Journal on Matrix Analysis and Applications*, 36 (4):1660–1690, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gemignani:2017:FHR**

[GR17a] L. Gemignani and L. Robol. Fast Hessenberg reduction of some rank structured matrices. *SIAM Journal on Matrix Analysis and Applications*, 38 (2):574–598, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gower:2017:RQN**

[GR17b] Robert M. Gower and Peter Richtárik. Randomized quasi-Newton updates are linearly

convergent matrix inversion algorithms. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1380–1409, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gillis:2023:PIN**

[GR23] Nicolas Gillis and Róbert Rajkó. Partial identifiability for nonnegative matrix factorization. *SIAM Journal on Matrix Analysis and Applications*, 44(1):27–52, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1507553`.

**Grasedyck:2010:HSV**

[Gra10] Lars Grasedyck. Hierarchical singular value decomposition of tensors. *SIAM Journal on Matrix Analysis and Applications*, 31(4):2029–2054, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Grcar:2010:SCN**

[Grc10] Joseph F. Grcar. Spectral condition numbers of orthogonal projections and full rank linear least squares residuals. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2934–2949, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v31/i5/p2934_s1`.

**Greenbaum:1992:DSL**

[Gre92] A. Greenbaum. Diagonal scalings of the Laplacian as preconditioners for other elliptic differential operators. *SIAM Journal on Matrix Analysis and Applications*, 13(3):826–846, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Iterative methods in numerical linear algebra (Copper Mountain, CO, 1990).

**Greenbaum:1997:EAA**

[Gre97] Anne Greenbaum. Estimating the attainable accuracy of recursively computed residual methods. *SIAM Journal on Matrix Analysis and Applications*, 18(3):535–551, July 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28494`.

**Greif:1999:RST**

[Gre99] Chen Greif. Reduced systems for three-dimensional elliptic equations with variable coefficients. *SIAM Journal on Matrix Analysis and Applications*, 21(1):29–44, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32984`.

**Greensite:2005:IPK**

[Gre05] Fred Greensite. Inverse problems with $I \otimes A$ Kronecker structure. *SIAM Journal on Matrix Analysis and Applications*, 27(1):218–237, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43419`.

**Grinstead:1988:CLK**

[Gri88] Charles M. Grinstead. Cycle lengths in $A^k b$. *SIAM Journal on Matrix Analysis and Applications*, 9(4):537–542, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guglielmi:2017:NIM**

[GRK17] Nicola Guglielmi, Mutti-Ur Rehman, and Daniel Kressner. A novel iterative method to approximate structured singular values. *SIAM Journal on Matrix Analysis and Applications*, 38(2):361–386, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gross:1997:NPO**

[Gro97] Jürgen Gross. A note on a partial ordering in the set of Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 18(4):887–892, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30568`.

**Gross:1998:MCM**

[Gro98] Jürgen Gross. More on concavity of a matrix function. *SIAM Journal on Matrix Analysis and Applications*, 19(2):365–368, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31124`.

**Golub:2007:HAC**

[GRT07] Gene H. Golub, Daniel Ruiz, and Ahmed Touhami. A hybrid approach combining Chebyshev filter and conjugate gradient for solving linear systems with multiple right-hand sides. *SIAM Journal on Matrix Analysis and Applications*, 29(3):774–795, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Grubii:2006:EEE**

[Gru06] Luka Grubi'i. On eigenvalue and eigenvector estimates for nonnegative definite operators. *SIAM Journal on Matrix Analysis and Applications*, 28(4):1097–1125, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Greenbaum:1992:PBF**

[GS92] A. Greenbaum and Z. Strakoš. Predicting the behavior of fi-

nite precision Lanczos and conjugate gradient computations. *SIAM Journal on Matrix Analysis and Applications*, 13(1): 121–137, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gowda:1994:GOL**

[GS94] M. Seetharama Gowda and Roman Sznajder. The generalized order linear complementarity problem. *SIAM Journal on Matrix Analysis and Applications*, 15(3):779–795, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23785`.

**Sun:1996:RBA**

[gS96] Ji guang Sun. Residual bounds on approximate solutions for the unitary eigenproblem. *SIAM Journal on Matrix Analysis and Applications*, 17(1):69–82, January 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27001`.

**Sun:1998:BSB**

[gS98a] Ji guang Sun. Bounds for the structured backward errors of Vandermonde systems. *SIAM Journal on Matrix Analysis and Applications*, 20(1):45–59, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31475`.

**Sun:1998:PTA**

[gS98b] Ji guang Sun. Perturbation theory for algebraic Riccati equations. *SIAM Journal on Matrix Analysis and Applications*, 19(1):39–65, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29130`.

**Sun:2000:CNB**

[gS00a] Ji guang Sun. Condition number and backward error for the generalized singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 22(2):323–341, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34885`.

**Gutknecht:2000:ATT**

[GS00b] Martin H. Gutknecht and Zdenvek Strakos. Accuracy of two three-term and three two-term recurrences for Krylov space solvers. *SIAM Journal on Matrix Analysis and Applications*, 22(1):213–229, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33186`.

**Gowda:2002:SNR**

[GS02] M. Seetharama Gowda and Y. Song. Some new results for the semidefinite linear complementarity problem. *SIAM Journal on Matrix Analysis and Applications*, 24(1):25–39, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37792`.

**Grochenig:2003:FLR**

[GS03] Karlheinz Gröchenig and Harald Schwab. Fast local reconstruction methods for nonuniform sampling in shift-invariant spaces. *SIAM Journal on Matrix Analysis and Applications*, 24(4):899–913, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40906`.

**Godunov:2006:SAS**

[GS06] S. K. Godunov and M. Sadkane. Spectral analysis of symplectic matrices with application to the theory of parametric resonance. *SIAM Journal on Matrix Analysis and Applications*, 28(4):1083–1096, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gao:2010:CLS**

[GS10a] Yan Gao and Defeng Sun. Calibrating least squares semidefinite programming with equality and inequality constraints. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1432–1457, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gould:2010:SAS**

[GS10b] N. I. M. Gould and V. Simoncini. Spectral analysis of saddle point matrices with indefinite leading blocks. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1152–1171, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guttel:2021:CLM**

[GS21] Stefan Güttel and Marcel Schweitzer. A comparison of limited-memory Krylov methods for Stieltjes functions of Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 42(1):83–107, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guttel:2023:RSK**

[GS23] Stefan Güttel and Marcel Schweitzer. Randomized sketching for Krylov approximations of large-scale matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1073–1095, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https:`

//epubs.siam.org/doi/10.1137/22M1518062.

**Garoni:2015:SAS**

[GSCS15] Carlo Garoni, Stefano Serra-Capizzano, and Debora Sesana. Spectral analysis and spectral symbol of $d$-variate $\mathbf{Q_p}$ Lagrangian FEM stiffness matrices. *SIAM Journal on Matrix Analysis and Applications*, 36 (3):1100–1128, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gill:1996:SCF**

[GSS96] Philip E. Gill, Michael A. Saunders, and Joseph R. Shinnerl. On the stability of Cholesky factorization for symmetric quasidefinite systems. *SIAM Journal on Matrix Analysis and Applications*, 17(1):35–46, January 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/25262.

**Sun:1997:OBP**

[gSS97] Ji guang Sun and Zheng Sun. Optimal backward perturbation bounds for underdetermined systems. *SIAM Journal on Matrix Analysis and Applications*, 18(2):393–402, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/29743.

**Gratton:2022:NII**

[GSTPT22] Serge Gratton, Ehouarn Simon, David Titley-Peloquin, and Philippe L. Toint. A note on inexact inner products in GMRES. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1406–1422, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL https://epubs.siam.org/doi/10.1137/20M1320018.

**Golub:2000:CSG**

[GSV00] Gene Golub, Knut Sølna, and Paul Van Dooren. Computing the SVD of a general matrix product/quotient. *SIAM Journal on Matrix Analysis and Applications*, 22(1):1–19, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/32557.

**Gross:1999:NDT**

[GT99] Jürgen Gross and Götz Trenkler. Nonsingularity of the difference of two oblique projectors. *SIAM Journal on Matrix Analysis and Applications*, 21(2):390–395, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/32027.

**Grassmann:2002:TQM**

[GT02] Winfried K. Grassmann and Javad Tavakoli. A tandem

queue with a movable server: An eigenvalue approach. *SIAM Journal on Matrix Analysis and Applications*, 24(2):465–474, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39408`.

**Gasso:2004:TPF**

[GT04] M. Gassó and Juan R. Torregrosa. A totally positive factorization of rectangular matrices by the Neville elimination. *SIAM Journal on Matrix Analysis and Applications*, 25(4):986–994, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41555`.

**Gotsman:2008:CNS**

[GT08] Craig Gotsman and Sivan Toledo. On the computation of null spaces of sparse rectangular matrices. *SIAM Journal on Matrix Analysis and Applications*, 30(2):445–463, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gernandt:2017:EPR**

[GT17] Hannes Gernandt and Carsten Trunk. Eigenvalue placement for regular matrix pencils with rank one perturbations. *SIAM Journal on Matrix Analysis and Applications*, 38(1):134–154, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gautier:2019:PFT**

[GTH19a] Antoine Gautier, Francesco Tudisco, and Matthias Hein. The Perron–Frobenius theorem for multihomogeneous mappings. *SIAM Journal on Matrix Analysis and Applications*, 40(3):1179–1205, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gautier:2019:UPF**

[GTH19b] Antoine Gautier, Francesco Tudisco, and Matthias Hein. A unifying Perron–Frobenius theorem for nonnegative tensors via multihomogeneous maps. *SIAM Journal on Matrix Analysis and Applications*, 40(3):1206–1231, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gratton:2011:RSV**

[GTI11] S. Gratton, Ph. L. Toint, and J. Tshimanga Ilunga. Range-space variants and inexact matrix-vector products in Krylov solvers for linear systems arising from inverse problems. *SIAM Journal on Matrix Analysis and Applications*, 32 (3):969–986, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p969_s1`.

**Giscard:2013:EMF**

[GTJ13] P.-L. Giscard, S. J. Thwaite, and D. Jaksch. Evaluating matrix functions by resummations on graphs: The method of path-sums. *SIAM Journal on Matrix Analysis and Applications*, 34(2):445–469, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gratton:2018:IBS**

[GTP18] Serge Gratton and David Titley-Peloquin. Improved bounds for small-sample estimation. *SIAM Journal on Matrix Analysis and Applications*, 39(2):922–931, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gratton:2013:SCT**

[GTPI13] Serge Gratton, David Titley-Peloquin, and Jean Tshimanga Ilunga. Sensitivity and conditioning of the truncated total least squares solution. *SIAM Journal on Matrix Analysis and Applications*, 34(3):1257–1276, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gratton:2014:DMC**

[GTPTI14] Serge Gratton, David Titley-Peloquin, Philippe Toint, and Jean Tshimanga Ilunga. Differentiating the method of conjugate gradients. *SIAM Journal on Matrix Analysis and Applications*, 35(1):110–126, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**George:2000:MOW**

[GTW00] Alan George, Wei-Pai Tang, and Ya Dan Wu. Multilevel one-way dissection factorization. *SIAM Journal on Matrix Analysis and Applications*, 22(3):752–771, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33256`.

**Gu:1998:BPB**

[Gu98a] Ming Gu. Backward perturbation bounds for linear least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 20(2):363–372, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29644`.

**Gu:1998:NFA**

[Gu98b] Ming Gu. New fast algorithms for structured linear least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 20(1):244–269, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29646`.

**Gu:1998:SEA**

[Gu98c] Ming Gu. Stable and efficient algorithms for structured systems of linear equations. *SIAM Journal on Matrix Analysis and Applications*, 19(2):279–306, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29127`.

**Gu:2000:NME**

[Gu00] Ming Gu. New methods for estimating the distance to uncontrollability. *SIAM Journal on Matrix Analysis and Applications*, 21(3):989–1003, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32885`.

**Guillaume:1999:NE**

[Gui99] Philippe Guillaume. Nonlinear eigenproblems. *SIAM Journal on Matrix Analysis and Applications*, 20(3):575–595, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32417`.

**Gulliksson:1995:BEA**

[Gul95] Mårten Gulliksson. Backward error analysis for the constrained and weighted linear least squares problem when using the weighted $QR$ factorization. *SIAM Journal on Matrix Analysis and Applications*, 16(2):675–687, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24602`.

**Guo:1998:NMD**

[Guo98] Chun-Hua Guo. Newton's method for discrete algebraic Riccati equations when the closed-loop matrix has eigenvalues on the unit circle. *SIAM Journal on Matrix Analysis and Applications*, 20(2):279–294, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32299`.

**Guo:2001:CRI**

[Guo01a] Chun-Hua Guo. Convergence rate of an iterative method for a nonlinear matrix equation. *SIAM Journal on Matrix Analysis and Applications*, 23(1):295–302, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37401`.

**Guo:2001:NAR**

[Guo01b] Chun-Hua Guo. Nonsymmetric algebraic Riccati equations and Wiener–Hopf factorization for $M$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 23(1):225–242, 2001. CODEN SJMAEL.

ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37568`.

**Guo:2002:CAL**

[Guo02] Chun-Hua Guo. Convergence analysis of the Latouche–Ramaswami algorithm for null recurrent quasi-birth-death processes. *SIAM Journal on Matrix Analysis and Applications*, 23(3):744–760, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38187`.

**Guo:2003:CSC**

[Guo03] Chun-Hua Guo. Comments on a shifted cyclic reduction algorithm for quasi-birth-death problems. *SIAM Journal on Matrix Analysis and Applications*, 24(4):1161–1166, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40790`. See [HMR01].

**Gupta:2002:ISN**

[Gup02] Anshul Gupta. Improved symbolic and numerical factorization algorithms for unsymmetric sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 24(2):529–552, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39604`.

**Gutknecht:1992:CTU**

[Gut92] Martin H. Gutknecht. A completed theory of the unsymmetric Lanczos process and related algorithms, Part I. *SIAM Journal on Matrix Analysis and Applications*, 13(2):594–639, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gutknecht:1994:CTU**

[Gut94] Martin H. Gutknecht. A completed theory of the unsymmetric Lanczos process and related algorithms, Part II. *SIAM Journal on Matrix Analysis and Applications*, 15(1):15–58, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/18880`.

**Gutknecht:2014:DAK**

[Gut14] Martin H. Gutknecht. Deflated and augmented Krylov subspace methods: a framework for deflated BiCG and related solvers. *SIAM Journal on Matrix Analysis and Applications*, 35(4):1444–1466, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Greif:1999:BSM**

[GV99] Chen Greif and James Varah. Block stationary methods for

nonsymmetric cyclically reduced systems arising from three-dimensional elliptic equations. *SIAM Journal on Matrix Analysis and Applications*, 20(4):1038–1059, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31771`.

**Greif:2007:MCN**

[GV07] Chen Greif and James M. Varah. Minimizing the condition number for small rank modifications. *SIAM Journal on Matrix Analysis and Applications*, 29(1):82–97, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Greif:2009:ISS**

[GV09] Chen Greif and James M. Varah. Iterative solution of skew-symmetric linear systems. *SIAM Journal on Matrix Analysis and Applications*, 31(2):584–601, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Garza-Vargas:2020:LAU**

[GVK20] Jorge Garza-Vargas and Archit Kulkarni. The Lanczos algorithm under few iterations: Concentration and location of the output. *SIAM Journal on Matrix Analysis and Applications*, 41(3):1312–1346, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gallivan:2004:MRM**

[GVV04] K. Gallivan, A. Vandendorpe, and P. Van Dooren. Model reduction of MIMO systems via tangential interpolation. *SIAM Journal on Matrix Analysis and Applications*, 26(2):328–349, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42392`.

**Gulliksson:1992:MDC**

[GW92] Mårten Gulliksson and Per-Åke Wedin. Modifying the $QR$ decomposition to constrained and weighted linear least squares. *SIAM Journal on Matrix Analysis and Applications*, 13(4):1298–1313, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gulliksson:2000:UPT**

[GW00] Mårten Gulliksson and Per-Åke Wedin. The use and properties of Tikhonov filter matrices. *SIAM Journal on Matrix Analysis and Applications*, 22(1):276–281, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35502`.

**Geronimo:2007:TVO**

[GW07] Jeffrey S. Geronimo and Hugo Woerdeman. Two variable orthogonal polynomials on the BiCircle and structured matrices. *SIAM Journal on Matrix Analysis and Applications*, 29 (3):796–825, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guo:2022:NLB**

[GW22] Yongyan Guo and Gang Wu. A new lower bound on the size of the smallest vertex separator of a graph. *SIAM Journal on Matrix Analysis and Applications*, 43(1):370–376, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M1382118`.

**Wang:2012:ADD**

[gWcWL12] Wei guo Wang, Wei chao Wang, and Ren-Cang Li. Alternating-directional doubling algorithm for $M$-matrix algebraic Riccati equations. *SIAM Journal on Matrix Analysis and Applications*, 33(1): 170–194, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guglielmi:2005:CPE**

[GWZ05] N. Guglielmi, F. Wirth, and M. Zennaro. Complex polytope extremality results for families of matrices. *SIAM Journal on Matrix Analysis and Applications*, 27(3):721–743, July 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/60681`.

**Guglielmi:2009:FEC**

[GZ09] N. Guglielmi and M. Zennaro. Finding extremal complex polytope norms for families of real matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(2):602–620, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Gutknecht:2013:ECB**

[GZ13] Martin H. Gutknecht and Jens-Peter M. Zemke. Eigenvalue computations based on IDR. *SIAM Journal on Matrix Analysis and Applications*, 34(2): 283–311, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Guglielmi:2015:CCP**

[GZ15] N. Guglielmi and M. Zennaro. Canonical construction of polytope Barabanov norms and antinorms for sets of matrices. *SIAM Journal on Matrix Analysis and Applications*, 36(2):634–655, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hacon:1993:JMS**

[Hac93] Derek Hacon. Jacobi's method for skew-symmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 14(3): 619–628, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hallman:2020:SNE**

[Hal20] Eric Hallman. Sharp 2-norm error bounds for LSQR and the conjugate gradient method. *SIAM Journal on Matrix Analysis and Applications*, 41(3):1183–1207, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hallman:2022:BBM**

[Hal22] Eric Hallman. A block bidiagonalization method for fixed-accuracy low-rank matrix approximation. *SIAM Journal on Matrix Analysis and Applications*, 43(2):661–680, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1397866`.

**Hanke:1994:ICC**

[Han94] M. Hanke. Iterative consistency: a concept for the solution of singular systems of linear equations. *SIAM Journal on Matrix Analysis and Applications*, 15(2):569–577, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/18254`.

**Han:2003:CSE**

[Han03] Bin Han. Computing the smoothness exponent of a symmetric multivariate refinable function. *SIAM Journal on Matrix Analysis and Applications*, 24(3):693–714, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39086`.

**Harrar:1993:OMC**

[Har93] David L. Harrar, II. Orderings, multicoloring, and consistently ordered matrices. *SIAM Journal on Matrix Analysis and Applications*, 14(1):259–278, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hartfiel:1998:ESN**

[Har98] D. J. Hartfiel. Eigenvector slicing of the nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 19(1):182–190, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29870`.

**Hartfiel:1999:DES**

[Har99] D. J. Hartfiel. Distribution of entries in a substochastic matrix having eigenval-

ues near 1. *SIAM Journal on Matrix Analysis and Applications*, 21(2):537–546, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32344`.

**Hargreaves:2005:CCN**

[Har05] Gareth I. Hargreaves. Computing the condition number of tridiagonal and diagonal-plus-semiseparable matrices in linear time. *SIAM Journal on Matrix Analysis and Applications*, 27(3):801–820, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hari:2007:CBO**

[Har07] Vjeran Hari. Convergence of a block-oriented quasi-cyclic Jacobi method. *SIAM Journal on Matrix Analysis and Applications*, 29(2):349–369, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hari:2019:GCC**

[Har19] Vjeran Hari. On the global convergence of the complex HZ method. *SIAM Journal on Matrix Analysis and Applications*, 40(4):1291–1310, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Haviv:1989:MRR**

[Hav89] Moshe Haviv. More on Rayleigh–Ritz refinement technique for nearly uncoupled stochastic matrices. *SIAM Journal on Matrix Analysis and Applications*, 10(3):287–293, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Handy:1994:NSE**

[HB94] Susan L. Handy and Jesse L. Barlow. Numerical solution of the eigenproblem for banded, symmetric Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(1):205–214, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/19667`.

**Haut:2012:FAE**

[HB12] T. S. Haut and G. Beylkin. Fast and accurate con-eigenvalue algorithm for optimal rational approximations. *SIAM Journal on Matrix Analysis and Applications*, 33(4):1101–1125, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hill:1990:CHM**

[HBW90a] Richard D. Hill, Ronald G. Bates, and Steven R. Waters. On centro-Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 11(1):

128–133, January 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hill:1990:PHM**

[HBW90b] Richard D. Hill, Ronald G. Bates, and Steven R. Waters. On per-Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 11 (2):173–179, April 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hyland:1989:BKP**

[HC89a] David C. Hyland and Emmanuel G. Collins, Jr. Block Kronecker products and block norm matrices in large-scale systems analysis. *SIAM Journal on Matrix Analysis and Applications*, 10(1):18–29, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See erratum [HC89b].

**Hyland:1989:EBK**

[HC89b] David C. Hyland and Emmanuel G. Collins, Jr. Erratum: "Block Kronecker products and block norm matrices in large-scale systems analysis" [SIAM J. Matrix Anal. Appl. **10** (1989), no. 1, 18–29 and MR 90a:93010]. *SIAM Journal on Matrix Analysis and Applications*, 10(4):593, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See [HC89a].

**Huang:2015:RPA**

[HC15] Rong Huang and Delin Chu. Relative perturbation analysis for eigenvalues and singular values of totally nonpositive matrices. *SIAM Journal on Matrix Analysis and Applications*, 36(2):476–495, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hari:1997:SAD**

[HD97] Vjeran Hari and Zlatko Drmač. On scaled almost-diagonal Hermitian matrix pairs. *SIAM Journal on Matrix Analysis and Applications*, 18(4):1000–1012, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27847`.

**Hon:2023:PMM**

[HDSC23] Sean Hon, Jiamei Dong, and Stefano Serra-Capizzano. A preconditioned MINRES method for optimal control of wave equations and its asymptotic spectral distribution theory. *SIAM Journal on Matrix Analysis and Applications*, 44(4):1477–1509, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/23M1547251`.

**Hladik:2010:BRE**

[HDT10] Milan Hladík, David Daney,

and Elias Tsigaridas. Bounds on real eigenvalues and singular values of interval matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(4): 2116–2129, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**He:1999:POM**

[He99] Qi-Ming He. Partial orders and the matrix $R$ in matrix analytic methods. *SIAM Journal on Matrix Analysis and Applications*, 20(4):871–885, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31121`.

**He:2021:GUF**

[He21] Yunhui He. A generalized and unified framework of local Fourier analysis using matrix-stencils. *SIAM Journal on Matrix Analysis and Applications*, 42(3):1096–1118, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Heller:1995:RWV**

[Hel95] Peter Niels Heller. Rank $M$ wavelets with $N$ vanishing moments. *SIAM Journal on Matrix Analysis and Applications*, 16(2):502–519, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24548`.

**Helmberg:2000:FVS**

[Hel00] Christoph Helmberg. Fixing variables in semidefinite relaxations. *SIAM Journal on Matrix Analysis and Applications*, 21(3):952–969, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31442`.

**Hemmingsson:1995:DDM**

[Hem95] Lina Hemmingsson. A domain decomposition method for first-order PDEs. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1241–1267, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27015`.

**Hershkowitz:1990:PSP**

[Her90] Daniel Hershkowitz. Positive semidefinite pattern decompositions. *SIAM Journal on Matrix Analysis and Applications*, 11(4):612–619, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hershkowitz:1996:USD**

[Her96] Daniel Hershkowitz. Uniqueness of sum decompositions of symmetric matrices. *SIAM Journal on Matrix Analysis*

*and Applications*, 17(3):691–705, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27756`.

**Heyman:1995:ACF**

[Hey95] Daniel P. Heyman. Accurate computation of the fundamental matrix of a Markov chain. *SIAM Journal on Matrix Analysis and Applications*, 16(3):954–963, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25881`.

**Ho:2014:FSL**

[HG14] Kenneth L. Ho and Leslie Greengard. A fast semidirect least squares algorithm for hierarchically block separable matrices. *SIAM Journal on Matrix Analysis and Applications*, 35(2):725–748, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hallman:2018:LMB**

[HG18] Eric Hallman and Ming Gu. LSMB: Minimizing the backward error for least-squares problems. *SIAM Journal on Matrix Analysis and Applications*, 39(3):1295–1317, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hocking:2021:OCR**

[HG21] L. Robert Hocking and Chen Greif. Optimal complex relaxation parameters in multigrid for complex-shifted linear systems. *SIAM Journal on Matrix Analysis and Applications*, 42(2):475–502, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higueras:1999:LNM**

[HGC99] Inmaculada Higueras and Berta Garcia-Celayeta. Logarithmic norms for matrix pencils. *SIAM Journal on Matrix Analysis and Applications*, 20(3):646–666, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32595`.

**Higueras:2000:HCC**

[HGC00] Inmaculada Higueras and Berta Garcia-Celayeta. How close can the logarithmic norm of a matrix pencil come to the spectral abscissa? *SIAM Journal on Matrix Analysis and Applications*, 22(2):472–478, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34629`.

**Holz:2005:SAM**

[HGL05] U. B. Holz, G. H. Golub, and K. H. Law. A subspace approximation method

for the quadratic eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 26(2):498–521, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42337`.

**Higham:1989:LGF**

[HH89] Nicholas J. Higham and Desmond J. Higham. Large growth factors in Gaussian elimination with pivoting. *SIAM Journal on Matrix Analysis and Applications*, 10(2): 155–164, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:1992:BEC**

[HH92] Desmond J. Higham and Nicholas J. Higham. Backward error and condition of structured linear systems. *SIAM Journal on Matrix Analysis and Applications*, 13(1):162–175, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Heinig:1993:BSM**

[HH93] Georg Heinig and Frank Hellinger. On the Bezoutian structure of the Moore–Penrose inverses of Hankel matrices. *SIAM Journal on Matrix Analysis and Applications*, 14(3):629–645, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Heinig:1994:MPI**

[HH94] Georg Heinig and Frank Hellinger. Moore–Penrose inversion of square Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(2):418–450, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22585`.

**Higham:1998:SBE**

[HH98] Desmond J. Higham and Nicholas J. Higham. Structured backward error and condition of generalized eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 20(2):493–512, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31318`.

**Hamm:2021:PCD**

[HH21] Keaton Hamm and Longxiu Huang. Perturbations of CUR decompositions. *SIAM Journal on Matrix Analysis and Applications*, 42(1):351–375, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hladnik:2003:FDF**

[HHC03] Milan Hladnik, John Holbrook, and Stefano Serra Capizzano.

Fat diagonals and Fourier analysis. *SIAM Journal on Matrix Analysis and Applications*, 24(4):1060–1070, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41174`.

**Huang:2012:MPT**

[HHH12] Jie Huang, Ronald D. Haynes, and Ting-Zhu Huang. Monotonicity of perturbed tridiagonal $M$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 33(2):681–700, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Huang:2013:EDD**

[HHLW13] Tsung-Ming Huang, Han-En Hsieh, Wen-Wei Lin, and Weichung Wang. Eigendecomposition of the discrete double-curl operator with application to fast eigensolver for three-dimensional photonic crystals. *SIAM Journal on Matrix Analysis and Applications*, 34(2): 369–391, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:2021:RMG**

[HHP21] Desmond J. Higham, Nicholas J. Higham, and Srikara Pranesh. Random matrices generating large growth in $LU$ factorization with pivoting. *SIAM Journal on Matrix Analysis and Applications*, 42(1):185–201, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hadjidimos:1999:AIL**

[HHRV99] A. Hadjidimos, E. N. Houstis, J. R. Rice, and E. Vavalis. Analysis of iterative line spline collocation methods for elliptic partial differential equations. *SIAM Journal on Matrix Analysis and Applications*, 21(2):508–521, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30982`.

**Hershkowitz:1997:AWN**

[HHSW97] Daniel Hershkowitz, Wenchao Huang, Hans Schneider, and Hans Weinberger. Approximability by weighted norms of the structured and volumetric singular values of a class of nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 18(1):249–257, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29324`.

**Holodnak:2015:RAG**

[HI15] John T. Holodnak and Ilse C. F. Ipsen. Randomized approximation of the Gram matrix: Exact computation and probabilistic bounds. *SIAM*

*Journal on Matrix Analysis and Applications*, 36(1):110–137, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:1990:BEG**

[Hig90a] Nicholas J. Higham. Bounding the error in Gaussian elimination for tridiagonal systems. *SIAM Journal on Matrix Analysis and Applications*, 11(4): 521–530, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:1990:SAA**

[Hig90b] Nicholas J. Higham. Stability analysis of algorithms for solving confluent Vandermonde-like systems. *SIAM Journal on Matrix Analysis and Applications*, 11(1):23–41, January 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:1992:SMM**

[Hig92] Nicholas J. Higham. Stability of a method for multiplying complex matrices with three real matrix multiplications. *SIAM Journal on Matrix Analysis and Applications*, 13(3):681–687, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:1993:ODS**

[Hig93] Nicholas J. Higham. Optimization by direct search in matrix computations. *SIAM Journal on Matrix Analysis and Applications*, 14(2):317–333, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:1997:SDP**

[Hig97] Nicholas J. Higham. Stability of the diagonal pivoting method with partial pivoting. *SIAM Journal on Matrix Analysis and Applications*, 18(1):52–65, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29037`.

**Higham:2001:EPA**

[Hig01] Nicholas J. Higham. Evaluating Padé approximants of the matrix logarithm. *SIAM Journal on Matrix Analysis and Applications*, 22(4):1126–1135, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:2003:MPV**

[Hig03] Desmond J. Higham. A matrix perturbation view of the small world phenomenon. *SIAM Journal on Matrix Analysis and Applications*, 25(2):429–444, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40614`.

**Higham:2005:SSM**

[Hig05] Nicholas J. Higham. The scaling and squaring method for the matrix exponential revisited. *SIAM Journal on Matrix Analysis and Applications*, 26(4):1179–1193, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/61101`.

**Holodnak:2018:PSB**

[HIS18] John T. Holodnak, Ilse C. F. Ipsen, and Ralph C. Smith. A probabilistic subspace bound with application to active subspaces. *SIAM Journal on Matrix Analysis and Applications*, 39(3):1208–1220, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hallman:2023:MCM**

[HIS23] Eric Hallman, Ilse C. F. Ipsen, and Arvind K. Saibaba. Monte Carlo methods for estimating the diagonal of a real symmetric matrix. *SIAM Journal on Matrix Analysis and Applications*, 44(1):240–269, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1476277`.

**Holodnak:2015:CLS**

[HIW15] John T. Holodnak, Ilse C. F. Ipsen, and Thomas Wentworth. Conditioning of leverage scores and computation by $QR$ decomposition. *SIAM Journal on Matrix Analysis and Applications*, 36(3):1143–1163, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Howe:1989:LAI**

[HJ89] Eric C. Howe and Charles R. Johnson. Linear aggregation of input-output models. *SIAM Journal on Matrix Analysis and Applications*, 10(1):65–79, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hansen:2007:SNP**

[HJ07] Per Christian Hansen and Toke Koldborg Jensen. Smoothing-norm preconditioning for regularizing minimum-residual methods. *SIAM Journal on Matrix Analysis and Applications*, 29(1):1–14, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hare:1993:SAF**

[HJOvdD93] Donovan R. Hare, Charles R. Johnson, D. D. Olesky, and P. van den Driessche. Sparsity analysis of the $QR$ factorization. *SIAM Journal on Matrix Analysis and Applications*, 14 (3):655–669, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Howland:2003:SPD**

[HJP03] Peg Howland, Moongu Jeon, and Haesun Park. Structure preserving dimension reduction for clustered text data based on the generalized singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 25(1):165–179, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39366`.

**Higham:1995:MPF**

[HK95] Nicholas J. Higham and Philip A. Knight. Matrix powers in finite precision arithmetic. *SIAM Journal on Matrix Analysis and Applications*, 16(2):343–358, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25634`.

**Higham:2001:SQM**

[HK01] Nicholas J. Higham and Hyun-Min Kim. Solving a quadratic matrix equation by Newton's method with exact line searches. *SIAM Journal on Matrix Analysis and Applications*, 23(2):303–316, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35097`.

**Hackbusch:2008:TPA**

[HK08] Wolfgang Hackbusch and Boris N. Khoromskij. Tensor-product approximation to multidimensional integral operators and Green's functions. *SIAM Journal on Matrix Analysis and Applications*, 30(3):1233–1253, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Huckle:2012:CFA**

[HK12] Thomas K. Huckle and Christos Kravvaritis. Compact Fourier analysis for multigrid methods based on block symbols. *SIAM Journal on Matrix Analysis and Applications*, 33(1):73–96, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v33/i1/p73_s1`.

**Hyde:2008:AEM**

[HKBM08] Damon Hyde, Misha Kilmer, Dana H. Brooks, and Eric Miller. Analysis and exploitation of matrix structure arising in linearized optical tomographic imaging. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1065–1082, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Helton:2009:DES**

[HKG09] J. William Helton, Igor Klep, and Raul Gomez. Determi-

nant expansions of signed matrices and of certain Jacobians. *SIAM Journal on Matrix Analysis and Applications*, 31(2): 732–754, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hochstenbach:2005:JDT**

[HKP05] Michiel E. Hochstenbach, Tomaz Kosir, and Bor Plestenjak. A Jacobi–Davidson type method for the two-parameter eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 26(2):477–497, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41831`.

**Helsen:2005:CIA**

[HKV05] S. Helsen, A. B. J. Kuijlaars, and M. Van Barel. Convergence of the isometric Arnoldi process. *SIAM Journal on Matrix Analysis and Applications*, 26(3):782–809, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43820`.

**Huhtanen:2002:EIR**

[HL02] Marko Huhtanen and Rasmus Munk Larsen. Exclusion and inclusion regions for the eigenvalues of a normal matrix. *SIAM Journal on Matrix Analysis and Applications*, 23(4):1070–1091, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38456`.

**Hetmaniuk:2006:UAE**

[HL06] U. L. Hetmaniuk and R. B. Lehoucq. Uniform accuracy of eigenpairs from a shift-invert Lanczos method. *SIAM Journal on Matrix Analysis and Applications*, 28(4):927–948, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hager:2008:OGM**

[HL08] William W. Hager and Jiangtao Luo. Optimization of generalized mean-square error in noisy linear estimation. *SIAM Journal on Matrix Analysis and Applications*, 30(2):783–804, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:2011:SPA**

[HL11] Nicholas J. Higham and Lijing Lin. A Schur–Padé algorithm for fractional powers of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 32 (3):1056–1078, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p1056_s1`.

**Higham:2013:ISP**

[HL13] Nicholas J. Higham and Lijing Lin. An improved Schur–Padé algorithm for fractional powers of a matrix and their Fréchet derivatives. *SIAM Journal on Matrix Analysis and Applications*, 34(3):1341–1360, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hagedorn:2017:SKP**

[HL17] George A. Hagedorn and Caroline Lasser. Symmetric Kronecker products and semiclassical wave packets. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1560–1579, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:2021:MDF**

[HL21] Nicholas J. Higham and Xiaobo Liu. A multiprecision derivative-free Schur–Parlett algorithm for computing matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 42(3):1401–1422, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**He:2023:SAT**

[HL23] Yunhui He and Jun Liu. Smoothing analysis of two robust multigrid methods for elliptic optimal control problems. *SIAM Journal on Matrix Analysis and Applications*, 44(1):1–26, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1485759`.

**Hladik:2008:DSS**

[Hla08] Milan Hladík. Description of symmetric and skew–symmetric solution set. *SIAM Journal on Matrix Analysis and Applications*, 30(2):509–521, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hladik:2023:PSS**

[Hla23] Milan Hladík. Properties of the solution set of absolute value equations and the related matrix classes. *SIAM Journal on Matrix Analysis and Applications*, 44(1):175–195, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1497018`.

**Horn:1994:LOP**

[HLM94] Roger A. Horn, Chi-Kwong Li, and Dennis I. Merino. Linear operators preserving complex orthogonal equivalence on matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(2):519–529, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22775`.

**Huang:2023:FLE**

[HLM23] Zheng-Hai Huang, Yu-Fan Li, and Xinhe Miao. Finding the least element of a nonnegative solution set of a class of polynomial inequalities. *SIAM Journal on Matrix Analysis and Applications*, 44(2):530–558, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1476733`.

**Huang:2009:SPA**

[HLQ09] Tsung-Ming Huang, Wen-Wei Lin, and Jiang Qian. Structure-preserving algorithms for palindromic quadratic eigenvalue problems arising from vibration of fast trains. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1566–1592, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Huang:1997:NIR**

[HLS97] Wenchao Huang, Chi-Kwong Li, and Hans Schneider. Norms and inequalities related to Schur products of rectangular matrices. *SIAM Journal on Matrix Analysis and Applications*, 18(2):334–347, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29887`.

**Horn:1991:LOP**

[HLT91] Roger A. Horn, Chi-Kwong Li, and Nam-Kiu Tsing. Linear operators preserving certain equivalence relations on matrices. *SIAM Journal on Matrix Analysis and Applications*, 12(2):195–204, April 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:2008:BEP**

[HLT08] Nicholas J. Higham, Ren-Cang Li, and Françoise Tisseur. Backward error of polynomial eigenproblems solved by linearization. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1218–1241, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hadjidimos:2012:ISL**

[HLT12] A. Hadjidimos, M. Lapidakis, and M. Tzoumas. On iterative solution for linear complementarity problem with an $H_+$-matrix. *SIAM Journal on Matrix Analysis and Applications*, 33(1):97–110, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v33/i1/p97_s1`.

**Helton:1994:SPH**

[HLW94] J. William Helton, Daniel Lam, and Hugo J. Woerdeman. Sparsity patterns with

high rank extremal positive semidefinite matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(1):299–312, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/18983`.

**Hartwig:2005:RDI**

[HLW05] Robert Hartwig, Xiezhang Li, and Yimin Wei. Representations for the Drazin inverse of a $2 \times 2$ block matrix. *SIAM Journal on Matrix Analysis and Applications*, 27(3):757–771, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hegland:1989:ARS**

[HM89] M. Hegland and J. T. Marti. Algorithms for the reconstruction of special Jacobi matrices from their eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 10(2):219–228, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Horn:1990:ACS**

[HM90] Roger A. Horn and Roy Mathias. An analog of the Cauchy–Schwarz inequality for Hadamard products and unitarily invariant norms. *SIAM Journal on Matrix Analysis and Applications*, 11(4):481–498, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hodel:1997:LSA**

[HM97] A. Scottedward Hodel and Pradeep Misra. Least-squares approximate solution of overdetermined Sylvester equations. *SIAM Journal on Matrix Analysis and Applications*, 18(2):279–290, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25233`.

**Han:2004:SML**

[HM04a] Bin Han and Qun Mo. Splitting a matrix of Laurent polynomials with symmetry and its application to symmetric framelet filter banks. *SIAM Journal on Matrix Analysis and Applications*, 26(1):97–124, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41885`.

**Helton:2004:CNP**

[HM04b] J. William Helton and Scott McCullough. Convex noncommutative polynomials have degree two or less. *SIAM Journal on Matrix Analysis and Applications*, 25(4):1124–1139, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42199`.

**Hautphenne:2020:LRT**

[HM20] Sophie Hautphenne and Stefano Massei. A low-rank technique for computing the quasi-stationary distribution of subcritical Galton–Watson processes. *SIAM Journal on Matrix Analysis and Applications*, 41(1):29–57, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:2004:CPD**

[HMMT04] Nicholas J. Higham, D. Steven Mackey, Niloufer Mackey, and Françoise Tisseur. Computing the polar decomposition and the matrix sign decomposition in matrix groups. *SIAM Journal on Matrix Analysis and Applications*, 25(4):1178–1192, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42664`.

**Higham:2005:FPM**

[HMMT05] Nicholas J. Higham, D. Steven Mackey, Niloufer Mackey, and Françoise Tisseur. Functions preserving matrix groups and iterations for the matrix square root. *SIAM Journal on Matrix Analysis and Applications*, 26(3):849–877, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/44221`.

**Higham:2007:SLM**

[HMMT07] Nicholas J. Higham, D. Steven Mackey, Niloufer Mackey, and Françoise Tisseur. Symmetric linearizations for matrix polynomials. *SIAM Journal on Matrix Analysis and Applications*, 29(1):143–159, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Helmke:1994:DSC**

[HMP94] U. Helmke, J. B. Moore, and J. E. Perkins. Dynamical systems that compute balanced realizations and the singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 15(3):733–754, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22249`.

**Hochstenbach:2019:SSG**

[HMP19] Michiel E. Hochstenbach, Christian Mehl, and Bor Plestenjak. Solving singular generalized eigenvalue problems by a rank-completing perturbation. *SIAM Journal on Matrix Analysis and Applications*, 40(3):1022–1046, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**He:2001:SCR**

[HMR01] C. He, B. Meini, and N. H. Rhee. A shifted cyclic re-

duction algorithm for quasi-birth-death problems. *SIAM Journal on Matrix Analysis and Applications*, 23(3):673–691, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37195`. See comments [Guo03].

**Herceg:1993:CMM**

[HMT93] D. Herceg, M. M. Martins, and M. E. Trigo. On the convergence of the MSOR method for some classes of matrices. *SIAM Journal on Matrix Analysis and Applications*, 14(1): 122–131, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:2006:CLM**

[HMT06] Nicholas J. Higham, D. Steven Mackey, and Françoise Tisseur. The conditioning of linearizations of matrix polynomials. *SIAM Journal on Matrix Analysis and Applications*, 28(4): 1005–1028, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:2009:DMP**

[HMT09] Nicholas J. Higham, D. Steven Mackey, and Françoise Tisseur. Definite matrix polynomials and their linearization by definite pencils. *SIAM Journal on Matrix Analysis and Applications*, 31(2):478–502, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:2010:CGP**

[HMT10] Nicholas J. Higham, Christian Mehl, and Françoise Tisseur. The canonical generalized polar decomposition. *SIAM Journal on Matrix Analysis and Applications*, 31(4):2163–2180, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hu:2018:AQR**

[HMWY18] Jiang Hu, Andre Milzarek, Zaiwen Wen, and Yaxiang Yuan. Adaptive quadratically regularized Newton method for Riemannian optimization. *SIAM Journal on Matrix Analysis and Applications*, 39(3): 1181–1207, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hadjidimos:1990:YEA**

[HN90] A. Hadjidimos and D. Noutsos. The Young–Eidson algorithm: Applications and extensions. *SIAM Journal on Matrix Analysis and Applications*, 11(4):620–631, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**He:1997:EQ**

[HN97] Qi-Ming He and Marcel F. Neuts. On episodic queues.

*SIAM Journal on Matrix Analysis and Applications*, 18 (1):223–248, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28147`.

**Hadjidimos:1998:ENM**

[HN98] Apostolos Hadjidimos and Michael Neumann. Euclidean norm minimization of the SOR operators. *SIAM Journal on Matrix Analysis and Applications*, 19(1):191–204, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30049`.

**Hochstenbach:2009:CII**

[HN09] Michiel E. Hochstenbach and Yvan Notay. Controlling inner iterations in the Jacobi–Davidson method. *SIAM Journal on Matrix Analysis and Applications*, 31(2):460–477, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Horning:2022:TED**

[HN22] Andrew Horning and Yuji Nakatsukasa. Twice is enough for dangerous eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 43(1):68–93, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M1385330`.

**Haddock:2022:QBI**

[HNRS22] Jamie Haddock, Deanna Needell, Elizaveta Rebrova, and William Swartworth. Quantile-based iterative methods for corrupted systems of linear equations. *SIAM Journal on Matrix Analysis and Applications*, 43(2):605–637, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1429187`.

**Han:1999:SRF**

[HNT99] Lixing Han, Michael Neumann, and Michael Tsatsomeros. Spectral radii of fixed Frobenius norm perturbations of nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 21(1):79–92, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31824`.

**Ho:1990:SSM**

[Ho90] Chi Fai Ho. Some 0–1 solutions to matrix equation $A^m - A^n = IJ$ — Part I. *SIAM Journal on Matrix Analysis and Applications*, 11(2):200–206, April 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Holmgren:1992:ISM**

[HO92] S. Holmgren and K. Otto. Iterative solution methods and preconditioners for block-tridiagonal systems of equations. *SIAM Journal on Matrix Analysis and Applications*, 13(3):863–886, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Iterative methods in numerical linear algebra (Copper Mountain, CO, 1990).

**Haeberly:1994:HAO**

[HO94] Jean-Pierre A. Haeberly and Michael L. Overton. A hybrid algorithm for optimizing eigenvalues of symmetric definite pencils. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1141–1156, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24483`.

**Heyman:1998:OIC**

[HO98] Daniel P. Heyman and Dianne P. O'Leary. Overcoming instability in computing the fundamental matrix for a Markov chain. *SIAM Journal on Matrix Analysis and Applications*, 19(2):534–540, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30175`.

**Hendrickx:2010:MNN**

[HO10] Julien M. Hendrickx and Alex Olshevsky. Matrix $p$-norms are NP-hard to approximate if $p \neq 1, 2, \infty$. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2802–2812, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hur:2015:SLP**

[HO15] Youngmi Hur and Kasso A. Okoudjou. Scaling Laplacian pyramids. *SIAM Journal on Matrix Analysis and Applications*, 36(1):348–365, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Holmes:1991:RCM**

[Hol91] R. B. Holmes. On random correlation matrices. *SIAM Journal on Matrix Analysis and Applications*, 12(2):239–272, April 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hong:1989:CFH**

[Hon89] Yoo Pyo Hong. A canonical form for Hermitian matrices under complex orthogonal congruence. *SIAM Journal on Matrix Analysis and Applications*, 10(2):233–243, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hook:2017:MPA**

[Hoo17] James Hook. Max-plus algebraic statistical leverage scores. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1410–1433, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hill:1992:RIP**

[HP92a] R. O. Hill, Jr. and B. N. Parlett. Refined interlacing properties. *SIAM Journal on Matrix Analysis and Applications*, 13(1):239–247, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hodel:1992:PSL**

[HP92b] A. Scottedward Hodel and Kameshwar Poolla. Parallel solution of large Lyapunov equations. *SIAM Journal on Matrix Analysis and Applications*, 13 (4):1189–1203, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hochstenbach:2002:JDT**

[HP02] Michiel E. Hochstenbach and Bor Plestenjak. A Jacobi–Davidson type method for a right definite two-parameter eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 24(2):392–410, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39526`.

**Heggernes:2009:FCM**

[HP09] Pinar Heggernes and Barry W. Peyton. Fast computation of minimal fill inside a given elimination ordering. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1424–1444, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Helton:1989:REP**

[HPR89] J. W. Helton, S. Pierce, and L. Rodman. The ranks of extremal positive semidefinite matrices with given sparsity pattern. *SIAM Journal on Matrix Analysis and Applications*, 10(3):407–423, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hnetynkova:2011:TLS**

[HPS+11] Iveta Hnětynková, Martin Plešinger, Diana Maria Sima, Zdeněk Strakoš, and Sabine Van Huffel. The total least squares problem in $AX \approx B$: a new classification with the relationship to the classical works. *SIAM Journal on Matrix Analysis and Applications*, 32(3):748–770, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p748_s1`.

**Hnetynkova:2013:CPW**

[HPS13] Iveta Hnetynková, Martin Plesinger, and Zdenek Strakos. The core problem within a linear approximation problem $AX \approx B$ with multiple right-hand sides. *SIAM Journal on Matrix Analysis and Applications*, 34(3):917–931, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hnetynkova:2015:BGG**

[HPS15] Iveta Hnetynková, Martin Plesinger, and Zdenek Strakos. Band generalization of the Golub–Kahan bidiagonalization, generalized Jacobi matrices, and the core problem. *SIAM Journal on Matrix Analysis and Applications*, 36(2): 417–434, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hnetynkova:2016:SCP**

[HPS16] Iveta Hnetynková, Martin Plesinger, and Diana Maria Sima. Solvability of the core problem with multiple right-hand sides in the TLS sense. *SIAM Journal on Matrix Analysis and Applications*, 37(3): 861–876, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hook:2019:MBH**

[HPTH19] James Hook, Jennifer Pestana, Françoise Tisseur, and Jonathan Hogg. Max-balanced Hungarian scalings. *SIAM Journal on Matrix Analysis and Applications*, 40(1):320–346, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hnetynkova:2023:KSA**

[HPZ23] Iveta Hnetynková, Martin Plesinger, and Jana Záková. Krylov subspace approach to core problems within multilinear approximation problems: a unifying framework. *SIAM Journal on Matrix Analysis and Applications*, 44(1):53–79, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1462155`.

**Hu:2016:NSC**

[HQ16] Shenglong Hu and Liqun Qi. A necessary and sufficient condition for existence of a positive Perron vector. *SIAM Journal on Matrix Analysis and Applications*, 37(4):1747–1770, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Haviv:1993:SES**

[HR93] Moshe Haviv and Y. Ritov. On series expansions and stochastic matrices. *SIAM Journal on Matrix Analysis and Applications*, 14(3):670–676, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Heath:1995:CPN**

[HR95] Michael T. Heath and Padma Raghavan. A Cartesian parallel nested dissection algorithm. *SIAM Journal on Matrix Analysis and Applications*, 16(1):235–253, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23827`.

**Heinig:2000:HTR**

[HR00] Georg Heinig and Karla Rost. Hartley transform representations of symmetric Toeplitz matrix inverses with application to fast matrix-vector multiplication. *SIAM Journal on Matrix Analysis and Applications*, 22(1):86–105, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33961`.

**Heinig:2004:NFA**

[HR04] Georg Heinig and Karla Rost. New fast algorithms for Toeplitz-plus-Hankel matrices. *SIAM Journal on Matrix Analysis and Applications*, 25(3):842–857, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41007`.

**Higham:2014:HOF**

[HR14] Nicholas J. Higham and Samuel D. Relton. Higher order Fréchet derivatives of matrix functions and the level-2 condition number. *SIAM Journal on Matrix Analysis and Applications*, 35(3):1019–1037, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hershkowitz:1988:CNM**

[HRS88] Daniel Hershkowitz, Uriel G. Rothblum, and Hans Schneider. Classifications of nonnegative matrices using diagonal equivalence. *SIAM Journal on Matrix Analysis and Applications*, 9(4):455–460, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hershkowitz:1988:ECM**

[HS88] Daniel Hershkowitz and Hans Schneider. Equality classes of matrices. *SIAM Journal on Matrix Analysis and Applications*, 9(1):1–18, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hershkowitz:1990:IIM**

[HS90] Daniel Hershkowitz and Hans Schneider. On the inertia of intervals of matrices. *SIAM Journal on Matrix Analysis and Applications*, 11(4):565–574, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hochbruck:1995:PKS**

[HS95a] Marlis Hochbruck and Gerhard Starke. Preconditioned Krylov subspace methods for Lyapunov matrix equations. *SIAM Journal on Matrix Analysis and Applications*, 16(1):156–171, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23923`.

**Hu:1995:SCI**

[HS95b] Shu-An Hu and Ronald L. Smith. The Schur complement interlacing theorem. *SIAM Journal on Matrix Analysis and Applications*, 16(3):1013–1023, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26502`.

**Hartwig:1998:PAO**

[HS98] Robert E. Hartwig and Peter Semrl. Power additivity and orthogonality. *SIAM Journal on Matrix Analysis and Applications*, 20(1):1–13, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31498`.

**Hongwei:2000:CCS**

[HS00] Liu Hongwei and Liu Sanyang. A counterexample of the convexity of sums of singular values. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1389–1391, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36180`.

**Herzog:2010:PCG**

[HS10] Roland Herzog and Ekkehard Sachs. Preconditioned conjugate gradient method for optimal control problems with control and state constraints. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2291–2317, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hogg:2013:OWM**

[HS13] J. D. Hogg and J. A. Scott. Optimal weighted matchings for rank-deficient sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 34(4):1431–1447, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hogg:2014:CTP**

[HS14] J. D. Hogg and J. A. Scott. Compressed threshold pivoting for sparse symmetric indefinite systems. *SIAM Journal on Matrix Analysis and Applications*, 35(2):783–817, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:2016:BDN**

[HS16] Nicholas J. Higham and Natasa Strabić. Bounds for the distance to the nearest correlation matrix. *SIAM Journal on Matrix Analysis and Applications*, 37(3):1088–1102, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hauck:2023:PCS**

[HS23] Cory D. Hauck and Stefan Schnake. A predictor-corrector strategy for adaptivity in dynamical low-rank approximations. *SIAM Journal on Matrix Analysis and Applications*, 44(3):971–1005, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1519493`.

**Huckle:2004:SPT**

[HSC04] Thomas Huckle and Stefano Serra-Capizzano. The spectra of preconditioned Toeplitz matrix sequences can have gaps. *SIAM Journal on Matrix Analysis and Applications*, 25(4):930–946, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41926`.

**Hu:2019:BNR**

[HST19] Shenglong Hu, Defeng Sun, and Kim-Chuan Toh. Best nonnegative rank-one approximations of tensors. *SIAM Journal on Matrix Analysis and Applications*, 40(4):1527–1554, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Higham:2000:BAM**

[HT00] Nicholas J. Higham and Françoise Tisseur. A block algorithm for matrix 1-norm estimation, with an application to 1-norm pseudospectra. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1185–1201, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35608`.

**Hook:2017:IPB**

[HT17] James Hook and Françoise Tisseur. Incomplete *LU* preconditioner based on max-plus approximation of *LU* factorization. *SIAM Journal on Matrix Analysis and Applications*, 38 (4):1160–1189, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hu:1992:PMR**

[Hu92] H. Hu. A projective method for rescaling a diagonally stable matrix to be positive definite. *SIAM Journal on Matrix Analysis and Applications*, 13 (4):1255–1263, October 1992. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic).

**Huang:2021:ACG**

[Hua21] Rong Huang. Accurate computation of generalized eigenvalues of regular SR–BP pairs. *SIAM Journal on Matrix Analysis and Applications*, 42(4): 1680–1702, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Huckle:1992:CSM**

[Huc92] Thomas Huckle. Circulant and skewcirculant matrices for solving Toeplitz matrix problems. *SIAM Journal on Matrix Analysis and Applications*, 13(3):767–777, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Iterative methods in numerical linear algebra (Copper Mountain, CO, 1990).

**Huckle:1994:AMN**

[Huc94] Thomas Huckle. The Arnoldi method for normal matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(2):479–489, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/21996`.

**Huhtanen:2001:SSN**

[Huh01] Marko Huhtanen. A stratification of the set of normal matrices. *SIAM Journal on Matrix Analysis and Applications*, 23(2):349–367, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35708`.

**Huhtanen:2002:HLM**

[Huh02] Marko Huhtanen. A Hermitian Lanczos method for normal matrices. *SIAM Journal on Matrix Analysis and Applications*, 23(4):1092–1108, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39846`.

**Hough:1997:COD**

[HV97] Patricia D. Hough and Stephen A. Vavasis. Complete orthogonal decomposition for weighted least squares. *SIAM Journal on Matrix Analysis and Applications*, 18(2):369–392, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28079`.

**Howle:2005:IMS**

[HV05] Victoria E. Howle and Stephen A. Vavasis. An iterative method for solving complex-symmetric systems arising in electrical power modeling. *SIAM Journal on Matrix Analysis and Applications*, 26(4):1150–1178, October 2005. CODEN SJMAEL. ISSN 0895-4798

(print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37087`.

**Hu:2019:MAC**

[HV19] Xiaozhe Hu and Panayot S. Vassilevski. Modifying AMG coarse spaces with weak approximation property to exhibit approximation in energy norm. *SIAM Journal on Matrix Analysis and Applications*, 40(3):1131–1152, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**He:1998:ACD**

[HW98] C. He and G. A. Watson. An algorithm for computing the distance to instability. *SIAM Journal on Matrix Analysis and Applications*, 20(1):101–116, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31483`.

**He:2011:SLS**

[HXY11] Bingsheng He, Minghua Xu, and Xiaoming Yuan. Solving large-scale least squares semidefinite programming by alternating direction methods. *SIAM Journal on Matrix Analysis and Applications*, 32(1):136–152, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p136_s1`.

**Hansen:2000:SPT**

[HY00] Per Christian Hansen and Plamen Y. Yalamov. Stabilization by perturbation of a $4n^2$ Toeplitz solver. *SIAM Journal on Matrix Analysis and Applications*, 21(3):849–866, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29226`.

**Hansen:2001:CSR**

[HY01] Per Christian Hansen and Plamen Y. Yalamov. Computing symmetric rank-revealing decompositions via triangular factorization. *SIAM Journal on Matrix Analysis and Applications*, 23(2):443–458, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37006`.

**Hayami:2010:GML**

[HYI10] Ken Hayami, Jun-Feng Yin, and Tokushi Ito. GMRES methods for least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2400–2430, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Hu:2001:IMV**

[HZ01] Qiya Hu and Jun Zou. An iterative method with variable relaxation parameters for

saddle-point problems. *SIAM Journal on Matrix Analysis and Applications*, 23(2):317–338, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36406`.

**Iannazzo:2006:NMM**

[Ian06] Bruno Iannazzo. On the Newton method for the matrix $P$ th root. *SIAM Journal on Matrix Analysis and Applications*, 28(2):503–523, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Iannazzo:2009:FRI**

[Ian09] Bruno Iannazzo. A family of rational iterations and its application to the computation of the matrix $p$ th root. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1445–1462, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ishteva:2013:JAB**

[IAV13] Mariya Ishteva, P.-A. Absil, and Paul Van Dooren. Jacobi algorithm for the best low multilinear rank approximation of symmetric tensors. *SIAM Journal on Matrix Analysis and Applications*, 34(2):651–672, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ishteva:2011:BLM**

[IAVD11] Mariya Ishteva, P.-A. Absil, Sabine Van Huffel, and Lieven De Lathauwer. Best low multilinear rank approximation of higher-order tensors, based on the Riemannian trust-region scheme. *SIAM Journal on Matrix Analysis and Applications*, 32(1):115–135, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p115_s1`.

**Ito:1994:BTP**

[IIM94] Hisashi Ito, Satoru Iwata, and Kazuo Murota. Block-triangularizations of partitioned matrices under similarity/equivalence transformations. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1226–1255, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23559`.

**Ipsen:2006:CAP**

[IK06] Ilse C. F. Ipsen and Steve Kirkland. Convergence analysis of a PageRank updating algorithm by Langville and Meyer. *SIAM Journal on Matrix Analysis and Applications*, 27(4):952–967, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ikramov:1997:CNT**

[Ikr97] Khakim D. Ikramov. Comments on: "Normal Toeplitz matrices" [SIAM J. matrix anal. appl. **17** (1996), no. 4, 1037–1043 and MR 97g:15025] by D. R. Farenick, M. Krupnik, N. Krupnik, and W. Y. Lee. *SIAM Journal on Matrix Analysis and Applications*, 18(2):518, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31479`. See [FKKL96].

**Ito:2010:ANI**

[IKSG10] Kazufumi Ito, Karl Kunisch, Volker Schulz, and Ilia Gherman. Approximate nullspace iterations for KKT systems. *SIAM Journal on Matrix Analysis and Applications*, 31(4): 1835–1847, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ipsen:1994:USM**

[IM94] Ilse C. F. Ipsen and Carl D. Meyer. Uniform stability of Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1061–1074, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23756`.

**Iwata:1995:MTD**

[IM95] Satoru Iwata and Kazuo Murota. A minimax theorem and a Dulmage–Mendelsohn type decomposition for a class of generic partitioned matrices. *SIAM Journal on Matrix Analysis and Applications*, 16(3):719–734, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25590`.

**Iannazzo:2013:SLA**

[IM13] Bruno Iannazzo and Carlo Manasse. A Schur logarithmic algorithm for fractional powers of matrices. *SIAM Journal on Matrix Analysis and Applications*, 34(2):794–813, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ito:2016:AGE**

[IM16] Shinji Ito and Kazuo Murota. An algorithm for the generalized eigenvalue problem for nonsquare matrix pencils by minimal perturbation approach. *SIAM Journal on Matrix Analysis and Applications*, 37(1):409–419, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ipsen:2009:RPB**

[IN09] I. C. F. Ipsen and B. Nadler. Refined perturbation bounds

for eigenvalues of Hermitian and non-Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(1): 40–53, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Iwen:2021:LMO**

[INRZ21] Mark A. Iwen, Deanna Needell, Elizaveta Rebrova, and Ali Zare. Lower memory oblivious (tensor) subspace embeddings with fewer random bits: Modewise methods for least squares. *SIAM Journal on Matrix Analysis and Applications*, 42(1): 376–416, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Iwen:2016:DIS**

[IO16] M. A. Iwen and B. W. Ong. A distributed and incremental SVD algorithm for agglomerative data analysis on large networks. *SIAM Journal on Matrix Analysis and Applications*, 37(4):1699–1718, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ipsen:2006:SIA**

[Ips06] Ilse C. F. Ipsen. Special issue on accurate solution of eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 28(4):ix, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ipsen:2009:SIA**

[Ips09] Ilse C. F. Ipsen. Special issue on accurate solution of eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 31(1):vii, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ipsen:2008:PBD**

[IR08] Ilse C. F. Ipsen and Rizwana Rehman. Perturbation bounds for determinants and characteristic polynomials. *SIAM Journal on Matrix Analysis and Applications*, 30(2):762–776, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Iwata:2007:CAS**

[IS07] Satoru Iwata and Ryo Shimizu. Combinatorial analysis of singular matrix pencils. *SIAM Journal on Matrix Analysis and Applications*, 29(1):245–259, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ipsen:2008:PCS**

[IS08] Ilse C. F. Ipsen and Teresa M. Selee. PageRank computation, with special attention to dangling nodes. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1281–1296, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ipsen:2011:ECD**

[IS11] Ilse C. F. Ipsen and Teresa M. Selee. Ergodicity coefficients defined by vector norms. *SIAM Journal on Matrix Analysis and Applications*, 32(1): 153–200, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p153_s1`.

**Irony:2006:SBP**

[IT06] Dror Irony and Sivan Toledo. The snap-back pivoting method for symmetric banded indefinite matrices. *SIAM Journal on Matrix Analysis and Applications*, 28(2):398–424, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Iwata:2011:KCF**

[IT11] Satoru Iwata and Mizuyo Takamatsu. On the Kronecker canonical form of mixed matrix pencils. *SIAM Journal on Matrix Analysis and Applications*, 32(1):44–71, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p44_s1`.

**Iwata:2018:IRU**

[IT18] Satoru Iwata and Mizuyo Takamatsu. Index reduction via unimodular transformations. *SIAM Journal on Matrix Analysis and Applications*, 39(3):1135–1151, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ito:1996:ENT**

[Ito96] Takashi Ito. Every normal Toeplitz matrix is either of type I or of type II. *SIAM Journal on Matrix Analysis and Applications*, 17(4):998–1006, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29315`.

**Ishteva:2014:FAS**

[IUM14] Mariya Ishteva, Konstantin Usevich, and Ivan Markovsky. Factorization approach to structured low-rank approximation with applications. *SIAM Journal on Matrix Analysis and Applications*, 35(3): 1180–1204, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ipsen:2014:ECS**

[IW14] Ilse C. F. Ipsen and Thomas Wentworth. The effect of coherence on sampling from matrices with orthonormal columns, and preconditioned least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 35(4):1490–1520, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Iserles:2004:SCM**

[IZ04] Arieh Iserles and Antonella Zanna. On the spectra of certain matrices generated by involutory automorphisms. *SIAM Journal on Matrix Analysis and Applications*, 25(4):1110–1123, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42378`.

**Ipsen:2020:PEA**

[IZ20] Ilse C. F. Ipsen and Hua Zhou. Probabilistic error analysis for inner products. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1726–1741, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**James:1992:INI**

[Jam92] Douglas James. Implicit nullspace iterative methods for constrained least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 13 (3):962–978, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Iterative methods in numerical linear algebra (Copper Mountain, CO, 1990).

**Jarlebring:2022:IGP**

[JC22a] Elias Jarlebring and Siobhán Correnty. Infinite GMRES for parameterized linear systems. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1382–1405, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1410324`.

**Jiao:2022:AGI**

[JC22b] Xiangmin Jiao and Qiao Chen. Approximate generalized inverses with iterative refinement for $\epsilon$-accurate preconditioning of singular systems. *SIAM Journal on Matrix Analysis and Applications*, 43(1):40–67, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M1364126`.

**Jungers:2014:LPM**

[JCG14] Raphaël M. Jungers, Antonio Cicone, and Nicola Guglielmi. Lifted polytope methods for computing the joint spectral radius. *SIAM Journal on Matrix Analysis and Applications*, 35(2):391–410, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Johnson:2003:PWT**

[JDS03] Charles R. Johnson, António Leal Duarte, and Carlos M. Saiago. The Parter–Wiener theorem: Refinement and generalization. *SIAM Journal on Matrix Analysis and Applications*, 25(2):352–361, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162

(electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39332`.

**Johnsson:1988:AMT**

[JH88] S. Lennart Johnsson and Ching-Tien Ho. Algorithms for matrix transposition on Boolean $N$-cube configured ensemble architectures. *SIAM Journal on Matrix Analysis and Applications*, 9(3):419–454, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Johnson:2002:EWT**

[JH02] Charles R. Johnson and Christopher J. Hillar. Eigenvalues of words in two positive definite letters. *SIAM Journal on Matrix Analysis and Applications*, 23(4):916–928, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38707`.

**Ji:1992:TDB**

[Ji92] Xing Zhi Ji. A two-dimensional bisection method for solving two-parameter eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 13(4):1085–1093, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jia:1995:CGL**

[Jia95] Zhong Xiao Jia. The convergence of generalized Lanczos methods for large unsymmetric eigenproblems. *SIAM Journal on Matrix Analysis and Applications*, 16(3):843–862, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24675`.

**Jianmiao:1998:SSG**

[Jia98] Cen Jianmiao. On the sandwich semigroups of group Boolean matrices. *SIAM Journal on Matrix Analysis and Applications*, 19(2):416–428, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29038`.

**Jiang:2001:SPM**

[Jia01] Qingtang Jiang. Symmetric paraunitary matrix extension and parametrization of symmetric orthogonal multifilter banks. *SIAM Journal on Matrix Analysis and Applications*, 23(1):167–186, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37292`.

**Jia:2022:TCO**

[Jia22a] Zhongxiao Jia. Theoretical and computable optimal subspace expansions for matrix eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 43(2):584–604,

???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL https://epubs.siam.org/doi/10.1137/20M1331032.

**Jian:2022:SAR**

[Jia22b] Yuan Jian. Subspaces analysis for random projection UTV framework. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1291–1307, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL https://epubs.siam.org/doi/10.1137/21M1451592.

**Jeffries:1988:SSP**

[JJ88] Clark Jeffries and Charles R. Johnson. Some sign patterns that preclude matrix stability. *SIAM Journal on Matrix Analysis and Applications*, 9(1):19–25, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jia:2003:SAT**

[JJ03] Rong-Qing Jia and Qingtang Jiang. Spectral analysis of the transition operator and its applications to smoothness analysis of wavelets. *SIAM Journal on Matrix Analysis and Applications*, 24(4):1071–1109, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/39785.

**Jaimoukha:1995:OPM**

[JK95a] Imad M. Jaimoukha and Ebrahim M. Kasenally. Oblique projection methods for large scale model reduction. *SIAM Journal on Matrix Analysis and Applications*, 16(2):602–627, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/25074.

**Johnson:1995:PSG**

[JK95b] Charles R. Johnson and Brenda K. Kroschel. Principal submatrices, geometric multiplicities, and structured eigenvectors. *SIAM Journal on Matrix Analysis and Applications*, 16(3):1004–1012, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/26656.

**Jaimoukha:1997:IRK**

[JK97] Imad M. Jaimoukha and Ebrahim M. Kasenally. Implicitly restarted Krylov subspace methods for stable partial realizations. *SIAM Journal on Matrix Analysis and Applications*, 18(3):633–652, July 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/27987.

**Jiang:2015:UPB**

[JK15] Yao-Lin Jiang and Xu Kong. On the uniqueness and perturbation to the best rank-one approximation of a tensor. *SIAM Journal on Matrix Analysis and Applications*, 36 (2):775–792, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jarlebring:2011:CAP**

[JKM11] Elias Jarlebring, Simen Kvaal, and Wim Michiels. Computing all pairs $(\lambda, \mu)$ such that $\lambda$ is a double eigenvalue of $A + \mu B$. *SIAM Journal on Matrix Analysis and Applications*, 32(3): 902–927, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p902_s1`.

**Juditsky:2011:LRM**

[JKN11] Anatoli Juditsky, Fatma Kilinç karzan, and Arkadi Nemirovski. On low rank matrix approximations with applications to synthesis problem in compressed sensing. *SIAM Journal on Matrix Analysis and Applications*, 32(3): 1019–1029, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p1019_s1`.

**Juang:1998:NAR**

[JL98] Jonq Juang and Wen-Wei Lin. Nonsymmetric algebraic Riccati equations and Hamiltonian-like matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(1):228–243, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31825`.

**Jia:2023:JBM**

[JL23] Zhongxiao Jia and Haibo Li. The joint bidiagonalization method for large GSVD computations in finite precision. *SIAM Journal on Matrix Analysis and Applications*, 44(1):382–407, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1483608`.

**Juang:2001:EPO**

[JLS01] Jonq Juang, Wen-Wei Lin, and Shih-Feng Shieh. Eigenvalue problems for one-dimensional discrete Schrödinger operators with symmetric boundary conditions. *SIAM Journal on Matrix Analysis and Applications*, 23(2):524–533, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37153`.

**Jia:2022:SCR**

[JLSZ22] Xiaojing Jia, Xin Liang, Chungen Shen, and Lei-Hong Zhang. Solving the cubic regularization model by a nested restarting Lanczos method. *SIAM Journal on Matrix Analysis and Applications*, 43(2):812–839, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1436324`.

**Jiang:2016:CRV**

[JLZ16] Bo Jiang, Zhening Li, and Shuzhong Zhang. Characterizing real-valued multivariate complex polynomials and their symmetric tensor representations. *SIAM Journal on Matrix Analysis and Applications*, 37(1):381–408, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jarlebring:2014:CPS**

[JMM14] Elias Jarlebring, Karl Meerbergen, and Wim Michiels. Computing a partial Schur factorization of nonlinear eigenvalue problems using the infinite Arnoldi method. *SIAM Journal on Matrix Analysis and Applications*, 35(2):411–436, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Johnson:1993:SCN**

[JMO93] Charles R. Johnson, Volker Mehrmann, and D. Dale Olesky. Sign controllability of a nonnegative matrix and a positive vector. *SIAM Journal on Matrix Analysis and Applications*, 14(2):398–407, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jeannerod:2019:ICB**

[JMPR19] Claude-Pierre Jeannerod, Theo Mary, Clément Pernet, and Daniel S. Roche. Improving the complexity of block low-rank factorizations with fast matrix arithmetic. *SIAM Journal on Matrix Analysis and Applications*, 40(4):1478–1496, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jain:1996:EBM**

[JMW96] S. K. Jain, S. K. Mitra, and H. J. Werner. Extensions of }-based matrix partial orders. *SIAM Journal on Matrix Analysis and Applications*, 17(4):834–850, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jodar:1989:CSR**

[JN89] L. Jódar and E. Navarro. Cosquare roots of matrices and their application to boundary value differential matrix problems. *SIAM Journal on Matrix Analysis and Applications*, 10(3):279–286, ???? 1989. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic).

**Johnson:1991:LSV**

[JN91] Charles R. Johnson and Peter Nylen. Largest singular value submultiplicativity. *SIAM Journal on Matrix Analysis and Applications*, 12(1): 1–6, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Johnson:1993:LBS**

[JN93] Charles R. Johnson and Peter M. Nylen. Length bounds for singular values of sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 14(4):1043–1047, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jia:2003:IRR**

[JN03] Zhongxiao Jia and Datian Niu. An implicitly restarted refined bidiagonalization Lanczos method for computing a partial singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 25(1):246–265, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40419`.

**Jia:2021:SPQ**

[JN21] ZhiGang Jia and Michael K. Ng. Structure preserving quaternion generalized minimal residual method. *SIAM Journal on Matrix Analysis and Applications*, 42(2):616–634, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jacquelin:2021:FIT**

[JNP21] Mathias Jacquelin, Esmond G. Ng, and Barry W. Peyton. Fast implementation of the traveling-salesman-problem method for reordering columns within supernodes. *SIAM Journal on Matrix Analysis and Applications*, 42 (3):1337–1364, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jungers:2010:GMP**

[JOAKt10] Marc Jungers, Cristian Oară, Hisham Abou-Kandil, and Radu tefan. General matrix pencil techniques for solving discrete-time nonsymmetric algebraic Riccati equations. *SIAM Journal on Matrix Analysis and Applications*, 31(3): 1257–1278, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Johnson:1996:MRC**

[Joh96] Charles R. Johnson. In memoriam: Robert C. Thompson (1931–1995). *SIAM Journal on Matrix Analysis and Applications*, 17(3):463–464, July 1996. CODEN SJMAEL. ISSN

0895-4798 (print), 1095-7162 (electronic).

**Joho:2008:NMJ**

[Joh08] Marcel Joho. Newton method for joint approximate diagonalization of positive definite Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 30(3):1205–1218, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Joubert:1992:LMS**

[Jou92] Wayne Joubert. Lanczos methods for the solution of nonsymmetric systems of linear equations. *SIAM Journal on Matrix Analysis and Applications*, 13(3):926–943, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Iterative methods in numerical linear algebra (Copper Mountain, CO, 1990).

**Johnson:1989:IME**

[JOvdD89] Charles R. Johnson, D. D. Olesky, and P. van den Driessche. Inherited matrix entries: *LU* factorizations. *SIAM Journal on Matrix Analysis and Applications*, 10(1):94–104, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Johnson:2001:SOE**

[JOvdD01] Charles R. Johnson, D. D. Olesky, and P. van den Driessche. Successively ordered elementary bidiagonal factorization. *SIAM Journal on Matrix Analysis and Applications*, 22(4):1079–1088, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See erratum [JOvdD04].

**Johnson:2003:MCG**

[JOvdD03] C. R. Johnson, D. D. Olesky, and P. van den Driessche. Matrix classes that generate all matrices with positive determinant. *SIAM Journal on Matrix Analysis and Applications*, 25(1):285–294, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41844`.

**Johnson:2004:ESO**

[JOvdD04] Charles R. Johnson, D. D. Olesky, and P. van den Driessche. Erratum: "Successively Ordered Elementary Bidiagonal Factorization". *SIAM Journal on Matrix Analysis and Applications*, 25(3):900, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43526`. See [JOvdD01].

**Jones:1993:BKF**

[JP93] Mark T. Jones and Merrell L. Patrick. Bunch–Kaufman factorization for real symmetric indefinite banded matrices.

*SIAM Journal on Matrix Analysis and Applications*, 14(2): 553–559, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jones:1994:FSI**

[JP94] Mark T. Jones and Merrell L. Patrick. Factoring symmetric indefinite matrices on high-performance architectures. *SIAM Journal on Matrix Analysis and Applications*, 15(1):273–283, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/18008`.

**Jungers:2009:CCP**

[JP09] R. M. Jungers and V. Y. Protasov. Counterexamples to the complex polytope extremality conjecture. *SIAM Journal on Matrix Analysis and Applications*, 31(2):404–409, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Johnson:1988:CTP**

[JR88] Charles R. Johnson and Leiba Rodman. Completion of Toeplitz partial contractions. *SIAM Journal on Matrix Analysis and Applications*, 9(2): 159–167, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jansson:1999:ACR**

[JR99] Christian Jansson and Jiri Rohn. An algorithm for checking regularity of interval matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(3):756–776, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31397`.

**Jiranek:2008:MAA**

[JR08] Pavel Jiránek and Miroslav Rozložník. Maximum attainable accuracy of inexact saddle point solvers. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1297–1321, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jeannerod:2013:IEB**

[JR13] Claude-Pierre Jeannerod and Siegfried M. Rump. Improved error bounds for inner products in floating-point arithmetic. *SIAM Journal on Matrix Analysis and Applications*, 34(2):338–344, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jiranek:2009:HMS**

[JRG09] Pavel Jiránek, Miroslav Rozložník, and Martin H. Gutknecht. How to make simpler GMRES and GCR more stable. *SIAM Journal on Matrix Analysis and Applications*, 30(4):

1483–1499, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jia:1999:SMR**

[JRZ99] Rong-Qing Jia, Sherman D. Riemenschneider, and Ding-Xuan Zhou. Smoothness of multiple refinable functions and multiple wavelets. *SIAM Journal on Matrix Analysis and Applications*, 21(1):1–28, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32383`.

**Jessup:1994:PAC**

[JS94] E. R. Jessup and D. C. Sorensen. A parallel algorithm for computing the singular value decomposition of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 15(2):530–548, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/20195`.

**Johnson:2004:HME**

[JS04] Charles R. Johnson and Brian D. Sutton. Hermitian matrices, eigenvalue multiplicities, and eigenvector components. *SIAM Journal on Matrix Analysis and Applications*, 26(2):390–399, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41364`.

**Johnson:2007:PPM**

[JS07] Charles R. Johnson and Ronald L. Smith. Path product matrices and eventually inverse $M$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 29(2):370–376, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jung:2015:SRD**

[JSG15] Sungkyu Jung, Armin Schwartzman, and David Groisser. Scaling-rotation distance and interpolation of symmetric positive-definite matrices. *SIAM Journal on Matrix Analysis and Applications*, 36(3):1180–1201, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Johnson:1998:ASM**

[JT98] Charles R. Johnson and Pablo Tarazaga. Approximate semidefinite matrices in a linear variety. *SIAM Journal on Matrix Analysis and Applications*, 19(4):861–871, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31151`.

**Jiranek:2010:EBE**

[JTP10] Pavel Jiránek and David Titley-Peloquin. Estimating

the backward error in LSQR. *SIAM Journal on Matrix Analysis and Applications*, 31(4): 2055–2074, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jin:2020:UTF**

[JTZ20] Pengzhan Jin, Yifa Tang, and Aiqing Zhu. Unit triangular factorization of the matrix symplectic group. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1630–1650, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jonsson:2004:SPS**

[JV04] Gudbjörn F. Jónsson and Stephen Vavasis. Solving polynomials with small leading coefficients. *SIAM Journal on Matrix Analysis and Applications*, 26(2):400–414, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36572`.

**Jeuris:2016:KMB**

[JV16] B. Jeuris and R. Vandebril. The Kähler mean of block-Toeplitz matrices with Toeplitz structured blocks. *SIAM Journal on Matrix Analysis and Applications*, 37(3):1151–1175, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jia:2011:RVS**

[JW11] Zhigang Jia and Musheng Wei. A real-valued spectral decomposition of the undamped gyroscopic system with applications. *SIAM Journal on Matrix Analysis and Applications*, 32(2):584–604, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p584_s1`.

**Jaffe:2018:NCM**

[JWN18] Ariel Jaffe, Roi Weiss, and Boaz Nadler. Newton correction methods for computing real eigenpairs of symmetric tensors. *SIAM Journal on Matrix Analysis and Applications*, 39(3):1071–1094, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jin:2003:SPC**

[JWX03] Xiao-Qing Jin, Yi-Min Wei, and Wei Xu. A stability property of T. Chan's preconditioner. *SIAM Journal on Matrix Analysis and Applications*, 25(3):627–629, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42270`.

**Jiang:2020:RMP**

[JX20] Yao-Lin Jiang and Kang-Li Xu. Riemannian modified

Polak–Ribière–Polyak conjugate gradient order reduced model by tensor techniques. *SIAM Journal on Matrix Analysis and Applications*, 41(2): 432–463, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Jia:1999:CSS**

[JZ99] Rong-Qing Jia and Ding-Xuan Zhou. Convergence of subdivision schemes associated with nonnegative masks. *SIAM Journal on Matrix Analysis and Applications*, 21(2):418–430, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34243`.

**Knyazev:2007:MCA**

[KA07] Andrew V. Knyazev and Merico E. Argentati. Majorization for changes in angles between subspaces, Ritz values, and graph Laplacian spectra. *SIAM Journal on Matrix Analysis and Applications*, 29(1): 15–32, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Knyazev:2010:RRM**

[KA10] Andrew V. Knyazev and Merico E. Argentati. Rayleigh–Ritz majorization error bounds with applications to FEM. *SIAM Journal on Matrix Analysis and Applications*, 31(3): 1521–1537, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kaagstrom:1994:PAG**

[Kåg94] Bo Kågström. A perturbation analysis of the generalized Sylvester equation $(AR - LB, DR - LE) = (C, F)$. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1045–1060, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24621`.

**Kanzow:1996:SNC**

[Kan96] Christian Kanzow. Some noninterior continuation methods for linear complementarity problems. *SIAM Journal on Matrix Analysis and Applications*, 17(4):851–868, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27313`.

**Kaplansky:1990:APD**

[Kap90] Irving Kaplansky. Algebraic polar decomposition. *SIAM Journal on Matrix Analysis and Applications*, 11(2):213–217, April 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Karow:2010:SPC**

[Kar10] Michael Karow. Structured pseudospectra and the condi-

tion of a nonderogatory eigenvalue. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2860–2881, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v31/i5/p2860_s1`.

**Karow:2011:VSV**

[Kar11a] Michael Karow. $\mu$-values and spectral value sets for linear perturbation classes defined by a scalar product. *SIAM Journal on Matrix Analysis and Applications*, 32(3):845–865, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p845_s1`.

**Karow:2011:SPS**

[Kar11b] Michael Karow. Structured pseudospectra for small perturbations. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1383–1398, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1383_s1`.

**Kautsky:1992:GQI**

[Kau92] Jaroslav Kautský. Gauss quadratures: An inverse problem. *SIAM Journal on Matrix Analysis and Applications*, 13(1):402–417, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kaufman:1993:ABS**

[Kau93] Linda Kaufman. An algorithm for the banded symmetric generalized matrix eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 14(2):372–389, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kaufman:2006:EPF**

[Kau06] Linda Kaufman. Eigenvalue problems in fiber optic design. *SIAM Journal on Matrix Analysis and Applications*, 28(1):105–117, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Keel:1990:MEA**

[KB90] L. H. Keel and S. P. Bhattacharyya. A matrix equation approach to the design of low-order regulators. *SIAM Journal on Matrix Analysis and Applications*, 11(2):180–199, April 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kaszkurewicz:1993:RSD**

[KB93] Eugenius Kaszkurewicz and Amit Bhaya. Robust stability and diagonal Liapunov functions. *SIAM Journal on Matrix Analysis and Applications*, 14(2):508–520, April 1993. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic).

**Kilmer:2013:TOT**

[KBHH13] Misha E. Kilmer, Karen Braman, Ning Hao, and Randy C. Hoover. Third-order tensors as operators on matrices: a theoretical and computational framework with applications in imaging. *SIAM Journal on Matrix Analysis and Applications*, 34(1):148–172, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kailath:1994:GDS**

[KC94] T. Kailath and J. Chun. Generalized displacement structure for Block-Toeplitz, Toeplitz-Block, and Toeplitz-derived matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(1):114–128, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/16904`.

**Kimura:2009:VSS**

[KC09] Takuma Kimura and Xiaojun Chen. Validated solutions of saddle point linear systems. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1697–1708, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kuo:1990:MFE**

[KCT90] C.-C. Jay Kuo, Tony F. Chan, and Charles Tong. Multilevel filtering elliptic preconditioners. *SIAM Journal on Matrix Analysis and Applications*, 11(3):403–429, July 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Sparse matrices (Gleneden Beach, OR, 1989).

**Khabou:2013:FPR**

[KDGG13] Amal Khabou, James W. Demmel, Laura Grigori, and Ming Gu. *LU* factorization with panel rank revealing pivoting and its communication avoiding version. *SIAM Journal on Matrix Analysis and Applications*, 34(3):1401–1429, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kempf:2023:HOG**

[KGD23] Idris Kempf, Paul J. Goulart, and Stephen R. Duncan. A higher-order generalized singular value decomposition for rank-deficient matrices. *SIAM Journal on Matrix Analysis and Applications*, 44 (3):1047–1072, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1443881`.

**Keller:2000:CPI**

[KGW00] Carsten Keller, Nicholas I. M. Gould, and Andrew J. Wa-

then. Constraint preconditioning for indefinite linear systems. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1300–1317, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35180`.

**Kratz:2013:GIT**

[KH13] W. Kratz and R. Simon Hilscher. A generalized index theorem for monotone matrix-valued functions with applications to discrete oscillation theory. *SIAM Journal on Matrix Analysis and Applications*, 34 (1):228–243, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kleinsteuber:2004:JAC**

[KHH04] M. Kleinsteuber, U. Helmke, and K. Huper. Jacobi's algorithm on compact Lie algebras. *SIAM Journal on Matrix Analysis and Applications*, 26(1):42–69, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42006`.

**Kilmer:1999:CLP**

[Kil99] Misha E. Kilmer. Cauchy-like preconditioners for two-dimensional ill-posed problems. *SIAM Journal on Matrix Analysis and Applications*, 20(3):777–799, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31953`.

**Kirkland:1992:ERL**

[Kir92] Steve Kirkland. An eigenvalue region for Leslie matrices. *SIAM Journal on Matrix Analysis and Applications*, 13 (2):507–529, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kirkland:1995:GIA**

[Kir95] Steve Kirkland. The group inverse associated with an irreducible periodic nonnegative matrix. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1127–1134, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26005`.

**Kirkland:2002:QCC**

[Kir02] S. Kirkland. On a question concerning condition numbers for Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 23(4):1109–1119, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39094`.

**Kittaneh:1995:SVC**

[Kit95] Fuad Kittaneh. Singular values of companion matrices and bounds on zeros of polynomials. *SIAM Journal on Matrix Analysis and Applications*, 16(1):333–340, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26013`.

**Koskela:2016:KAL**

[KJH16] Antti Koskela, Elias Jarlebring, and Michiel E. Hochstenbach. Krylov approximation of linear ODEs with polynomial parameterization. *SIAM Journal on Matrix Analysis and Applications*, 37(2):519–538, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ku:1993:SPPb**

[KK93a] Ta-Kang Ku and C.-C. Jay Kuo. Spectral properties of preconditioned rational Toeplitz matrices: The nonsymmetric case. *SIAM Journal on Matrix Analysis and Applications*, 14(2):521–544, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ku:1993:SPPa**

[KK93b] Takang Ku and C.-C. Jay Kuo. Spectral properties of preconditioned rational Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 14(1):146–165, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kaagstrom:2007:MVQ**

[KK07] Bo Kågström and Daniel Kressner. Multishift variants of the QZ algorithm with aggressive early deflation. *SIAM Journal on Matrix Analysis and Applications*, 29(1):199–227, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kazeev:2012:LRE**

[KK12] Vladimir A. Kazeev and Boris N. Khoromskij. Low-rank explicit QTT representation of the Laplace operator and its inverse. *SIAM Journal on Matrix Analysis and Applications*, 33(3):742–758, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Karow:2014:PBI**

[KK14] Michael Karow and Daniel Kressner. On a perturbation bound for invariant subspaces of matrices. *SIAM Journal on Matrix Analysis and Applications*, 35(2):599–618, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kovac:2017:SPL**

[KK17] Erna Begović Kovac and Daniel Kressner. Structure-preserving low multilinear rank

approximation of antisymmetric tensors. *SIAM Journal on Matrix Analysis and Applications*, 38(3):967–983, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Krone:2021:UNM**

[KK21] Robert Krone and Kaie Kubjas. Uniqueness of nonnegative matrix factorizations by rigidity theory. *SIAM Journal on Matrix Analysis and Applications*, 42(1):134–164, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Karow:2014:NEP**

[KKM14] Michael Karow, Daniel Kressner, and Emre Mengi. Nonlinear eigenvalue problems with specified eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 35(3):819–834, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kalantari:1997:CMB**

[KKS97] B. Kalantari, L. Khachiyan, and A. Shokoufandeh. On the complexity of matrix balancing. *SIAM Journal on Matrix Analysis and Applications*, 18(2):450–463, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28976`.

**Kenmoe:2022:FIA**

[KKSZ22] Maseim Kenmoe, Ronald Kriemann, Matteo Smerlak, and Anton S. Zadorin. A fast iterative algorithm for near-diagonal eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 43 (4):1573–1598, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1401474`.

**Karow:2006:SEC**

[KKT06] Michael Karow, Daniel Kressner, and Françoise Tisseur. Structured eigenvalue condition numbers. *SIAM Journal on Matrix Analysis and Applications*, 28(4):1052–1068, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kenney:1989:CEM**

[KL89] Charles Kenney and Alan J. Laub. Condition estimates for matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 10(2):191–209, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kenney:1991:RIM**

[KL91] Charles Kenney and Alan J. Laub. Rational iterative methods for the matrix sign function. *SIAM Journal on Matrix Analysis and Applications*, 12

(2):273–291, April 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kenney:1992:SNM**

[KL92] Charles Kenney and Alan J. Laub. On scaling Newton's method for polar decomposition and the matrix sign function. *SIAM Journal on Matrix Analysis and Applications*, 13 (3):688–706, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kenney:1998:SFA**

[KL98a] C. S. Kenney and A. J. Laub. A Schur–Fréchet algorithm for computing the logarithm and exponential of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 19(3):640–663, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30033`.

**Krupnik:1998:SUM**

[KL98b] Ilya Krupnik and Peter Lancaster. $H$-selfadjoint and $H$-unitary matrix pencils. *SIAM Journal on Matrix Analysis and Applications*, 19(2):307–324, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28602`.

**Koch:2007:DLR**

[KL07] Othmar Koch and Christian Lubich. Dynamical low-rank approximation. *SIAM Journal on Matrix Analysis and Applications*, 29(2):434–454, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Knyazev:2008:SDC**

[KL08] Andrew V. Knyazev and Ilya Lashuk. Steepest descent and conjugate gradient methods with variable preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 29 (4):1267–1280, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Koch:2010:DTA**

[KL10] Othmar Koch and Christian Lubich. Dynamical tensor approximation. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2360–2375, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kressner:2018:FCM**

[KL18] Daniel Kressner and Robert Luce. Fast computation of the matrix exponential for a Toeplitz matrix. *SIAM Journal on Matrix Analysis and Applications*, 39(1):23–47, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kenney:1998:SCE**

[KLR98] C. S. Kenney, A. J. Laub, and M. S. Reese. Statistical condition estimation for linear least squares. *SIAM Journal on Matrix Analysis and Applications*, 19(4):906–923, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29193`.

**Kuo:2016:SPF**

[KLS16] Yueh-Cheng Kuo, Wen-Wei Lin, and Shih-Feng Shieh. Structure-preserving flows of symplectic matrix pairs. *SIAM Journal on Matrix Analysis and Applications*, 37(3):976–1001, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kressner:2018:SAC**

[KLV18] Daniel Kressner, Ding Lu, and Bart Vandereycken. Subspace acceleration for the Crawford number and related eigenvalue optimization problems. *SIAM Journal on Matrix Analysis and Applications*, 39(2):961–982, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kuo:2004:RLD**

[KLX04] Yuen-Cheng Kuo, Wen-Wei Lin, and Shu-Fang Xu. Regularization of linear discrete-time periodic descriptor systems by derivative and proportional state feedback. *SIAM Journal on Matrix Analysis and Applications*, 25(4):1046–1073, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41263`.

**Kuo:2007:SPD**

[KLX07] Yuen-Cheng Kuo, Wen-Wei Lin, and Shu-Fang Xu. Solutions of the partially described inverse quadratic eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 29(1):33–53, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kunkel:1996:GID**

[KM96] Peter Kunkel and Volker Mehrmann. Generalized inverses of differential-algebraic operators. *SIAM Journal on Matrix Analysis and Applications*, 17(2):426–442, April 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26770`.

**Kolda:2011:SPM**

[KM11] Tamara G. Kolda and Jackson R. Mayo. Shifted power method for computing tensor eigenpairs. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1095–1124, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (elec-

tronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1095_s1`.

**Kolda:2014:ASP**

[KM14] Tamara G. Kolda and Jackson R. Mayo. An adaptive shifted power method for computing generalized tensor eigenpairs. *SIAM Journal on Matrix Analysis and Applications*, 35(4):1563–1581, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Katsouleas:2016:IPR**

[KM16] Georgios Katsouleas and John Maroulas. An inverse problem for the $k$-rank numerical range. *SIAM Journal on Matrix Analysis and Applications*, 37(3):1022–1037, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kangal:2018:SML**

[KMMM18] Fatih Kangal, Karl Meerbergen, Emre Mengi, and Wim Michiels. A subspace method for large-scale eigenvalue optimization. *SIAM Journal on Matrix Analysis and Applications*, 39(1):48–82, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kovalenko:2011:EEE**

[KMN11] Andrey Kovalenko, Trond Mannseth, and Geir Nævdal. Error estimate for the ensemble Kalman filter analysis step. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1275–1287, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1275_s1`.

**Konstantinov:2001:PAH**

[KMP01] M. Konstantinov, V. Mehrmann, and P. Petkov. Perturbation analysis of Hamiltonian Schur and block-Schur forms. *SIAM Journal on Matrix Analysis and Applications*, 23(2):387–424, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34242`.

**Koukouvinos:2001:VMI**

[KMS01] C. Koukouvinos, M. Mitrouli, and Jennifer Seberry. Values of minors of an infinite family of $D$-optimal designs and their application to the growth problem. *SIAM Journal on Matrix Analysis and Applications*, 23(1):1–14, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37364`.

**Koukouvinos:2003:VMI**

[KMS03] C. Koukouvinos, M. Mitrouli, and Jennifer Seberry. Values of minors of an infinite

family of $D$-optimal designs and their application to the growth problem: II. *SIAM Journal on Matrix Analysis and Applications*, 24(3):715–727, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38684`.

**Kostic:2015:MNP**

[KMS15] Vladimir R. Kostić, Agnieszka Miedlar, and Jeroen J. Stolwijk. On matrix nearness problems: Distance to delocalization. *SIAM Journal on Matrix Analysis and Applications*, 36 (2):435–460, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kavanagh:1989:CCP**

[KN89] J. Philip Kavanagh and Michael Neumann. Consistency and convergence of the parallel multisplitting method for singular $M$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 10(2):210–218, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Koltracht:1991:IMP**

[KN91] I. Koltracht and M. Neumann. On the inverse $M$-matrix problem for real symmetric positive-definite Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 12(2):310–320, April 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kirkland:1994:CCP**

[KN94] Stephen J. Kirkland and Michael Neumann. Convexity and concavity of the Perron root and vector of Leslie matrices with applications to a population model. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1092–1107, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24922`.

**Kirkland:1998:MGG**

[KN98] Stephen J. Kirkland and Michael Neumann. The $M$-matrix group generalized inverse problem for weighted trees. *SIAM Journal on Matrix Analysis and Applications*, 19(1):226–234, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30492`.

**Kirkland:1999:CDF**

[KN99] Stephen J. Kirkland and Michael Neumann. Cutpoint decoupling and first passage times for random walks on graphs. *SIAM Journal on Matrix Analysis and Applications*, 20(4):860–870, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162

(electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31880`.

**Kamm:2000:OKP**

[KN00] Julie Kamm and James G. Nagy. Optimal Kronecker product approximation of block Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 22(1):155–172, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34554`.

**Knyazev:2009:GFA**

[KN09] Andrew V. Knyazev and Klaus Neymeyr. Gradient flow approach to geometric convergence analysis of preconditioned eigensolvers. *SIAM Journal on Matrix Analysis and Applications*, 31(2):621–628, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Knizhnerman:2000:GEB**

[Kni00] Leonid Knizhnerman. On GMRES-equivalent bounded operators. *SIAM Journal on Matrix Analysis and Applications*, 22(1):195–212, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32574`.

**Knizhnerman:2004:SEJ**

[Kni04] Leonid Knizhnerman. Stability estimates on the Jacobi and unitary Hessenberg inverse eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 26(1):154–169, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41009`.

**Knight:2008:SKA**

[Kni08] Philip A. Knight. The Sinkhorn–Knopp algorithm: Convergence and applications. *SIAM Journal on Matrix Analysis and Applications*, 30(1): 261–275, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kirkland:2002:EPR**

[KNOX02] S. J. Kirkland, M. Neumann, N. Ormes, and J. Xu. On the elasticity of the Perron root of a nonnegative matrix. *SIAM Journal on Matrix Analysis and Applications*, 24(2):454–464, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39824`.

**Kirkland:1997:DWT**

[KNS97] Stephen J. Kirkland, Michael Neumann, and Bryan L. Shader. Distances in weighted trees and group inverse of

Laplacian matrices. *SIAM Journal on Matrix Analysis and Applications*, 18(4):827–841, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29871`.

**Ke:2020:EPT**

[KNW20] Rihuan Ke, Michael K. Ng, and Ting Wei. Efficient preconditioning for time fractional diffusion inverse source problems. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1857–1888, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kirkland:2004:CEG**

[KNX04] S. J. Kirkland, M. Neumann, and J. Xu. Convexity and elasticity of the growth rate in size-classified population models. *SIAM Journal on Matrix Analysis and Applications*, 26(1):170–185, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41103`.

**Kilmer:2001:CRP**

[KO01] Misha E. Kilmer and Dianne P. O'Leary. Choosing regularization parameters in iterative methods for ill-posed problems. *SIAM Journal on Matrix Analysis and Applications*, 22(4):1204–1221, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kailath:2005:DSA**

[KO05] Thomas Kailath and Vadim Olshevsky. Displacement structure approach to discrete-trigonometric-transform based preconditioners of G. Strang type and of T. Chan type. *SIAM Journal on Matrix Analysis and Applications*, 26(3):706–734, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31256`.

**Koskela:2014:MMA**

[KO14] Antti Koskela and Alexander Ostermann. A moment-matching Arnoldi iteration for linear combinations of $\varphi$ functions. *SIAM Journal on Matrix Analysis and Applications*, 35(4):1344–1363, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kolesnikov:2015:LRA**

[KO15] D. A. Kolesnikov and I. V. Oseledets. From low-rank approximation to a rational Krylov subspace method for the Lyapunov equation. *SIAM Journal on Matrix Analysis and Applications*, 36(4):1622–1637, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Khrulkov:2018:DBR**

[KO18] Valentin Khrulkov and Ivan Oseledets. Desingularization of bounded-rank matrix sets. *SIAM Journal on Matrix Analysis and Applications*, 39(1): 451–471, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Koev:2005:AES**

[Koe05] Plamen Koev. Accurate eigenvalues and SVDs of totally nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 27(1):1–23, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43822`.

**Koev:2007:ACT**

[Koe07] Plamen Koev. Accurate computations with totally nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 29(3):731–751, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kohaupt:1999:SLD**

[Koh99] L. Kohaupt. Second logarithmic derivative of a complex matrix in the Chebyshev norm. *SIAM Journal on Matrix Analysis and Applications*, 21(2):382–389, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31607`.

**Kolda:2001:OTD**

[Kol01] Tamara G. Kolda. Orthogonal tensor decompositions. *SIAM Journal on Matrix Analysis and Applications*, 23(1):243–255, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36835`.

**Kolda:2003:CPE**

[Kol03] Tamara G. Kolda. A counterexample to the possibility of an extension of the Eckart–Young low-rank approximation theorem for the orthogonal rank tensor decomposition. *SIAM Journal on Matrix Analysis and Applications*, 24(3):762–767, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39446`.

**Kontoghiorghes:2000:PSR**

[Kon00] Erricos J. Kontoghiorghes. Parallel strategies for rank-$k$ updating of the $QR$ decomposition. *SIAM Journal on Matrix Analysis and Applications*, 22(3):714–725, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/30858.

**Kim:2007:SPA**

[KOSvdD07] In-Jae Kim, D. D. Olesky, B. L. Shader, and P. van den Driessche. Sign patterns that allow a positive or nonnegative left inverse. *SIAM Journal on Matrix Analysis and Applications*, 29(2):554–565, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kaagstrom:1992:DSM**

[KP92] Bo Kågström and Peter Poromaa. Distributed and shared memory block algorithms for the triangular Sylvester equation with $\mathrm{sep}^{-1}$ estimators. *SIAM Journal on Matrix Analysis and Applications*, 13(1): 90–101, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Konstantinov:1999:NPT**

[KP99] M. Konstantinov and P. Petkov. Note on perturbation theory for algebraic Riccati equations. *SIAM Journal on Matrix Analysis and Applications*, 21(1): 327, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/33811.

**Kim:2008:NMF**

[KP08] Hyunsoo Kim and Haesun Park. Nonnegative matrix factorization based on alternating nonnegativity constrained least squares and active set method. *SIAM Journal on Matrix Analysis and Applications*, 30(2):713–730, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Konstantinov:1994:NPA**

[KPC94] M. M. Konstantinov, P. Hr. Petkov, and N. D. Christov. Nonlocal perturbation analysis of the Schur system of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 15(2):383–392, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/20267.

**Kressner:2009:SHC**

[KPM09] Daniel Kressner, María José Peláez, and Julio Moro. Structured Hölder condition numbers for multiple eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 31(1): 175–201, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kofidis:2002:BRA**

[KR02] Eleftherios Kofidis and Phillip A. Regalia. On the best rank-1 approximation of higher-order supersymmetric tensors. *SIAM Journal on Matrix Analysis and Applications*, 23(3):863–

884, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38741`.

**Kratz:1995:ITM**

[Kra95] Werner Kratz. An index theorem for monotone matrix-valued functions. *SIAM Journal on Matrix Analysis and Applications*, 16(1):113–122, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24023`.

**Kramer:2019:GDF**

[Krä19] Sebastian Krämer. A geometric description of feasible singular values in the tensor train format. *SIAM Journal on Matrix Analysis and Applications*, 40(3):1153–1178, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kressner:2005:PBI**

[Kre05] Daniel Kressner. Perturbation bounds for isotropic invariant subspaces of skew-Hamiltonian matrices. *SIAM Journal on Matrix Analysis and Applications*, 26(4):947–961, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42975`.

**Kressner:2008:EAE**

[Kre08] Daniel Kressner. The effect of aggressive early deflation on the convergence of the $QR$ algorithm. *SIAM Journal on Matrix Analysis and Applications*, 30(2):805–821, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kuian:2019:OCV**

[KRS19] Mykhailo Kuian, Lothar Reichel, and Sergij Shiyanovskii. Optimally conditioned Vandermonde-like matrices. *SIAM Journal on Matrix Analysis and Applications*, 40(4):1399–1424, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Knight:2014:SPA**

[KRU14] Philip A. Knight, Daniel Ruiz, and Bora Uçar. A symmetry preserving algorithm for matrix scaling. *SIAM Journal on Matrix Analysis and Applications*, 35(3):931–955, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kaufman:1992:SNL**

[KS92] Linda Kaufman and Garrett Sylvester. Separable nonlinear least squares with multiple right-hand sides. *SIAM Journal on Matrix Analysis and Applications*, 13(1):68–89, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kilmer:1999:IRM**

[KS99] Misha Kilmer and G. W. Stewart. Iterative regularization and MINRES. *SIAM Journal on Matrix Analysis and Applications*, 21(2):613–628, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34862`.

**Klein:2003:SRV**

[KS03] André Klein and Peter Spreij. Some results on Vandermonde matrices with an application to time series analysis. *SIAM Journal on Matrix Analysis and Applications*, 25(1):213–223, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40289`.

**Klein:2008:RSC**

[KS08] André Klein and Peter Spreij. Recursive solution of certain structured linear systems. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1191–1217, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kuo:2012:SPC**

[KS12] Yueh-Cheng Kuo and Shih-Feng Shieh. A structure-preserving curve for symplectic pairs and its applications. *SIAM Journal on Matrix Analysis and Applications*, 33(2):597–616, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kazeev:2015:TAS**

[KS15] Vladimir Kazeev and Christoph Schwab. Tensor approximation of stationary distributions of chemical reaction networks. *SIAM Journal on Matrix Analysis and Applications*, 36(3):1221–1247, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kressner:2017:FCS**

[KS17] Daniel Kressner and Ana Susnjara. Fast computation of spectral projectors of banded matrices. *SIAM Journal on Matrix Analysis and Applications*, 38(3):984–1009, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kubinova:2020:AAC**

[KS20] Marie Kubínová and Kirk M. Soodhalter. Admissible and attainable convergence behavior of block Arnoldi and GMRES. *SIAM Journal on Matrix Analysis and Applications*, 41(2):464–486, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Karim:2022:EPI**

[KS22a] Samah Karim and Edgar Solomonik. Efficient precon-

ditioners for interior point methods via a new Schur complement-based strategy. *SIAM Journal on Matrix Analysis and Applications*, 43 (4):1680–1711, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1416552`.

**Kilmer:2022:SMA**

[KS22b] Misha E. Kilmer and Arvind K. Saibaba. Structured matrix approximations via tensor decompositions. *SIAM Journal on Matrix Analysis and Applications*, 43(4):1599–1626, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1418290`.

**Kim:2002:MSN**

[KSH02] Si-Ju Kim, Bryan L. Shader, and Suk-Geun Hwang. On matrices with signed nullspaces. *SIAM Journal on Matrix Analysis and Applications*, 24(2):570–580, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39622`.

**Kitahara:2010:PWL**

[KT10a] Tomonari Kitahara and Takashi Tsuchiya. Proximity of weighted and layered least squares solutions. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1172–1186, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kressner:2010:KSM**

[KT10b] Daniel Kressner and Christine Tobler. Krylov subspace methods for linear systems with tensor product structure. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1688–1714, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kressner:2011:LRT**

[KT11] Daniel Kressner and Christine Tobler. Low-rank tensor Krylov subspace methods for parametrized linear systems. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1288–1316, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1288_s1`.

**Kaya:2013:CET**

[KU13] Kamer Kaya and Bora Uçar. Constructing elimination trees for sparse unsymmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 34 (2):345–354, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kuijlaars:2000:WEF**

[Kui00] A. B. J. Kuijlaars. Which eigenvalues are found by the Lanczos method? *SIAM Journal on Matrix Analysis and Applications*, 22(1):306–321, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35527`.

**Kuznetsov:2015:EHT**

[Kuz15] Alexey Kuznetsov. Explicit Hermite-type eigenvectors of the discrete Fourier transform. *SIAM Journal on Matrix Analysis and Applications*, 36(4):1443–1464, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kressner:2014:SMC**

[KV14] Daniel Kressner and Bart Vandereycken. Subspace methods for computing the pseudospectral abscissa and the stability radius. *SIAM Journal on Matrix Analysis and Applications*, 35(1):292–313, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kuczynski:1992:ELE**

[KW92] J. Kuczyński and H. Woźniakowski. Estimating the largest eigenvalue by the power and Lanczos algorithms with a random start. *SIAM Journal on Matrix Analysis and Applications*, 13(4):1094–1122, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kuczynski:1994:PBE**

[KW94] J. Kuczyński and H. Woźniakowski. Probabilistic bounds on the extremal eigenvalues and condition number by the Lanczos algorithm. *SIAM Journal on Matrix Analysis and Applications*, 15(2):672–691, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23045`.

**Kolotilina:1993:FSA**

[KY93] L. Yu. Kolotilina and A. Yu. Yeremin. Factorized sparse approximate inverse preconditionings. I. Theory. *SIAM Journal on Matrix Analysis and Applications*, 14(1):45–58, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Kielbasinski:2010:NNS**

[KZ10] Andrzej Kiełbasiński and Krystyna Zietak. Note on "A New Scaling for Newton's Iteration for the Polar Decomposition and Its Backward Stability" by R. Byers and H. Xu. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1538–1539, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See [BX08].

**Lagarias:1991:MPT**

[Lag91] Jeffrey C. Lagarias. Monotonicity properties of the Toda flow, the $QR$-flow, and subspace iteration. *SIAM Journal on Matrix Analysis and Applications*, 12(3):449–462, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lancaster:2007:ISP**

[Lan07] Peter Lancaster. Inverse spectral problems for semisimple damped vibrating systems. *SIAM Journal on Matrix Analysis and Applications*, 29(1): 279–301, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Laszlo:1994:ALB**

[Lás94] Lajos László. An attainable lower bound for the best normal approximation. *SIAM Journal on Matrix Analysis and Applications*, 15(3):1035–1043, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23230`.

**Latham:1995:EES**

[Lat95a] Geoff A. Latham. Existence of EMS solutions and A priori estimates. *SIAM Journal on Matrix Analysis and Applications*, 16(3):943–953, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25384`.

**Latham:1995:RMM**

[Lat95b] Geoff A. Latham. A remark on Minc's maximal eigenvector bound for positive matrices. *SIAM Journal on Matrix Analysis and Applications*, 16(1):307–311, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24258`.

**Laurent:2000:PIP**

[Lau00] Monique Laurent. Polynomial instances of the positive semidefinite and Euclidean distance matrix completion problems. *SIAM Journal on Matrix Analysis and Applications*, 22(3):874–894, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35268`.

**Lawrence:2013:FRG**

[Law13] Piers W. Lawrence. Fast reduction of generalized companion matrix pairs for barycentric Lagrange interpolants. *SIAM Journal on Matrix Analysis and Applications*, 34(3):1277–1300, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lu:1996:MCO**

[LB96] Szu-Min Lu and Jesse L. Barlow. Multifrontal computation with the orthogonal factors of sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 17(3):658–679, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25950`.

**Livne:2002:RSE**

[LB02] Oren E. Livne and Achi Brandt. $N$ roots of the secular equation in $O(N)$ operations. *SIAM Journal on Matrix Analysis and Applications*, 24(2):439–453, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38369`.

**Liao:2005:BAS**

[LBL05] An-Ping Liao, Zhong-Zhi Bai, and Yuan Lei. Best approximate solution of matrix equation $AXB + CYD = E$. *SIAM Journal on Matrix Analysis and Applications*, 27(3):675–688, July 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/61579`.

**Lin:2005:ORS**

[LC05] Wen-Yang Lin and Chuen-Liang Chen. On optimal reorderings of sparse matrices for parallel Cholesky factorizations. *SIAM Journal on Matrix Analysis and Applications*, 27(1):24–45, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38635`.

**Lawrence:2015:BEP**

[LC15a] Piers W. Lawrence and Robert M. Corless. Backward error of polynomial eigenvalue problems solved by linearization of Lagrange interpolants. *SIAM Journal on Matrix Analysis and Applications*, 36(4):1425–1442, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lee:2015:EFE**

[LC15b] Namgil Lee and Andrzej Cichocki. Estimating a few extreme singular values and vectors for large-scale matrices in tensor train format. *SIAM Journal on Matrix Analysis and Applications*, 36(3):994–1014, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lee:2016:RCA**

[LC16] Namgil Lee and Andrzej Cichocki. Regularized computation of approximate pseudoinverse of large matrices using low-rank tensor train decompositions. *SIAM Journal on Matrix Analysis and Ap-*

*plications*, 37(2):598–623, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**LeCadre:1996:PRE**

[Le 96] J.-P. Le Cadre. On the properties of a relative entropy functional. *SIAM Journal on Matrix Analysis and Applications*, 17(2):355–382, April 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25152`.

**LeBorne:2006:MHM**

[Le 06] Sabine Le Borne. Multilevel hierarchical matrices. *SIAM Journal on Matrix Analysis and Applications*, 28(3):871–889, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**LeBorne:2019:FST**

[Le 19] Sabine Le Borne. Factorization, symmetrization, and truncated transformation of radial basis function-GA stabilized Gaussian radial basis functions. *SIAM Journal on Matrix Analysis and Applications*, 40(2):517–541, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lundstrom:2002:AEC**

[LE02] Eva Lundström and Lars Eldén. Adaptive eigenvalue computations using Newton's method on the Grassmann manifold. *SIAM Journal on Matrix Analysis and Applications*, 23(3):819–839, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35468`.

**Lee:1995:PUB**

[Lee95] Steven L. Lee. A practical upper bound for departure from normality. *SIAM Journal on Matrix Analysis and Applications*, 16(2):462–468, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25518`.

**Lee:1996:BAB**

[Lee96] Steven L. Lee. Best available bounds for departure from normality. *SIAM Journal on Matrix Analysis and Applications*, 17(4):984–991, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28526`.

**Lehoucq:2001:IRA**

[Leh01] R. B. Lehoucq. Implicitly restarted Arnoldi methods and subspace iteration. *SIAM Journal on Matrix Analysis and Applications*, 23(2):551–562, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/35859.

**Lourenco:2019:ESS**

[LEMCD19] Christopher Lourenco, Adolfo R. Escobedo, Erick Moreno-Centeno, and Timothy A. Davis. Exact solution of sparse linear systems via left-looking roundoff-error-free *LU* factorization in time proportional to arithmetic work. *SIAM Journal on Matrix Analysis and Applications*, 40(2):609–638, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lewin:1991:NIM**

[Lew91] Mordechai Lewin. Nonnegative idempotent matrices and their graphs. *SIAM Journal on Matrix Analysis and Applications*, 12(1):166–171, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lewis:1996:GIC**

[Lew96] A. S. Lewis. Group invariance and convex matrix analysis. *SIAM Journal on Matrix Analysis and Applications*, 17(4):927–949, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28317.

**Lewis:1999:LTN**

[Lew99] A. S. Lewis. Lidskii's theorem via nonsmooth analysis. *SIAM Journal on Matrix Analysis and Applications*, 21(2):379–381, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/33867.

**Levy:2002:CSD**

[LF02a] Bernard C. Levy and Augusto Ferrante. Characterization of stationary discrete-time Gaussian reciprocal processes over a finite interval. *SIAM Journal on Matrix Analysis and Applications*, 24(2):334–355, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/36862.

**Li:2002:MMT**

[LF02b] Guo-Lin Li and Zheng-He Feng. Mirrorsymmetric matrices, their basic properties, and an application on odd/even-mode decomposition of symmetric multiconductor transmission lines. *SIAM Journal on Matrix Analysis and Applications*, 24(1):78–90, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/39382.

**Lie:2013:SRA**

[LFW13] Han Cheng Lie, Konstantin Fackeldey, and Marcus Weber. A square root approximation of transition rates for a Markov

state model. *SIAM Journal on Matrix Analysis and Applications*, 34(2):738–756, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**LeBorne:2006:MPC**

[LG06] Sabine Le Borne and Lars Grasedyck. $H$-matrix preconditioners in convection-dominated problems. *SIAM Journal on Matrix Analysis and Applications*, 27(4):1172–1183, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lecumberri:2008:GEN**

[LGC08] Pablo Lecumberri, Marisol Gómez, and Alfonso Carlosena. Generalized eigenvalues of nonsquare pencils with structure. *SIAM Journal on Matrix Analysis and Applications*, 30(1):41–55, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:2014:ADC**

[LGC+14] Shengguo Li, Ming Gu, Lizhi Cheng, Xuebin Chi, and Meng Sun. An accelerated divide-and-conquer algorithm for the bidiagonal SVD problem. *SIAM Journal on Matrix Analysis and Applications*, 35(3):1038–1057, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Leplat:2021:MUN**

[LGI21] Valentin Leplat, Nicolas Gillis, and Jérôme Idier. Multiplicative updates for NMF with $\beta$-divergences under disjoint equality constraints. *SIAM Journal on Matrix Analysis and Applications*, 42(2):730–752, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liu:2016:PPI**

[LGL16] Ching-Sung Liu, Chun-Hua Guo, and Wen-Wei Lin. A positivity preserving inverse iteration for finding the Perron pair of an irreducible nonnegative third order tensor. *SIAM Journal on Matrix Analysis and Applications*, 37(3):911–932, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lewis:1990:PSS**

[LGPS90] J. G. Lewis, J. R. Gilbert, R. J. Plemmons, and H. D. Simon. Preface to the special section on sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 11(3):381, July 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lin:2002:PAP**

[LgS02] Wen-Wei Lin and Ji guang Sun. Perturbation analysis of the periodic discrete-time algebraic Riccati equation. *SIAM*

*Journal on Matrix Analysis and Applications*, 24(2):411–438, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38439`.

**Li:2012:NER**

[LGWX12] ShengGuo Li, Ming Gu, Cinna Julie Wu, and JianLin Xia. New efficient and robust HSS Cholesky factorization of SPD matrices. *SIAM Journal on Matrix Analysis and Applications*, 33(3):886–904, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lu:2005:CPC**

[LH05] Yi Lu and Clifford M. Hurvich. On the complexity of the preconditioned conjugate gradient algorithm for solving Toeplitz systems with a Fisher–Hartwig singularity. *SIAM Journal on Matrix Analysis and Applications*, 27(3):638–653, July 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/61211`.

**Laursen:2022:SAC**

[LH22] Ragnhild Laursen and Asger Hobolth. A sampling algorithm to compute the set of feasible solutions for NonNegative matrix factorization with an arbitrary rank. *SIAM Journal on Matrix Analysis and Applications*, 43(1):257–273, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M1378971`.

**Lessel:2016:FME**

[LHC16] K. Lessel, M. Hartman, and S. Chandrasekaran. A fast memory efficient construction algorithm for hierarchically semi-separable representations. *SIAM Journal on Matrix Analysis and Applications*, 37(1):338–353, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lai:1995:ISH**

[LHHR95] Yu-Ling Lai, Apostolos Hadjidimos, Elias N. Houstis, and John R. Rice. On the iterative solution of Hermite collocation equations. *SIAM Journal on Matrix Analysis and Applications*, 16(1):254–277, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24230`.

**Li:1991:SID**

[Li91] Chi-Kwong Li. Some inequalities on the decomposable numerical radii of matrices. *SIAM Journal on Matrix Analysis and Applications*, 12(4):790–801, October 1991. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic).

**Li:1993:BPG**

[Li93] Ren Cang Li. Bounds on perturbations of generalized singular values and of associated subspaces. *SIAM Journal on Matrix Analysis and Applications*, 14(1):195–234, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:1995:NPB**

[Li95] Ren Cang Li. New perturbation bounds for the unitary polar factor. *SIAM Journal on Matrix Analysis and Applications*, 16(1):327–332, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25635`.

**Li:1998:RPTa**

[Li98a] Ren-Cang Li. Relative perturbation theory: I. eigenvalue and singular value variations. *SIAM Journal on Matrix Analysis and Applications*, 19(4):956–982, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29849`.

**Li:1998:RPTb**

[Li98b] Ren-Cang Li. Relative perturbation theory: II. eigenspace and singular subspace variations. *SIAM Journal on Matrix Analysis and Applications*, 20(2):471–492, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29850`.

**Li:1999:BSS**

[Li99] Ren-Cang Li. A bound on the solution to a structured Sylvester equation with an application to relative perturbation theory. *SIAM Journal on Matrix Analysis and Applications*, 21(2):440–445, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34958`.

**Li:2002:ICG**

[Li02] Lei Li. On the iterative criterion for generalized diagonally dominant matrices. *SIAM Journal on Matrix Analysis and Applications*, 24(1):17–24, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34882`.

**Li:2005:RPB**

[Li05] Ren-Cang Li. Relative perturbation bounds for positive polar factors of graded matrices. *SIAM Journal on Matrix Analysis and Applications*, 27(2):424–433, April

2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43715`.

**Li:2006:AOL**

[Li06] Ren-Cang Li. Asymptotically optimal lower bounds for the condition number of a real Vandermonde matrix. *SIAM Journal on Matrix Analysis and Applications*, 28(3):829–844, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:2016:BSN**

[Li16] Zhening Li. Bounds on the spectral norm and the nuclear norm of a tensor based on tensor partitions. *SIAM Journal on Matrix Analysis and Applications*, 37(4):1440–1452, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liesen:2000:CCB**

[Lie00] Jörg Liesen. Computable convergence bounds for GMRES. *SIAM Journal on Matrix Analysis and Applications*, 21(3):882–903, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34166`.

**Liesen:2008:WAM**

[Lie08] Jörg Liesen. When is the adjoint of a matrix a low degree rational function in the matrix? *SIAM Journal on Matrix Analysis and Applications*, 29 (4):1171–1180, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lim:2007:MGM**

[Lim07] Yongdo Lim. The matrix golden mean and its applications to Riccati matrix equations. *SIAM Journal on Matrix Analysis and Applications*, 29(1):54–66, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lim:2013:RDB**

[Lim13] Yongdo Lim. Riemannian distances between geometric means. *SIAM Journal on Matrix Analysis and Applications*, 34(3):932–945, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Linden:2003:QNR**

[Lin03] Hansjörg Linden. The quadratic numerical range and the location of zeros of polynomials. *SIAM Journal on Matrix Analysis and Applications*, 25(1):266–284, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41165`.

**Lin:2011:DEY**

[Lin11] Matthew M. Lin. Discrete Eckart–Young theorem for integer matrices. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1367–1382, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1367_s1`.

**Lin:2019:RGS**

[Lin19] Zhenhua Lin. Riemannian geometry of symmetric positive definite matrices via Cholesky decomposition. *SIAM Journal on Matrix Analysis and Applications*, 40(4):1353–1370, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liu:1988:TMS**

[Liu88] Joseph W. H. Liu. A tree model for sparse symmetric indefinite matrix factorization. *SIAM Journal on Matrix Analysis and Applications*, 9(1):26–39, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liu:1990:RET**

[Liu90] Joseph W. H. Liu. The role of elimination trees in sparse factorization. *SIAM Journal on Matrix Analysis and Applications*, 11(1):134–172, January 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liu:2012:PBS**

[Liu12] Yuanyuan Liu. Perturbation bounds for the stationary distributions of Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 33(4):1057–1074, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lahat:2019:SLC**

[LJS19] Dana Lahat, Christian Jutten, and Helene Shapiro. Schur's lemma for coupled reducibility and coupled normality. *SIAM Journal on Matrix Analysis and Applications*, 40(3):998–1021, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liu:2022:MTL**

[LJW22] Qiaohua Liu, Zhigang Jia, and Yimin Wei. Multidimensional total least squares problem with linear equality constraints. *SIAM Journal on Matrix Analysis and Applications*, 43(1):124–150, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1400420`.

**Lyness:1995:ASN**

[LK95] J. N. Lyness and P. Keast. Application of the Smith Normal Form to the structure of lattice rules. *SIAM Journal on Matrix Analysis and Ap-*

*plications*, 16(1):218–231, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/21793`.

**Larsen:2022:PLB**

[LK22] Brett W. Larsen and Tamara G. Kolda. Practical leverage-based sampling for low-rank tensor decomposition. *SIAM Journal on Matrix Analysis and Applications*, 43 (3):1488–1517, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1441754`.

**Lui:1997:HML**

[LKK97] S. H. Lui, H. B. Keller, and T. W. C. Kwok. Homotopy method for the large, sparse, real nonsymmetric eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 18(2):312–333, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27390`.

**Lin:2017:SPT**

[lLNS17] Xue lei Lin, Michael K. Ng, and Hai-Wei Sun. A splitting preconditioner for Toeplitz-like linear systems arising from fractional diffusion equations. *SIAM Journal on Matrix Analysis and Applications*, 38(4): 1580–1614, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Laffey:2009:NMS**

[LLŠ09] Thomas J. Laffey, Raphael Loewy, and Helena Šmigoc. Nonnegative matrices that are similar to positive matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(2): 629–649, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lee:2009:RRM**

[LLZ09] Tsung-Lin Lee, Tien-Yien Li, and Zhonggang Zeng. A rank-revealing method with updating, downdating, and applications. Part II. *SIAM Journal on Matrix Analysis and Applications*, 31(2):503–525, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liu:2023:MAM**

[LLZ23] Jinpeng Liu, Yuanyuan Liu, and Yiqiang Q. Zhao. Matrix-analytic methods for solving Poisson's equation with applications to Markov chains of GI/G/1-type. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1122–1145, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1489861`.

**Li:1990:RPC**

[LM90] Tie Jun Li and S. F. McCormick. The realization problem for a class of nonlinear systems. *SIAM Journal on Matrix Analysis and Applications*, 11(1):113–127, January 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lehoucq:1998:UGC**

[LM98a] R. B. Lehoucq and Karl Meerbergen. Using generalized Cayley transformations within an inexact rational Krylov sequence method. *SIAM Journal on Matrix Analysis and Applications*, 20(1):131–148, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31122`.

**Li:1998:GKF**

[LM98b] Chi-Kwong Li and Roy Mathias. Generalizations of Ky Fan's dominance theorem. *SIAM Journal on Matrix Analysis and Applications*, 19(1):99–106, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31123`.

**Li:2002:ISV**

[LM02] Chi-Kwong Li and Roy Mathias. Inequalities on singular values of block triangular matrices. *SIAM Journal on Matrix Analysis and Applications*, 24(1):126–131, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39851`.

**Loewy:2003:NSR**

[LM03] Raphael Loewy and Volker Mehrmann. A note on the symmetric recursive inverse eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 25(1):180–187, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40883`.

**Langville:2006:UMC**

[LM06a] Amy N. Langville and Carl D. Meyer. Updating Markov chains with an eye on Google's PageRank. *SIAM Journal on Matrix Analysis and Applications*, 27(4):968–987, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:2006:DHP**

[LM06b] Chi-Kwong Li and Roy Mathias. Distances from a Hermitian pair to diagonalizable and nondiagonalizable Hermitian pairs. *SIAM Journal on Matrix Analysis and Applications*, 28(2):301–305, January 2006. CODEN SJMAEL. ISSN

0895-4798 (print), 1095-7162 (electronic).

**Loisel:2018:PFM**

[LM18] Sébastien Loisel and Peter Maxwell. Path-following method to determine the field of values of a matrix with high accuracy. *SIAM Journal on Matrix Analysis and Applications*, 39(4):1726–1749, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lourenco:2022:ESS**

[LMC22] Christopher J. Lourenco and Erick Moreno-Centeno. Exactly solving sparse rational linear systems via roundoff-error-free Cholesky factorizations. *SIAM Journal on Matrix Analysis and Applications*, 43(1):439–463, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M1371592`.

**Liu:2020:HPM**

[LMPT20] Tianxiang Liu, Ivan Markovsky, Ting Kei Pong, and Akiko Takeda. A hybrid penalty method for a class of optimization problems with multiple rank constraints. *SIAM Journal on Matrix Analysis and Applications*, 41(3):1260–1283, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lancaster:2003:PTA**

[LMZ03] P. Lancaster, A. S. Markus, and F. Zhou. Perturbation theory for analytic matrix functions: The semisimple case. *SIAM Journal on Matrix Analysis and Applications*, 25(3):606–626, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42379`.

**Luce:2014:MFP**

[LN14] Robert Luce and Esmond G. Ng. On the minimum FLOPs problem in the sparse Cholesky factorization. *SIAM Journal on Matrix Analysis and Applications*, 35(1):1–21, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Le:2022:SDC**

[LN22] Thanh Hieu Le and Thi Ngan Nguyen. Simultaneous diagonalization via congruence of Hermitian matrices: Some equivalent conditions and a numerical solution. *SIAM Journal on Matrix Analysis and Applications*, 43(2):882–911, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1390657`.

**Liu:1993:FSS**

[LNP93] Joseph W. H. Liu, Esmond G. Ng, and Barry W. Peyton. On

finding supernodes for sparse matrix computations. *SIAM Journal on Matrix Analysis and Applications*, 14(1):242–252, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:2018:OTB**

[LNSU18] Zhening Li, Yuji Nakatsukasa, Tasuku Soma, and André Uschmajew. On orthogonal tensors and best rank-one approximation ratio. *SIAM Journal on Matrix Analysis and Applications*, 39(1):400–425, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Linh:2018:ESR**

[LNT18] Vu Hoang Linh, Ngo Thi Thanh Nga, and Do Duc Thuan. Exponential stability and robust stability for linear time-varying singular systems of second order difference equations. *SIAM Journal on Matrix Analysis and Applications*, 39(1):204–233, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:2011:PPH**

[LNTX11] Ren-Cang Li, Yuji Nakatsukasa, Ninoslav Truhar, and Shufang Xu. Perturbation of partitioned Hermitian definite generalized eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 32 (2):642–663, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p642_s1`. See erratum [LNTX13].

**Li:2013:EPP**

[LNTX13] Ren-Cang Li, Yuji Nakatsukasa, Ninoslav Truhar, and Shufang Xu. Erratum: "Perturbation of Partitioned Hermitian Definite Generalized Eigenvalue Problems". *SIAM Journal on Matrix Analysis and Applications*, 34(1):280–281, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See [LNTX11].

**Langer:1992:PEQ**

[LNV92] H. Langer, B. Najman, and K. Veselić. Perturbation of the eigenvalues of quadratic matrix polynomials. *SIAM Journal on Matrix Analysis and Applications*, 13(2):474–489, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lewis:2020:PSN**

[LO20] A. S. Lewis and M. L. Overton. Partial smoothness of the numerical radius at matrices whose fields of values are disks. *SIAM Journal on Matrix Analysis and Applications*, 41(3): 1004–1032, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Loewy:1990:LMP**

[Loe90] Raphael Loewy. Linear maps that preserve an inertia class. *SIAM Journal on Matrix Analysis and Applications*, 11(1): 107–112, January 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Loghin:2017:NCP**

[Log17] Daniel Loghin. A note on constraint preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1486–1495, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lin:2002:DPS**

[LOvdD02] Qing Lin, D. D. Olesky, and P. van den Driessche. The distance of potentially stable sign patterns to the unstable matrices. *SIAM Journal on Matrix Analysis and Applications*, 24(2):356–367, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39087`.

**Lamond:1989:GID**

[LP89] Bernard F. Lamond and Martin L. Puterman. Generalized inverses in discrete time Markov decision processes. *SIAM Journal on Matrix Analysis and Applications*, 10(1): 118–134, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Laurent:1996:FSS**

[LP96] Monique Laurent and Svatopluk Poljak. On the facial structure of the set of correlation matrices. *SIAM Journal on Matrix Analysis and Applications*, 17(3):530–547, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:2000:CJN**

[LP00] Chi-Kwong Li and Yiu-Tung Poon. Convexity of the joint numerical range. *SIAM Journal on Matrix Analysis and Applications*, 21(2):668–678, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34351`.

**Lancaster:2001:NRS**

[LP01] Peter Lancaster and Panayiotis Psarrakos. The numerical range of self-adjoint quadratic matrix polynomials. *SIAM Journal on Matrix Analysis and Applications*, 23(3):615–631, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36408`.

**Lancaster:2005:PMP**

[LP05] Peter Lancaster and Panayiotis Psarrakos. On the pseudospectra of matrix polyno-

mials. *SIAM Journal on Matrix Analysis and Applications*, 27(1):115–129, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/44142`.

**Lu:2011:MCN**

[LP11] Zhaosong Lu and Ting Kei Pong. Minimizing condition number via convex programming. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1193–1211, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1193_s1`.

**Lu:2013:COE**

[LP13] Zhaosong Lu and Ting Kei Pong. Computing optimal experimental designs via interior point method. *SIAM Journal on Matrix Analysis and Applications*, 34(4):1556–1580, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lawrence:2017:CSL**

[LP17] Piers W. Lawrence and Javier Pérez. Constructing strong linearizations of matrix polynomials expressed in Chebyshev bases. *SIAM Journal on Matrix Analysis and Applications*, 38(3):683–709, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:2008:ESM**

[LPS08] Chi-Kwong Li, Yiu-Tung Poon, and Nung-Sing Sze. Eigenvalues of the sum of matrices from unitary similarity orbits. *SIAM Journal on Matrix Analysis and Applications*, 30(2):560–581, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lu:2010:RTL**

[LPT10] Shuai Lu, Sergei V. Pereverzev, and Ulrich Tautenhahn. Regularized total least squares: Computational aspects and error bounds. *SIAM Journal on Matrix Analysis and Applications*, 31(3):918–941, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Luo:2016:CPT**

[LQ16] Ziyan Luo and Liqun Qi. Completely positive tensors: Properties, easily checkable subclasses, and tractable relaxations. *SIAM Journal on Matrix Analysis and Applications*, 37(4):1675–1698, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:1994:NRM**

[LR94] Chi-Kwong Li and Leiba Rodman. Numerical range of matrix polynomials. *SIAM*

*Journal on Matrix Analysis and Applications*, 15(4):1256–1265, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24963`.

**Londre:1999:NRP**

[LR99] Tristan Londré and Noah H. Rhee. A note on relative perturbation bounds. *SIAM Journal on Matrix Analysis and Applications*, 21(2):357–361, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33164`.

**Londre:2005:NSP**

[LR05] T. Londre and N. H. Rhee. Numerical stability of the parallel Jacobi method. *SIAM Journal on Matrix Analysis and Applications*, 26(4):985–1000, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41599`.

**Leurgans:1993:DTW**

[LRA93] S. E. Leurgans, R. T. Ross, and R. B. Abel. A decomposition for three-way arrays. *SIAM Journal on Matrix Analysis and Applications*, 14(4):1064–1083, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Le:2023:SVN**

[LRG23] Quoc-Tung Le, Elisa Riccietti, and Remi Gribonval. Spurious valleys, NP-hardness, and tractability of sparse matrix factorization with fixed support. *SIAM Journal on Matrix Analysis and Applications*, 44(2):503–529, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1496657`.

**Lee:2006:EPT**

[LRN06] Ingyu Lee, Padma Raghavan, and Esmond G. Ng. Effective preconditioning through ordering interleaved with incomplete factorization. *SIAM Journal on Matrix Analysis and Applications*, 27(4):1069–1088, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lubich:2013:DAH**

[LRSV13] Christian Lubich, Thorsten Rohwedder, Reinhold Schneider, and Bart Vandereycken. Dynamical approximation by hierarchical Tucker and tensor-train tensors. *SIAM Journal on Matrix Analysis and Applications*, 34(2):470–494, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lundy:1995:SPA**

[LS95] Thomas Lundy and Asok K. Sen. Sign pattern analy-

sis of control coefficients of metabolic pathways. *SIAM Journal on Matrix Analysis and Applications*, 16(3):828–842, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22820`.

**Lehoucq:1996:DTI**

[LS96] R. B. Lehoucq and D. C. Sorensen. Deflation techniques for an implicitly restarted Arnoldi iteration. *SIAM Journal on Matrix Analysis and Applications*, 17(4):789–821, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28148`.

**Lewis:2001:TDS**

[LS01] Adrian S. Lewis and Hristo S. Sendov. Twice differentiable spectral functions. *SIAM Journal on Matrix Analysis and Applications*, 23(2):368–386, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36838`.

**Li:2003:NPB**

[LS03] Wen Li and Weiwei Sun. New perturbation bounds for unitary polar factors. *SIAM Journal on Matrix Analysis and Applications*, 25(2):362–372, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41362`.

**Liesen:2004:CGT**

[LS04] J. Liesen and Z. Strakos. Convergence of GMRES for tridiagonal Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 26(1):233–251, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42496`.

**Li:2006:MMI**

[LS06] Na Li and Yousef Saad. MIQR: a multilevel incomplete $QR$ preconditioner for large sparse least-squares problems. *SIAM Journal on Matrix Analysis and Applications*, 28(2):524–550, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:2007:CPB**

[LS07] Wen Li and Weiwei Sun. Combined perturbation bounds: I. eigensystems and singular value decompositions. *SIAM Journal on Matrix Analysis and Applications*, 29(2):643–655, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Laffey:2010:SCC**

[LŠ10] Thomas J. Laffey and Helena Šmigoc. Sufficient conditions

on commutators for a pair of stable matrices to have a common solution to the Lyapunov equation. *SIAM Journal on Matrix Analysis and Applications*, 31(4):2017–2028, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lin:2011:CCP**

[LS11] Minghua Lin and Gord Sinnamon. A condition for convexity of a product of positive definite quadratic forms. *SIAM Journal on Matrix Analysis and Applications*, 32(2): 457–462, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p457_s1`.

**Li:2017:LRC**

[LS17] Ruipeng Li and Yousef Saad. Low-rank correction methods for algebraic domain decomposition preconditioners. *SIAM Journal on Matrix Analysis and Applications*, 38(3):807–828, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lu:2016:SAT**

[LSB16] Ding Lu, Yangfeng Su, and Zhaojun Bai. Stability analysis of the two-level orthogonal Arnoldi procedure. *SIAM Journal on Matrix Analysis and Applications*, 37(1):195–214, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liljegren-Sailer:2022:ITS**

[LSM22] Björn Liljegren-Sailer and Nicole Marheineke. Input-tailored system-theoretic model order reduction for quadratic-bilinear systems. *SIAM Journal on Matrix Analysis and Applications*, 43(1):1–39, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/18M1216699`.

**Li:1989:IHF**

[LT89] Chi-Kwong Li and Nam-Kiu Tsing. $G$-invariant Hermitian forms and $G$-invariant elliptical norms. *SIAM Journal on Matrix Analysis and Applications*, 10(4):435–445, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:1994:NEC**

[LT94a] Chi-Kwong Li and Bit Shun Tam. A note on extreme correlation matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(3):903–908, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24068`.

**Luo:1994:PAC**

[LT94b] Zhi-Quan Luo and Paul Tseng. Perturbation analysis of a

condition number for linear systems. *SIAM Journal on Matrix Analysis and Applications*, 15(2):636–660, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22476`.

**LeCadre:1997:MDP**

[LT97] J. P. Le Cadre and O. Trémois. The matrix dynamic programming property and its implications. *SIAM Journal on Matrix Analysis and Applications*, 18(4):818–826, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28833`.

**Liesen:2009:BAP**

[LT09] Jörg Liesen and Petr Tichý. On best approximations of polynomials in matrices in the matrix 2-norm. *SIAM Journal on Matrix Analysis and Applications*, 31(2):853–863, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lu:1994:FSC**

[Lu94] Hao Lu. Fast solution of confluent Vandermonde linear systems. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1277–1289, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24416`.

**Lu:1995:FAC**

[Lu95] Hao Lu. Fast algorithms for confluent Vandermonde linear systems and generalized Trummer's problem. *SIAM Journal on Matrix Analysis and Applications*, 16(2):655–674, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25744`.

**Lu:1996:SVL**

[Lu96] Hao Lu. Solution of Vandermonde-like systems and confluent Vandermonde-like systems. *SIAM Journal on Matrix Analysis and Applications*, 17 (1):127–138, January 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27338`.

**Lu:1998:GHM**

[Lu98a] Hao Lu. A generalized Hilbert matrix problem and confluent Chebyshev–Vandermonde systems. *SIAM Journal on Matrix Analysis and Applications*, 19(1):253–276, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30722`.

**Lu:1998:PAM**

[Lu98b] Ya Yan Lu. A Padé approximation method for square roots of symmetric positive definite matrices. *SIAM Journal on Matrix Analysis and Applications*, 19(3):833–845, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31631`.

**Lu:2005:SFS**

[Lu05] Lin-Zhang Lu. Solution form and simple iteration of a nonsymmetric algebraic Riccati equation arising in transport theory. *SIAM Journal on Matrix Analysis and Applications*, 26(3):679–685, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39727`.

**Lu:2010:AFO**

[Lu10] Zhaosong Lu. Adaptive first-order methods for general sparse inverse covariance selection. *SIAM Journal on Matrix Analysis and Applications*, 31 (4):2000–2016, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lu:2020:NEM**

[Lu20] Ding Lu. Nonlinear eigenvector methods for convex minimization over the numerical range. *SIAM Journal on Matrix Analysis and Applications*, 41(4): 1771–1796, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:2018:GCJ**

[LUC18] Jianze Li, Konstantin Usevich, and Pierre Comon. Globally convergent Jacobi-type algorithms for simultaneous orthogonal symmetric tensor diagonalization. *SIAM Journal on Matrix Analysis and Applications*, 39(1):1–22, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:2023:CGB**

[LUC23] Jianze Li, Konstantin Usevich, and Pierre Comon. Convergence of gradient-based block coordinate descent algorithms for nonorthogonal joint approximate diagonalization of matrices. *SIAM Journal on Matrix Analysis and Applications*, 44(2):592–621, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1456972`.

**Lemonnier:2006:BRM**

[LV06] Damien Lemonnier and Paul Van Dooren. Balancing regular matrix pencils. *SIAM Journal on Matrix Analysis and Applications*, 28(1):253–263, January 2006. CODEN SJMAEL.

ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liu:2010:IPM**

[LV10] Zhang Liu and Lieven Vandenberghe. Interior-point method for nuclear norm approximation with application to system identification. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1235–1256, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lu:2017:CCT**

[LV17] Ding Lu and Bart Vandereycken. Criss-cross type algorithms for computing the real pseudospectral abscissa. *SIAM Journal on Matrix Analysis and Applications*, 38(3):891–923, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lawrence:2016:BEA**

[LVV16] Piers W. Lawrence, Marc Van Barel, and Paul Van Dooren. Backward error analysis of polynomial eigenvalue problems solved by linearization. *SIAM Journal on Matrix Analysis and Applications*, 37(1): 123–144, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lu:1994:RCC**

[LW94] Kai Sheng Lu and Jia Ning Wei. Reducibility condition of a class of rational function matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(1):151–161, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/21794`.

**Lin:1997:CSL**

[LW97] Wen-Wei Lin and Chern-Shuh Wang. On computing stable Lagrangian subspaces of Hamiltonian matrices and symplectic pencils. *SIAM Journal on Matrix Analysis and Applications*, 18(3):590–614, July 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27271`.

**Lasser:2002:EEL**

[LW02a] Rupert Lasser and Sebastian Walcher. Error estimates for linear compartmental systems. *SIAM Journal on Matrix Analysis and Applications*, 23(4):1013–1024, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37452`.

**Li:2002:LRS**

[LW02b] Jing-Rebecca Li and Jacob White. Low rank solution of Lyapunov equations. *SIAM Journal on Matrix Analysis*

*and Applications*, 24(1):260–280, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38493`.

**Li:2005:LBC**

[LW05] Chi-Kwong Li and Hugo J. Woerdeman. A lower bound on the C-numerical radius of nilpotent matrices appearing in coherent spectroscopy. *SIAM Journal on Matrix Analysis and Applications*, 27(3):793–800, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:2020:RPC**

[LW20a] Rui Li and Zeng-Qi Wang. Restrictively preconditioned conjugate gradient method for a series of constantly augmented least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 41(2):838–851, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liu:2020:FBC**

[LW20b] Jun Liu and Shu-Lin Wu. A fast block $\alpha$-circulant preconditoner for all-at-once systems from wave equations. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1912–1943, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:2013:SLS**

[LwCKL13] Tiexiang Li, Eric King wah Chu, Yueh-Cheng Kuo, and Wen-Wei Lin. Solving large-scale nonsymmetric algebraic Riccati equations by doubling. *SIAM Journal on Matrix Analysis and Applications*, 34(3):1129–1147, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liu:2015:MMT**

[LWW15] Xin-Guo Liu, Xue-Feng Wang, and Wei-Guo Wang. Maximization of matrix trace function of product Stiefel manifolds. *SIAM Journal on Matrix Analysis and Applications*, 36(4):1489–1506, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liu:2014:CSC**

[LWWY14] Xin Liu, Xiao Wang, Zaiwen Wen, and Yaxiang Yuan. On the convergence of the self-consistent field iteration in Kohn–Sham density functional theory. *SIAM Journal on Matrix Analysis and Applications*, 35(2):546–558, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lee:2006:CIM**

[LWXZ06] Young-Ju Lee, Jinbiao Wu, Jinchao Xu, and Ludmil Zikatanov. On the convergence of iterative methods for

semidefinite linear systems. *SIAM Journal on Matrix Analysis and Applications*, 28(3): 634–641, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lim:2019:NAA**

[LWY19] Lek-Heng Lim, Ken Sze-Wai Wong, and Ke Ye. Numerical algorithms on the affine Grassmannian. *SIAM Journal on Matrix Analysis and Applications*, 40(2):371–393, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lin:2006:CAS**

[LX06] Wen-Wei Lin and Shu-Fang Xu. Convergence analysis of structure-preserving doubling algorithms for Riccati-type matrix equations. *SIAM Journal on Matrix Analysis and Applications*, 28(1):26–39, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Laub:2009:FCE**

[LX09] A. J. Laub and J. Xia. Fast condition estimation for a class of structured eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 30 (4):1658–1676, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liu:2012:CNA**

[LX12] Changli Liu and Jungong Xue. Complex nonsymmetric algebraic Riccati equations arising in Markov modulated fluid flows. *SIAM Journal on Matrix Analysis and Applications*, 33(2):569–596, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Liu:2020:STD**

[LXSdH20] Xiao Liu, Yuanzhe Xi, Yousef Saad, and Maarten V. de Hoop. Solving the three-dimensional high-frequency Helmholtz equation using contour integration and polynomial preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 41 (1):58–82, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lu:1991:ELT**

[LY91] Ya Yan Lu and Shing-Tung Yau. Eigenvalues of the Laplacian through boundary integral equations. *SIAM Journal on Matrix Analysis and Applications*, 12(3):597–609, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Li:2003:KSM**

[LY03] Ren-Cang Li and Qiang Ye. A Krylov subspace method for quadratic matrix polynomials with application to constrained

least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 25(2):405–428, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40939`.

**Liu:1997:SIO**

[LZ97] Jianzhou Liu and Li Zhu. Some improvement of Oppenheim's inequality for $M$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 18(2):305–311, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29603`.

**Li:2005:RRM**

[LZ05a] T. Y. Li and Zhonggang Zeng. A rank-revealing method with updating, downdating, and applications. *SIAM Journal on Matrix Analysis and Applications*, 26(4):918–946, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43528`.

**Liu:2005:DSS**

[LZ05b] Jianzhou Liu and Fuzhen Zhang. Disc separation of the Schur complement of diagonally dominant matrices and determinantal bounds. *SIAM Journal on Matrix Analysis and Applications*, 27(3):665–674, July 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/62036`.

**Lu:2010:MNI**

[LZ10] Junfeng Lu and Zhenyue Zhang. A modified nonlinear inexact Uzawa algorithm with a variable relaxation parameter for the stabilized saddle point problem. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1934–1957, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Lancaster:2014:ISQ**

[LZ14] Peter Lancaster and Ion Zaballa. On the inverse symmetric quadratic eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 35 (1):254–278, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Maroulas:1999:CDN**

[MA99] J. Maroulas and M. Adam. Compressions and dilations of numerical ranges. *SIAM Journal on Matrix Analysis and Applications*, 21(1):230–244, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34052`.

**Massart:2020:QGS**

[MA20] Estelle Massart and P.-A. Absil. Quotient geometry with simple geodesics for the manifold of fixed-rank positive-semidefinite matrices. *SIAM Journal on Matrix Analysis and Applications*, 41(1):171–198, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mackey:1995:HJM**

[Mac95] Niloufer Mackey. Hamilton and Jacobi meet again: Quaternions and the eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 16(2):421–435, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25705`.

**MacInnes:1999:SSM**

[Mac99] Craig S. MacInnes. The solution to a structured matrix approximation problem using Grassman coordinates. *SIAM Journal on Matrix Analysis and Applications*, 21(2):446–453, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33545`.

**Maesumi:1998:CFS**

[Mae98] Mohsen Maesumi. On construction of a family of smooth nonseparable prewavelets via infinite products of triangularizable matrices. *SIAM Journal on Matrix Analysis and Applications*, 19(4):1005–1026, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26232`.

**Mailybaev:1999:TFM**

[Mai99] Alexei A. Mailybaev. Transformation of families of matrices to normal forms and its application to stability theory. *SIAM Journal on Matrix Analysis and Applications*, 21(2):396–417, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33837`.

**Malyshev:2003:UTC**

[Mal03] A. N. Malyshev. A unified theory of conditioning for linear least squares and Tikhonov regularization solutions. *SIAM Journal on Matrix Analysis and Applications*, 24(4):1186–1196, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38956`.

**Malick:2004:DAS**

[Mal04] Jérôme Malick. A dual approach to semidefinite least-squares problems. *SIAM Journal on Matrix Analysis and Applications*, 26(1):272–284,

2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41385`.

**Malyshev:2006:CSE**

[Mal06] Alexander N. Malyshev. Computation of smallest eigenvalues in the Sturm–Liouville problem with strongly varying coefficients. *SIAM Journal on Matrix Analysis and Applications*, 28(4):961–970, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Marchi:1991:ECE**

[Mar91] Ezio Marchi. The effective computation of equilibrium point for $N$-person games cyclic to the next person. *SIAM Journal on Matrix Analysis and Applications*, 12(4): 707–712, October 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Markovsky:2011:CLS**

[Mar11a] Ivan Markovsky. On the complex least squares problem with constrained phase. *SIAM Journal on Matrix Analysis and Applications*, 32(3): 987–992, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p987_s1`.

**Martinsson:2011:FRA**

[Mar11b] P. G. Martinsson. A fast randomized algorithm for computing a hierarchically semiseparable representation of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 32 (4):1251–1274, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1251_s1`.

**Mascarenhas:1994:NJB**

[Mas94] Walter F. Mascarenhas. A note on Jacobi being more accurate than $QR$. *SIAM Journal on Matrix Analysis and Applications*, 15(1):215–218, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22792`.

**Mascarenhas:1995:CJM**

[Mas95] Walter F. Mascarenhas. On the convergence of the Jacobi method for arbitrary orderings. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1197–1209, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/17963`.

**Masuyama:2016:EBA**

[Mas16] Hiroyuki Masuyama. Error bounds for augmented trun-

cations of discrete-time block-monotone Markov chains under subgeometric drift conditions. *SIAM Journal on Matrix Analysis and Applications*, 37(3):877–910, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mathias:1992:MPD**

[Mat92] Roy Mathias. Matrices with positive definite Hermitian part: Inequalities and linear systems. *SIAM Journal on Matrix Analysis and Applications*, 13(2):640–654, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mathias:1993:AMV**

[Mat93a] Roy Mathias. Approximation of matrix-valued functions. *SIAM Journal on Matrix Analysis and Applications*, 14 (4):1061–1063, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mathias:1993:HON**

[Mat93b] Roy Mathias. The Hadamard operator norm of a circulant and applications. *SIAM Journal on Matrix Analysis and Applications*, 14(4):1152–1167, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mathias:1993:PBP**

[Mat93c] Roy Mathias. Perturbation bounds for the polar decomposition. *SIAM Journal on Matrix Analysis and Applications*, 14(2):588–597, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mathias:1995:AEC**

[Mat95a] Roy Mathias. Accurate eigensystem computations by Jacobi methods. *SIAM Journal on Matrix Analysis and Applications*, 16(3):977–1003, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24820`.

**Mathias:1995:CEM**

[Mat95b] Roy Mathias. Condition estimation for matrix functions via the Schur decomposition. *SIAM Journal on Matrix Analysis and Applications*, 16(2):565–578, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24438`.

**Mathias:1996:CRM**

[Mat96] Roy Mathias. A chain rule for matrix functions and applications. *SIAM Journal on Matrix Analysis and Applications*, 17(3):610–620, July 1996. CODEN SJMAEL.

ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28340`.

**Mathias:1997:BMS**

[Mat97a] Roy Mathias. A bound for the matrix square root with application to eigenvector perturbation. *SIAM Journal on Matrix Analysis and Applications*, 18(4):861–867, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29577`.

**Mathias:1997:SPB**

[Mat97b] Roy Mathias. Spectral perturbation bounds for positive definite matrices. *SIAM Journal on Matrix Analysis and Applications*, 18(4):959–980, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27108`.

**Mathias:1998:QRB**

[Mat98] Roy Mathias. Quadratic residual bounds for the Hermitian eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 19(2):541–550, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31053`.

**Matsuura:2005:RAM**

[Mat05] Masaya Matsuura. Relations among the minimum norm coefficients for degenerate nonstationary flows. *SIAM Journal on Matrix Analysis and Applications*, 27(3):654–664, July 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43296`.

**Matejas:2009:AJM**

[Mat09] J. Matejaš. Accuracy of the Jacobi method on scaled diagonally dominant symmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(1):133–153, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mayer:2012:OPL**

[May12] Günter Mayer. An Oettli–Prager-like theorem for the symmetric solution set and for related solution sets. *SIAM Journal on Matrix Analysis and Applications*, 33(3):979–999, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Meerbergen:2010:LMP**

[MB10] Karl Meerbergen and Zhaojun Bai. The Lanczos method for parameterized symmetric linear systems with multiple right-hand sides. *SIAM Journal on Matrix Analysis and*

*Applications*, 31(4):1642–1662, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Muti:2008:LRT**

[MBM08] Damien Muti, Salah Bourennane, and Julien Marot. Lower-rank tensor approximation and multiway filtering. *SIAM Journal on Matrix Analysis and Applications*, 30(3): 1172–1204, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Michiels:2017:EFS**

[MBN17] Wim Michiels, Islam Boussaada, and Silviu-Iulian Niculescu. An explicit formula for the splitting of multiple eigenvalues for nonlinear eigenvalue problems and connections with the linearization for the delay eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 38(2):599–620, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Moro:1997:LVL**

[MBO97] Julio Moro, James V. Burke, and Michael L. Overton. On the Lidskii–Vishik lyusternik perturbation theory for eigenvalues of matrices with arbitrary Jordan structure. *SIAM Journal on Matrix Analysis and Applications*, 18(4):793–817, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29466`.

**Moro:2003:LRP**

[MD03] Julio Moro and Froilán M. Dopico. Low rank perturbation of Jordan structure. *SIAM Journal on Matrix Analysis and Applications*, 25(2):495–506, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41711`.

**Meerbergen:2003:SPS**

[Mee03] Karl Meerbergen. The solution of parametrized symmetric linear systems. *SIAM Journal on Matrix Analysis and Applications*, 24(4):1038–1059, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38038`.

**Meerbergen:2009:QAM**

[Mee09] Karl Meerbergen. The quadratic Arnoldi method for the solution of the quadratic eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1463–1482, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mehrmann:1988:SOM**

[Meh88] Volker Mehrmann. A symplectic orthogonal method for sin-

gle input or single output discrete time optimal quadratic control problems. *SIAM Journal on Matrix Analysis and Applications*, 9(2):221–247, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). SIAM Conference on Linear Algebra in Signals, Systems, and Control (Boston, Mass., 1986).

**Mehl:1999:CFS**

[Meh99] Christian Mehl. Condensed forms for skew-Hamiltonian/Hamiltonian pencils. *SIAM Journal on Matrix Analysis and Applications*, 21(2):454–476, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33651`.

**Mehl:2004:JLA**

[Meh04] Christian Mehl. Jacobi-like algorithms for the indefinite generalized Hermitian eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 25(4):964–985, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40947`.

**Mehl:2008:ACN**

[Meh08] Christian Mehl. On asymptotic convergence of nonsymmetric Jacobi algorithms. *SIAM Journal on Matrix Analysis and Applications*, 30(1):291–311, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Meini:2004:MSR**

[Mei04] Beatrice Meini. The matrix square root from a new functional perspective: Theoretical results and computational issues. *SIAM Journal on Matrix Analysis and Applications*, 26(2):362–376, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42665`.

**Melman:1999:BEE**

[Mel99] A. Melman. Bounds on the extreme eigenvalues of real symmetric Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 21(2):362–378, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33962`.

**Melman:2001:EOS**

[Mel01] A. Melman. The even-odd split Levinson algorithm for Toeplitz systems. *SIAM Journal on Matrix Analysis and Applications*, 23(1):256–270, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36712`.

**Melman:2004:CSE**

[Mel04] A. Melman. Computation of the smallest even and Odd eigenvalues of a symmetric positive-definite Toeplitz matrix. *SIAM Journal on Matrix Analysis and Applications*, 25(4):947–963, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42335`.

**Mendlovitz:1999:MRE**

[Men99] Mark A. Mendlovitz. More results on eigenvector saddlepoints and eigenpolynomials. *SIAM Journal on Matrix Analysis and Applications*, 21(2):593–612, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32448`.

**Mengi:2008:EDU**

[Men08] Emre Mengi. On the estimation of the distance to uncontrollability for higher order systems. *SIAM Journal on Matrix Analysis and Applications*, 30 (1):154–172, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mengi:2012:NLS**

[Men12] Emre Mengi. Nearest linear systems with highly deficient reachable subspaces. *SIAM Journal on Matrix Analysis and Applications*, 33(3):1000–1017, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mengi:2018:LSG**

[Men18] Emre Mengi. Large-scale and global maximization of the distance to instability. *SIAM Journal on Matrix Analysis and Applications*, 39(4):1776–1809, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Meszaros:2008:NII**

[Més08] Csaba Mészáros. On numerical issues of interior point methods. *SIAM Journal on Matrix Analysis and Applications*, 30 (1):223–235, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Meurant:1992:RIS**

[Meu92] Gérard Meurant. A review on the inverse of symmetric tridiagonal and block tridiagonal matrices. *SIAM Journal on Matrix Analysis and Applications*, 13(3):707–728, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Meurant:2011:RNF**

[Meu11] Gérard Meurant. On the residual norm in FOM and GMRES. *SIAM Journal on Matrix Analysis and Applications*, 32

(2):394–411, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p394_s1`.

**Meurant:2017:CFG**

[Meu17] Gérard Meurant. The coefficients of the FOM and GMRES residual polynomials. *SIAM Journal on Matrix Analysis and Applications*, 38(1): 96–117, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Meyer:1994:SSD**

[Mey94] Carl D. Meyer. Sensitivity of the stationary distribution of a Markov chain. *SIAM Journal on Matrix Analysis and Applications*, 15(3):715–728, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22890`.

**Michiels:2020:SBS**

[MF20] Wim Michiels and Luca Fenzi. Spectrum-based stability analysis and stabilization of time-periodic time-delay systems. *SIAM Journal on Matrix Analysis and Applications*, 41(3): 1284–1311, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Manteuffel:1992:ISS**

[MG92] Thomas A. Manteuffel and Gene H. Golub. Introduction to the special section on iterative methods in numerical linear algebra. *SIAM Journal on Matrix Analysis and Applications*, 13(3):765–766, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Michiels:2010:CCN**

[MG10] Wim Michiels and Suat Gumussoy. Characterization and computation of $\mathcal{H}_\infty$ norms for time-delay systems. *SIAM Journal on Matrix Analysis and Applications*, 31(4):2093–2115, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mostajeran:2020:GMM**

[MGS20] Cyrus Mostajeran, Christian Grussler, and Rodolphe Sepulchre. Geometric matrix midranges. *SIAM Journal on Matrix Analysis and Applications*, 41(3):1347–1368, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mani:1995:DBB**

[MH95] Vaidyanath Mani and Robert E. Hartwig. Duality and black box interpolation. I. the one variable nonderogatory case. *SIAM Journal on Matrix Analysis and Applications*, 16(1): 21–28, January 1995. CODEN

SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23492`.

**Mead:2013:TCR**

[MH13a] J. L. Mead and C. C. Hammerquist. $\chi^2$ tests for the choice of the regularization parameter in nonlinear inverse problems. *SIAM Journal on Matrix Analysis and Applications*, 34(3):1213–1230, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Morikuni:2013:IIK**

[MH13b] Keiichi Morikuni and Ken Hayami. Inner-iteration Krylov subspace methods for least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 34(1):1–22, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Morikuni:2015:CII**

[MH15] Keiichi Morikuni and Ken Hayami. Convergence of inner-iteration GMRES methods for rank-deficient least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 36(1):225–250, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mu:2015:SRO**

[MHG15] Cun Mu, Daniel Hsu, and Donald Goldfarb. Successive rank-one approximations for nearly orthogonally decomposable symmetric tensors. *SIAM Journal on Matrix Analysis and Applications*, 36(4):1638–1659, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mu:2017:GAS**

[MHG17] Cun Mu, Daniel Hsu, and Donald Goldfarb. Greedy approaches to symmetric orthogonal tensor decomposition. *SIAM Journal on Matrix Analysis and Applications*, 38 (4):1210–1226, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Miminis:2000:SAG**

[Mim00] George Miminis. A stepwise approach for the generalized eigenstructure assignment problem. *SIAM Journal on Matrix Analysis and Applications*, 22(3):912–924, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29848`.

**Miminis:2015:PPS**

[Mim15] George S. Miminis. Pole placement in single-input linear descriptor systems. *SIAM Journal on Matrix Analysis and Applications*, 36(4):1605–1621, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mitchell:2020:CKC**

[Mit20] Tim Mitchell. Computing the Kreiss constant of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 41(4): 1944–1975, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mitchell:2021:FIB**

[Mit21] Tim Mitchell. Fast interpolation-based globality certificates for computing Kreiss constants and the distance to uncontrollability. *SIAM Journal on Matrix Analysis and Applications*, 42(2):578–607, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Miyajima:2014:FEA**

[Miy14] Shinya Miyajima. Fast enclosure for all eigenvalues and invariant subspaces in generalized eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 35(3): 1205–1225, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mizutani:2022:RHM**

[Miz22] Tomohiko Mizutani. Refinement of Hottopixx method for nonnegative matrix factorization under noisy separability. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1029–1057, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1442206`.

**Michiels:2011:KBM**

[MJM11] Wim Michiels, Elias Jarlebring, and Karl Meerbergen. Krylov-based model order reduction of time-delay systems. *SIAM Journal on Matrix Analysis and Applications*, 32(4): 1399–1421, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1399_s1`.

**Mickelin:2020:MLR**

[MK20] Oscar Mickelin and Sertac Karaman. Multiresolution low-rank tensor formats. *SIAM Journal on Matrix Analysis and Applications*, 41(3):1086–1114, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Morris:1989:GPH**

[ML89] Walter D. Morris, Jr. and Jim Lawrence. Geometric properties of hidden Minkowski matrices. *SIAM Journal on Matrix Analysis and Applications*, 10(2):229–232, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mastronardi:2000:FST**

[MLV00] Nicola Mastronardi, Philippe

Lemmerling, and Sabine Van Huffel. Fast structured total least squares algorithm for solving the basic deconvolution problem. *SIAM Journal on Matrix Analysis and Applications*, 22(2):533–553, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34581`.

**Murthy:2000:PPM**

[MM00] A. L. N. Murthy and G. S. R. Murthy. Principal pivoting method for solving column sufficient complementarity problems. *SIAM Journal on Matrix Analysis and Applications*, 22(2):527–532, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36352`.

**Mikkelsen:2009:ATS**

[MM09] Carl Christian Kjelgaard Mikkelsen and Murat Manguoglu. Analysis of the truncated SPIKE algorithm. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1500–1519, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Maehara:2011:AEC**

[MM11] Takanori Maehara and Kazuo Murota. Algorithm for error-controlled simultaneous block-diagonalization of matrices. *SIAM Journal on Matrix Analysis and Applications*, 32(2): 605–620, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p605_s1`.

**Marshall:2023:OSL**

[MM23] Nicholas F. Marshall and Oscar Mickelin. An optimal scheduled learning rate for a randomized Kaczmarz algorithm. *SIAM Journal on Matrix Analysis and Applications*, 44(1):312–330, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M148803X`.

**Mahoney:2008:TCD**

[MMD08] Michael W. Mahoney, Mauro Maggioni, and Petros Drineas. Tensor-CUR decompositions for tensor-based data. *SIAM Journal on Matrix Analysis and Applications*, 30(3):957–987, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Moore:1994:NGA**

[MMH94] J. B. Moore, R. E. Mahony, and U. Helmke. Numerical gradient algorithms for eigenvalue and singular value calculations. *SIAM Journal on Matrix Analysis and Applications*, 15(3):881–902, July 1994. CODEN SJMAEL.

ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22973`.

**Mackey:2006:SPE**

[MMMM06a] D. Steven Mackey, Niloufer Mackey, Christian Mehl, and Volker Mehrmann. Structured polynomial eigenvalue problems: Good vibrations from good linearizations. *SIAM Journal on Matrix Analysis and Applications*, 28(4):1029–1051, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mackey:2006:VSL**

[MMMM06b] D. Steven Mackey, Niloufer Mackey, Christian Mehl, and Volker Mehrmann. Vector spaces of linearizations for matrix polynomials. *SIAM Journal on Matrix Analysis and Applications*, 28(4):971–1004, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**MacLachlan:2022:BLP**

[MMN22] Scott P. MacLachlan, Niall Madden, and Thái Anh Nhan. A boundary-layer preconditioner for singularly perturbed convection diffusion. *SIAM Journal on Matrix Analysis and Applications*, 43(2):561–583, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1443297`.

**Martinez:1994:ISU**

[MMS94] Servet Martínez, Gérard Michon, and Jaime San Martín. Inverse of strictly ultrametric matrices are of Stieltjes type. *SIAM Journal on Matrix Analysis and Applications*, 15(1):98–106, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/21701`.

**Mehl:2016:SRL**

[MMS16] Christian Mehl, Volker Mehrmann, and Punit Sharma. Stability radii for linear Hamiltonian systems with dissipation under structure-preserving perturbations. *SIAM Journal on Matrix Analysis and Applications*, 37 (4):1625–1654, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mackey:2005:SFS**

[MMT05] D. Steven Mackey, Niloufer Mackey, and Françoise Tisseur. Structured factorizations in scalar product spaces. *SIAM Journal on Matrix Analysis and Applications*, 27(3): 821–850, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mackey:2008:SMP**

[MMT08] D. Steven Mackey, Niloufer Mackey, and Françoise Tisseur. Structured mapping problems for matrices associated with scalar products. Part I: Lie and Jordan algebras. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1389–1410, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mehl:2017:PDR**

[MMW17] C. Mehl, V. Mehrmann, and M. Wojtylak. Parameter-dependent rank-one perturbations of singular Hermitian or symmetric pencils. *SIAM Journal on Matrix Analysis and Applications*, 38(1):72–95, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mehl:2018:LAP**

[MMW18] C. Mehl, V. Mehrmann, and M. Wojtylak. Linear algebra properties of dissipative Hamiltonian descriptor systems. *SIAM Journal on Matrix Analysis and Applications*, 39 (3):1489–1519, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mehl:2022:MPC**

[MMW22] C. Mehl, V. Mehrmann, and M. Wojtylak. Matrix pencils with coefficients that have positive semidefinite Hermitian parts. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1186–1212, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1439997`.

**Mohan:1997:VBH**

[MN97] S. R. Mohan and S. K. Neogy. Vertical block hidden $Z$-matrices and the generalized linear complementarity problem. *SIAM Journal on Matrix Analysis and Applications*, 18(1):181–190, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27114`.

**Ma:2015:CPR**

[MNR15] Anna Ma, Deanna Needell, and Aaditya Ramdas. Convergence properties of the randomized extended Gauss–Seidel and Kaczmarz methods. *SIAM Journal on Matrix Analysis and Applications*, 36(4):1590–1604, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ma:2018:IMS**

[MNR18] Anna Ma, Deanna Needell, and Aaditya Ramdas. Iterative methods for solving factorized linear systems. *SIAM Journal on Matrix Analysis and Applications*, 39(1):104–122, ???? 2018. CODEN SJMAEL. ISSN

0895-4798 (print), 1095-7162 (electronic).

**McDonald:1996:IUM**

[MNST96] J. J. McDonald, M. Neumann, H. Schneider, and M. J. Tsatsomeros. Inverses of unipathic $M$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 17(4):1025–1036, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27724`.

**Murthy:1999:NLM**

[MNT99] G. S. R. Murthy, S. K. Neogy, and F. Thuijsman. A note on $P_1$- and Lipschitzian matrices. *SIAM Journal on Matrix Analysis and Applications*, 21(2):636–641, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32989`.

**Mastronardi:2010:DFM**

[MNT10] N. Mastronardi, M. Ng, and E. E. Tyrtyshnikov. Decay in functions of multiband matrices. *SIAM Journal on Matrix Analysis and Applications*, 31 (5):2721–2737, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Montoison:2020:BIM**

[MO20] Alexis Montoison and Dominique Orban. BiLQ: an iterative method for nonsymmetric linear systems with a quasi-minimum error property. *SIAM Journal on Matrix Analysis and Applications*, 41(3): 1145–1166, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Montoison:2023:GIM**

[MO23] Alexis Montoison and Dominique Orban. GPMR: an iterative method for unsymmetric partitioned linear systems. *SIAM Journal on Matrix Analysis and Applications*, 44(1):293–311, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1459265`.

**Moakher:2002:MAG**

[Moa02] Maher Moakher. Means and averaging in the group of rotations. *SIAM Journal on Matrix Analysis and Applications*, 24(1):1–16, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38387`.

**Moakher:2005:DGA**

[Moa05] Maher Moakher. A differential geometric approach to the geometric mean of symmetric positive-definite matrices. *SIAM Journal on Matrix Analysis and Appli-*

*cations*, 26(3):735–747, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43693`.

**Marchi:1991:PTN**

[MOC91] Ezio Marchi, Jorge A. Oviedo, and Joel E. Cohen. Perturbation theory of a nonlinear game of von Neumann. *SIAM Journal on Matrix Analysis and Applications*, 12(3): 592–596, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Moler:1992:DGH**

[Mol92] Cleve Moler. Dedication to Gene H. Golub on the occasion of his 15th birthday. *SIAM Journal on Matrix Analysis and Applications*, 13(1): vii–viii, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Monnigmann:2011:FCS**

[Mön11] M. Mönnigmann. Fast calculation of spectral bounds for Hessian matrices on hyperrectangles. *SIAM Journal on Matrix Analysis and Applications*, 32 (4):1351–1366, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1351_s1`.

**Morris:1994:LDT**

[Mor94] Walter D. Morris, Jr. LCP degree theory and oriented matroids. *SIAM Journal on Matrix Analysis and Applications*, 15(3):995–1006, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22641`.

**Morgan:1995:RGM**

[Mor95] Ronald B. Morgan. A restarted GMRES method augmented with eigenvectors. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1154–1171, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25397`.

**Morgan:2000:IRG**

[Mor00] Ronald B. Morgan. Implicitly restarted GMRES and Arnoldi methods for nonsymmetric systems of equations. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1112–1135, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32136`.

**Maslen:2004:CIP**

[MOR04] David K. Maslen, Michael E. Orrison, and Daniel N. Rockmore. Computing isotypic

projections with the Lanczos iteration. *SIAM Journal on Matrix Analysis and Applications*, 25(3):784–803, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39977`.

**Morris:2012:NSC**

[Mor12] Ian D. Morris. A new sufficient condition for the uniqueness of Barabanov norms. *SIAM Journal on Matrix Analysis and Applications*, 33(2):317–324, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Massoudi:2016:AIM**

[MOR16] Arash Massoudi, Mark R. Opmeer, and Timo Reis. Analysis of an iteration method for the algebraic Riccati equation. *SIAM Journal on Matrix Analysis and Applications*, 37(2):624–648, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Morikuni:2021:PME**

[Mor21] Keiichi Morikuni. Projection method for eigenvalue problems of linear nonsquare matrix pencils. *SIAM Journal on Matrix Analysis and Applications*, 42(3):1381–1400, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Morris:2022:FAR**

[Mor22] Ian D. Morris. Fast approximation of the $p$-radius, matrix pressure, or generalized Lyapunov exponent for positive and dominated matrices. *SIAM Journal on Matrix Analysis and Applications*, 43(1):178–198, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/19M1303964`.

**Maybee:1989:MDD**

[MOvdDW89] John S. Maybee, D. D. Olesky, P. van den Driessche, and G. Wiener. Matrices, digraphs, and determinants. *SIAM Journal on Matrix Analysis and Applications*, 10(4):500–519, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Misra:1988:DIA**

[MP88] P. Misra and R. V. Patel. A determinant identity and its application in evaluating frequency response matrices. *SIAM Journal on Matrix Analysis and Applications*, 9(2):248–255, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). SIAM Conference on Linear Algebra in Signals, Systems, and Control (Boston, Mass., 1986).

**Miminis:1991:ISR**

[MP91] G. S. Miminis and C. C.

Paige. Implicit shifting in the $QR$ and related algorithms. *SIAM Journal on Matrix Analysis and Applications*, 12(2): 385–400, April 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mangasarian:1995:ELC**

[MP95a] O. L. Mangasarian and J. S. Pang. The extended linear complementarity problem. *SIAM Journal on Matrix Analysis and Applications*, 16(2):359–368, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26273`.

**Murthy:1995:SPF**

[MP95b] G. S. R. Murthy and T. Parthasarathy. Some properties of fully semimonotone $Q0$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1268–1286, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25360`.

**Mond:1998:IHP**

[MP98] B. Mond and J. E. Pecaric. Inequalities for the Hadamard product of matrices. *SIAM Journal on Matrix Analysis and Applications*, 19(1):66–70, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30295`.

**Meini:2011:PIS**

[MP11] Beatrice Meini and Federico Poloni. A Perron iteration for the solution of a quadratic vector equation arising in Markovian binary trees. *SIAM Journal on Matrix Analysis and Applications*, 32(1): 248–261, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p248_s1`.

**Mehrmann:2012:DAP**

[MP12] Volker Mehrmann and Federico Poloni. Doubling algorithms with permuted Lagrangian graph bases. *SIAM Journal on Matrix Analysis and Applications*, 33(3):780–805, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mazza:2021:ASF**

[MP21] M. Mazza and J. Pestana. The asymptotic spectrum of flipped multilevel Toeplitz matrices and of certain preconditionings. *SIAM Journal on Matrix Analysis and Applications*, 42(3):1319–1336, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Massei:2018:SRS**

[MPR18] Stefano Massei, Davide Palitta, and Leonardo Robol. Solving rank-structured Sylvester and Lyapunov equations. *SIAM Journal on Matrix Analysis and Applications*, 39(4):1564–1590, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Murthy:1998:SRR**

[MPS98] G. S. R. Murthy, T. Parthasarathy, and B. Sriparna. Some recent results on the linear complementarity problem. *SIAM Journal on Matrix Analysis and Applications*, 19(4):898–905, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31381`.

**Murthy:2000:SSL**

[MPS00] G. S. R. Murthy, T. Parthasarathy, and B. Sriparna. On the solution sets of linear complementarity problems. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1229–1235, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33697`.

**Migallon:2001:NMG**

[MPS01] Violeta Migallón, José Penadés, and Daniel B. Szyld. Nonstationary multisplittings with general weighting matrices. *SIAM Journal on Matrix Analysis and Applications*, 22 (4):1089–1094, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Meerbergen:1997:RAM**

[MR97] Karl Meerbergen and Dirk Roose. The restarted Arnoldi method applied to iterative linear system solvers for the computation of rightmost eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 18(1):1–20, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27425`.

**Morikuni:2018:GSE**

[MR18] Keiichi Morikuni and Miroslav Rozložník. On GMRES for singular EP and GP systems. *SIAM Journal on Matrix Analysis and Applications*, 39(2): 1033–1048, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Massei:2022:MPR**

[MR22] Stefano Massei and Leonardo Robol. Mixed precision recursive block diagonalization for bivariate functions of matrices. *SIAM Journal on Matrix Analysis and Applications*, 43(2):638–660, ???? 2022. CODEN SJMAEL. ISSN

0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1407872`.

**Muller:2022:RES**

[MRU22] Tommi Muller, Elina Robeva, and Konstantin Usevich. Robust eigenvectors of symmetric tensors. *SIAM Journal on Matrix Analysis and Applications*, 43(4):1784–1805, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1462052`.

**Marcus:1991:HSR**

[MS91] Marvin Marcus and Markus Sandy. Hadamard square roots. *SIAM Journal on Matrix Analysis and Applications*, 12(1):49–69, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Malyshev:1997:PES**

[MS97] A. N. Malyshev and M. Sadkane. On parabolic and elliptic spectral dichotomy. *SIAM Journal on Matrix Analysis and Applications*, 18(2):265–278, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27795`.

**Mailybaev:1999:SBS**

[MS99] Alexei A. Mailybaev and Alexander P. Seyranian. On singularities of a boundary of the stability domain. *SIAM Journal on Matrix Analysis and Applications*, 21(1):106–128, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32667`.

**Marek:2002:CCG**

[MS02] Ivo Marek and Daniel B. Szyld. Comparison of convergence of general stationary iterative methods for singular matrices. *SIAM Journal on Matrix Analysis and Applications*, 24(1):68–77, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37598`.

**Moskvina:2003:APS**

[MS03] V. Moskvina and K. M. Schmidt. Approximate projectors in singular spectrum analysis. *SIAM Journal on Matrix Analysis and Applications*, 24(4):932–942, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39896`.

**Meerbergen:2010:IIP**

[MS10] Karl Meerbergen and Alastair Spence. Inverse iteration for purely imaginary eigenvalues with application to the detection of Hopf bifurcations in

large-scale problems. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1982–1999, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mousavi:2018:UAS**

[MS18] Mehdi S. Mousavi and Hristo S. Sendov. A unified approach to spectral and isotropic functions. *SIAM Journal on Matrix Analysis and Applications*, 39 (2):632–663, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Minster:2021:EAE**

[MSKC21] Rachel Minster, Arvind K. Saibaba, Jishnudeep Kar, and Aranya Chakrabortty. Efficient algorithms for eigensystem realization using randomized SVD. *SIAM Journal on Matrix Analysis and Applications*, 42(2):1045–1072, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Musolas:2021:GPC**

[MSM21] Antoni Musolas, Steven T. Smith, and Youssef Marzouk. Geodesically parameterized covariance estimation. *SIAM Journal on Matrix Analysis and Applications*, 42(2):528–556, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mitz:2019:SRO**

[MSS19] Roy Mitz, Nir Sharon, and Yoel Shkolnisky. Symmetric rank-one updates from partial spectrum with an application to out-of-sample extension. *SIAM Journal on Matrix Analysis and Applications*, 40 (3):973–997, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Michalek:2019:TVQ**

[MSV19] Mateusz Michałek, Tim Seynnaeve, and Frank Verstraete. A tensor version of the quantum Wielandt theorem. *SIAM Journal on Matrix Analysis and Applications*, 40(3):1125–1130, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Martinez:2003:NCI**

[MSZ03] Servet Martínez, Jaime San Martín, and Xiao-Dong Zhang. A new class of inverse $M$-matrices of tree-like type. *SIAM Journal on Matrix Analysis and Applications*, 24(4): 1136–1148, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39681`.

**McCourt:2015:SMM**

[MSZ15] Michael McCourt, Barry Smith, and Hong Zhang. Sparse matrix-matrix products executed through color-

ing. *SIAM Journal on Matrix Analysis and Applications*, 36 (1):90–109, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Massey:2020:MBR**

[MSZ20] Pedro G. Massey, Demetrio Stojanoff, and Sebastian Zarate. Majorization bounds for Ritz values of self-adjoint matrices. *SIAM Journal on Matrix Analysis and Applications*, 41(2): 554–572, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Massey:2021:AVR**

[MSZ21] Pedro Massey, Demetrio Stojanoff, and Sebastián Zárate. Absolute variation of Ritz values, principal angles, and spectral spread. *SIAM Journal on Matrix Analysis and Applications*, 42(4):1506–1527, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mitchell:1989:VKL**

[MT89] John E. Mitchell and Michael J. Todd. A variant of Karmarkar's linear programming algorithm for problems with some unrestricted variables. *SIAM Journal on Matrix Analysis and Applications*, 10(1): 30–38, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Miranda:2000:ASH**

[MT00] M. Miranda and P. Tilli. Asymptotic spectra of Hermitian block Toeplitz matrices and preconditioning results. *SIAM Journal on Matrix Analysis and Applications*, 21(3):867–881, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31303`.

**Mehrmann:2015:SAI**

[MT15] Volker Mehrmann and Do Duc Thuan. Stability analysis of implicit difference equations under restricted perturbations. *SIAM Journal on Matrix Analysis and Applications*, 36(1): 178–202, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mastronardi:2010:FAU**

[MTV10] Nicola Mastronardi, Eugene E. Tyrtyshnikov, and Paul Van Dooren. A fast algorithm for updating and downsizing the dominant kernel principal components. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2376–2399, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Markovsky:2013:SLR**

[MU13] Ivan Markovsky and Konstantin Usevich. Structured

low-rank approximation with missing data. *SIAM Journal on Matrix Analysis and Applications*, 34(2):814–830, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Murota:1991:SNF**

[Mur91] Kazuo Murota. On the Smith Normal Form of structured polynomial matrices. *SIAM Journal on Matrix Analysis and Applications*, 12(4):747–765, October 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Murota:1993:SNF**

[Mur93] Kazuo Murota. On the Smith Normal Form of structured polynomial matrices, II. *SIAM Journal on Matrix Analysis and Applications*, 14(4):1103–1111, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Murota:1998:DMP**

[Mur98] Kazuo Murota. On the degree of mixed polynomial matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(1):196–227, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31143`.

**Marr:1988:FDT**

[MV88] Robert B. Marr and George H. Vineyard. Five-diagonal Toeplitz determinants and their relation to Chebyshev polynomials. *SIAM Journal on Matrix Analysis and Applications*, 9(4):579–586, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mackens:1997:MES**

[MV97] Wolfgang Mackens and Heinrich Voss. The minimum eigenvalue of a symmetric positive-definite Toeplitz matrix and rational Hermitian interpolation. *SIAM Journal on Matrix Analysis and Applications*, 18(3):521–534, July 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28885`.

**Martin:2002:PTS**

[MV02] Carla D. Moravitz Martin and Charles F. Van Loan. Product triangular systems with shift. *SIAM Journal on Matrix Analysis and Applications*, 24(1):292–301, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39605`.

**Martin:2007:SKP**

[MV07a] Carla D. Moravitz Martin and Charles F. Van Loan. Shifted Kronecker product systems. *SIAM Journal on Matrix Analysis and Applications*, 29(1):

184–198, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Martin:2007:SRL**

[MV07b] Carla D. Moravitz Martin and Charles F. Van Loan. Solving real linear systems with the complex Schur decomposition. *SIAM Journal on Matrix Analysis and Applications*, 29 (1):177–183, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Martin:2008:JTM**

[MV08] Carla D. Moravitz Martin and Charles F. Van Loan. A Jacobi-type method for computing orthogonal tensor decompositions. *SIAM Journal on Matrix Analysis and Applications*, 30(3):1219–1232, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mastronardi:2013:AFS**

[MV13] Nicola Mastronardi and Paul Van Dooren. The antitriangular factorization of symmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 34(1):173–196, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mach:2014:DEA**

[MV14] Thomas Mach and Raf Vandebril. On deflations in extended $QR$ algorithms. *SIAM Journal on Matrix Analysis and Applications*, 35(2):559–579, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mastronardi:2017:CJS**

[MV17] Nicola Mastronardi and Paul Van Dooren. Computing the Jordan structure of an eigenvalue. *SIAM Journal on Matrix Analysis and Applications*, 38(3):949–966, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mastronardi:2018:SPS**

[MV18] Nicola Mastronardi and Paul Van Dooren. The $QR$ steps with perfect shifts. *SIAM Journal on Matrix Analysis and Applications*, 39(4):1591–1615, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mehrmann:2020:ORP**

[MV20] Volker Mehrmann and Paul M. Van Dooren. Optimal robustness of port-Hamiltonian systems. *SIAM Journal on Matrix Analysis and Applications*, 41(1):134–151, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mehrmann:2021:SBE**

[MV21] Volker Mehrmann and Paul Van Dooren. Structured backward errors for eigenvalues

of linear port-Hamiltonian descriptor systems. *SIAM Journal on Matrix Analysis and Applications*, 42(1):1–16, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mitchell:2023:RMP**

[MV23] Tim Mitchell and Paul Van Dooren. Root-max problems, hybrid expansion-contraction, and quadratically convergent optimization of passive systems. *SIAM Journal on Matrix Analysis and Applications*, 44(2):753–780, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1450367`.

**Markovsky:2005:BTH**

[MVP05] Ivan Markovsky, Sabine Van Huffel, and Rik Pintelon. Block-Toeplitz/Hankel structured total least squares. *SIAM Journal on Matrix Analysis and Applications*, 26(4):1083–1099, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43490`.

**Moonen:1992:SVD**

[MVV92] Marc Moonen, Paul Van Dooren, and Joos Vandewalle. A singular value decomposition updating algorithm for subspace tracking. *SIAM Journal on Matrix Analysis and Applications*, 13(4):1015–1038, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Moonen:1993:SAS**

[MVV93] Marc Moonen, Paul Van Dooren, and Joos Vandewalle. A systolic array for SVD updating. *SIAM Journal on Matrix Analysis and Applications*, 14(2):353–371, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**McLean:2001:SFS**

[MW01] J. W. McLean and H. J. Woerdeman. Spectral factorizations and sums of squares representations via semidefinite programming. *SIAM Journal on Matrix Analysis and Applications*, 23(3):646–655, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37117`.

**Meyer:2012:SDC**

[MW12] Carl D. Meyer and Charles D. Wessell. Stochastic data clustering. *SIAM Journal on Matrix Analysis and Applications*, 33(4):1214–1236, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mehrmann:1998:CPS**

[MX98] Volker Mehrmann and Hongguo Xu. Choosing poles so that the single-input pole placement problem is well conditioned. *SIAM Journal on Matrix Analysis and Applications*, 19(3):664–681, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30238`.

**Mehrmann:2009:ESR**

[MX09] Volker Mehrmann and Hongguo Xu. Explicit solutions for a Riccati equation from transport theory. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1339–1357, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mor-Yosef:2019:SPC**

[MYA19] Liron Mor-Yosef and Haim Avron. Sketching for principal component regression. *SIAM Journal on Matrix Analysis and Applications*, 40(2):454–485, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Mengi:2014:NOE**

[MYK14] Emre Mengi, E. Alper Yildirim, and Mustafa Kiliç. Numerical optimization of eigenvalues of Hermitian matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 35 (2):699–724, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Michiels:2019:CDL**

[MZ19] Wim Michiels and Bin Zhou. Computing delay Lyapunov matrices and $\mathcal{H}_\in$ norms for large-scale problems. *SIAM Journal on Matrix Analysis and Applications*, 40(3):845–869, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nabben:1999:DRI**

[Nab99] Reinhard Nabben. Decay rates of the inverse of nonsymmetric tridiagonal and band matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(3):820–837, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31725`.

**Nabben:2000:IUB**

[Nab00] Reinhard Nabben. Improved upper bounds for the real part of nonmaximal eigenvalues of nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 22(2):574–579, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36775`.

**Nabben:2001:GMT**

[Nab01] Reinhard Nabben. On Green's matrices of trees. *SIAM Journal on Matrix Analysis and Applications*, 22(4):1014–1026, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36573`.

**Naevdal:1993:CPG**

[Næv93] Geir Nævdal. On the completion of partially given triangular Toeplitz matrices to contractions. *SIAM Journal on Matrix Analysis and Applications*, 14(2):545–552, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Najman:1998:ABE**

[Naj98] Branko Najman. The asymptotic behavior of the eigenvalues of a singularly perturbed linear pencil. *SIAM Journal on Matrix Analysis and Applications*, 20(2):420–427, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29994`.

**Napov:2013:CAI**

[Nap13] Artem Napov. Conditioning analysis of incomplete Cholesky factorizations with orthogonal dropping. *SIAM Journal on Matrix Analysis and Applications*, 34(3):1148–1173, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nakatsukasa:2012:DAE**

[NAY12] Yuji Nakatsukasa, Kensuke Aishima, and Ichitaro Yamazaki. dqds with aggressive early deflation. *SIAM Journal on Matrix Analysis and Applications*, 33(1):22–51, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v33/i1/p22_s1`.

**Nazareth:1989:UTF**

[Naz89] J. L. Nazareth. Updating the triangular factorization of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 10(3):424–428, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nakatsukasa:2010:OHI**

[NBG10] Yuji Nakatsukasa, Zhaojun Bai, and François Gygi. Optimizing Halley's iteration for computing the matrix polar decomposition. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2700–2720, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ngo:2010:TRO**

[NBS10] T. T. Ngo, M. Bellalij, and Y. Saad. The trace ratio

optimization problem for dimensionality reduction. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2950–2971, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v31/i5/p2950_s1`.

**Neogy:2006:SPG**

[ND06] S. K. Neogy and A. K. Das. Some properties of generalized positive subdefinite matrices. *SIAM Journal on Matrix Analysis and Applications*, 27(4):988–995, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Necoara:2019:FRB**

[Nec19] Ion Necoara. Faster randomized block Kaczmarz algorithms. *SIAM Journal on Matrix Analysis and Applications*, 40(4):1425–1452, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Neumaier:2000:SAA**

[Neu00] Arnold Neumaier. On Shary's algebraic approach for linear interval equations. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1156–1162, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34747`.

**Nakatsukasa:2012:BSI**

[NH12] Yuji Nakatsukasa and Nicholas J. Higham. Backward stability of iterations for computing the polar decomposition. *SIAM Journal on Matrix Analysis and Applications*, 33(2):460–479, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nievergelt:2010:WLM**

[Nie10] Yves Nievergelt. Why Lagrange multipliers with extreme magnitudes give extrema of definite Hermitian forms on quadric surfaces. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1303–1328, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nie:2017:LRS**

[Nie17] Jiawang Nie. Low rank symmetric tensor approximations. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1517–1540, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nichols:2001:REA**

[NK01] N. K. Nichols and J. Kautsky. Robust eigenstructure assignment in quadratic matrix polynomials: Nonsingular case. *SIAM Journal on Matrix Analysis and Applications*, 23(1):77–102, 2001.

CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36286`.

**Neff:2014:LMP**

[NNF14] Patrizio Neff, Yuji Nakatsukasa, and Andreas Fischle. A logarithmic minimization property of the unitary polar factor in the spectral and Frobenius norms. *SIAM Journal on Matrix Analysis and Applications*, 35(3):1132–1154, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nagy:2004:KPA**

[NNP04] James G. Nagy, Michael K. Ng, and Lisa Perrone. Kronecker product approximations for image restoration with reflexive boundary conditions. *SIAM Journal on Matrix Analysis and Applications*, 25(3):829–841, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41958`.

**Noferini:2023:PTT**

[NNPQ23] Vanni Noferini, Lauri Nyman, Javier Pérez, and María C. Quintana. Perturbation theory of transfer function matrices. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1299–1320, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1509825`.

**Nakatsukasa:2017:VSL**

[NNT17] Yuji Nakatsukasa, Vanni Noferini, and Alex Townsend. Vector spaces of linearizations for matrix polynomials: a bivariate polynomial approach. *SIAM Journal on Matrix Analysis and Applications*, 38(1):1–29, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Noferini:2017:FFD**

[Nof17] Vanni Noferini. A formula for the Fréchet derivative of a generalized matrix function. *SIAM Journal on Matrix Analysis and Applications*, 38(2):434–457, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Notay:2003:CAI**

[Not03] Yvan Notay. Convergence analysis of inexact Rayleigh quotient iteration. *SIAM Journal on Matrix Analysis and Applications*, 24(3):627–644, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39959`.

**Notay:2005:JDF**

[Not05] Yvan Notay. Is Jacobi–Davidson faster than David-

son? *SIAM Journal on Matrix Analysis and Applications*, 26(2):522–543, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43094`.

**Notay:2006:ABA**

[Not06] Yvan Notay. Aggregation-based algebraic multilevel preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 27(4):998–1018, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Notay:2014:NAB**

[Not14] Yvan Notay. A new analysis of block preconditioners for saddle point problems. *SIAM Journal on Matrix Analysis and Applications*, 35(1):143–173, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Notay:2016:ATL**

[Not16] Yvan Notay. Algebraic two-level convergence theory for singular systems. *SIAM Journal on Matrix Analysis and Applications*, 37(4):1419–1439, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Notay:2019:CSI**

[Not19] Yvan Notay. Convergence of some iterative methods for symmetric saddle point linear systems. *SIAM Journal on Matrix Analysis and Applications*, 40(1):122–146, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Noutsos:1996:ORU**

[Nou96] Dimitrios Noutsos. An operator relation of the USSOR and the Jacobi iteration matrices of a $p$-cyclic matrix. *SIAM Journal on Matrix Analysis and Applications*, 17(3):515–529, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26768`.

**Novati:2011:URD**

[Nov11] Paolo Novati. Using the restricted-denominator rational Arnoldi method for exponential integrators. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1537–1558, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1537_s1`.

**Neymeyr:2011:CAG**

[NOZ11] Klaus Neymeyr, Evgueni Ovtchinnikov, and Ming Zhou. Convergence analysis of gradient iterations for the symmetric eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 32(2):

443–456, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p443_s1`.

**Ng:1996:SRS**

[NP96] Esmond G. Ng and Barry W. Peyton. Some results on structure prediction in sparse $QR$ factorization. *SIAM Journal on Matrix Analysis and Applications*, 17(2):443–459, April 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23097`.

**Ng:1999:ISS**

[NP99] Esmond G. Ng and Daniel J. Pierce. Introduction to the special section on sparse and structured matrices and their applications. *SIAM Journal on Matrix Analysis and Applications*, 20(4):887, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/97409`.

**Ng:2002:FIM**

[NP02] Michael K. Ng and Daniel Potts. Fast iterative methods for sinc systems. *SIAM Journal on Matrix Analysis and Applications*, 24(2):581–598, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36977`.

**Nesterov:2013:OSR**

[NP13] Y. Nesterov and V. Y. Protasov. Optimizing the spectral radius. *SIAM Journal on Matrix Analysis and Applications*, 34(3):999–1013, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Noferini:2016:FCF**

[NP16] Vanni Noferini and Javier Pérez. Fiedler-comrade and Fiedler–Chebyshev pencils. *SIAM Journal on Matrix Analysis and Applications*, 37(4):1600–1624, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nesterov:2020:CCS**

[NP20] Yu. Nesterov and V. Yu. Protasov. Computing closest stable nonnegative matrix. *SIAM Journal on Matrix Analysis and Applications*, 41(1):1–28, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nakatsukasa:2023:RLR**

[NP23] Yuji Nakatsukasa and Taejun Park. Randomized low-rank approximation for symmetric indefinite matrices. *SIAM Journal on Matrix Analysis and Applications*, 44 (3):1370–1392, ???? 2023. CODEN SJMAEL. ISSN

0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1538648`.

**Ni:2014:GME**

[NQB14] Guyan Ni, Liqun Qi, and Minru Bai. Geometric measure of entanglement and $U$-eigenvalues of tensors. *SIAM Journal on Matrix Analysis and Applications*, 35(1):73–87, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ng:2010:FLE**

[NQZ10] Michael Ng, Liqun Qi, and Guanglu Zhou. Finding the largest eigenvalue of a nonnegative tensor. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1090–1099, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ng:1999:PGO**

[NR99] Esmond G. Ng and Padma Raghavan. Performance of greedy ordering heuristics for sparse Cholesky factorization. *SIAM Journal on Matrix Analysis and Applications*, 20(4):902–914, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31931`.

**Nachtigal:1992:HFN**

[NRT92a] Noël M. Nachtigal, Satish C. Reddy, and Lloyd N. Trefethen. How fast are nonsymmetric matrix iterations? *SIAM Journal on Matrix Analysis and Applications*, 13(3):778–795, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Iterative methods in numerical linear algebra (Copper Mountain, CO, 1990).

**Nachtigal:1992:HGA**

[NRT92b] Noël M. Nachtigal, Lothar Reichel, and Lloyd N. Trefethen. A hybrid GMRES algorithm for nonsymmetric linear systems. *SIAM Journal on Matrix Analysis and Applications*, 13(3):796–825, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Iterative methods in numerical linear algebra (Copper Mountain, CO, 1990).

**Neumann:1994:ACB**

[NS94] Michael Neumann and Hans Schneider. Algorithms for computing bases for the Perron eigenspace with prescribed nonnegativity and combinational properties. *SIAM Journal on Matrix Analysis and Applications*, 15(2):578–591, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22827`.

**Nash:1996:PRM**

[NS96] Stephen G. Nash and Ariela Sofer. Preconditioning re-

duced matrices. *SIAM Journal on Matrix Analysis and Applications*, 17(1):47–68, January 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24537`.

**Nabben:2007:SIS**

[NS07] Reinhard Nabben and Daniel B. Szyld. Schwarz iterations for symmetric positive semidefinite problems. *SIAM Journal on Matrix Analysis and Applications*, 29(1):98–116, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nie:2009:MCP**

[NS09] Jiawang Nie and Bernd Sturmfels. Matrix cubes parameterized by eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 31(2):755–766, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nechepurenko:2011:LRA**

[NS11] Yuri M. Nechepurenko and Miloud Sadkane. A low-rank approximation for computing the matrix exponential norm. *SIAM Journal on Matrix Analysis and Applications*, 32(2):349–363, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p349_s1`.

**Neymeyr:2018:SSN**

[NS18] Klaus Neymeyr and Mathias Sawall. On the set of solutions of the nonnegative matrix factorization problem. *SIAM Journal on Matrix Analysis and Applications*, 39(2):1049–1069, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ngondiep:2010:SFA**

[NSCS10] Eric Ngondiep, Stefano Serra-Capizzano, and Debora Sesana. Spectral features and asymptotic properties for $g$-circulants and $g$-Toeplitz sequences. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1663–1687, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Noferini:2015:TRA**

[NST15] Vanni Noferini, Meisam Sharify, and Françoise Tisseur. Tropical roots as approximations to eigenvalues of matrix polynomials. *SIAM Journal on Matrix Analysis and Applications*, 36(1):138–157, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Noutsos:2008:RHN**

[NT08] Dimitrios Noutsos and Michael J. Tsatsomeros. Reachability and holdability of nonnegative states. *SIAM Journal on Matrix Analysis and Applications*,

30(2):700–712, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nakatsukasa:2018:RMP**

[NTTZ18] Yuji Nakatsukasa, Leo Taslaman, Françoise Tisseur, and Ion Zaballa. Reduction of matrix polynomials to simpler forms. *SIAM Journal on Matrix Analysis and Applications*, 39(1):148–177, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nabben:1994:LAP**

[NV94] Reinhard Nabben and Richard S. Varga. A linear algebra proof that the inverse of a strictly ultrametric matrix is a strictly diagonally dominant Stieltjes matrix. *SIAM Journal on Matrix Analysis and Applications*, 15(1):107–113, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22823`.

**Noutsos:2002:NBT**

[NV02] D. Noutsos and P. Vassalos. New band Toeplitz preconditioners for ill-conditioned symmetric positive definite Toeplitz systems. *SIAM Journal on Matrix Analysis and Applications*, 23(3):728–743, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37631`.

**Noferini:2023:RMP**

[NV23] Vanni Noferini and Paul Van Dooren. Revisiting the matrix polynomial greatest common divisor. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1164–1188, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1531993`.

**Naevdal:1998:CIN**

[NW98] Geir Nævdal and Hugo J. Woerdeman. Cone inclusion numbers. *SIAM Journal on Matrix Analysis and Applications*, 19(3):613–639, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29690`.

**Neubauer:2002:OSB**

[NW02] Michael G. Neubauer and William Watkins. E-optimal spring balance weighing designs for $n \equiv -1 \pmod 4$ objects. *SIAM Journal on Matrix Analysis and Applications*, 24(1):91–105, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39393`.

**Nie:2014:SRB**

[NW14] Jiawang Nie and Li Wang. Semidefinite relaxations for best rank-1 tensor approximations. *SIAM Journal on Matrix Analysis and Applications*, 35 (3):1155–1179, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nikishin:1995:VBC**

[NY95] A. A. Nikishin and A. Yu Yeremin. Variable block CG algorithms for solving large sparse symmetric positive definite linear systems on parallel computers, I: General iterative scheme. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1135–1153, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24767`.

**Nie:2019:HTD**

[NY19] Jiawang Nie and Ke Ye. Hankel tensor decompositions and ranks. *SIAM Journal on Matrix Analysis and Applications*, 40(2):486–516, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Nie:2020:HTD**

[NY20] Jiawang Nie and Zi Yang. Hermitian tensor decompositions. *SIAM Journal on Matrix Analysis and Applications*, 41(3): 1115–1144, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Neymeyr:2016:CAR**

[NZ16] Klaus Neymeyr and Ming Zhou. Convergence analysis of restarted Krylov subspace eigensolvers. *SIAM Journal on Matrix Analysis and Applications*, 37(3):955–975, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Olikier:2023:AFF**

[OA23] Guillaume Olikier and P.-A. Absil. An apocalypse-free first-order low-rank optimization algorithm with at most one rank reduction attempt per iteration. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1421–1435, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1518256`.

**OCinneide:2002:STM**

[O'C02] Colm O'Cinneide. On "sluggish transients" in Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 24(2):320–333, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35535`.

**Ogita:2010:AMF**

[Ogi10] Takeshi Ogita. Accurate matrix factorization: Inverse $LU$ and inverse $QR$ factorizations. *SIAM Journal on Matrix Analysis and Applications*, 31(5): 2477–2497, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**OLeary:1990:RRC**

[O'L90] Dianne P. O'Leary. Robust regression computation using iteratively reweighted least squares. *SIAM Journal on Matrix Analysis and Applications*, 11(3):466–480, July 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Sparse matrices (Gleneden Beach, OR, 1989). Cited in Åke Björck's bibliography on least squares, which is available by anonymous ftp from `math.liu.se` in `pub/references`.

**Otto:1999:ISH**

[OL99] Kurt Otto and Elisabeth Larsson. Iterative solution of the Helmholtz equation by a second-order method. *SIAM Journal on Matrix Analysis and Applications*, 21(1):209–229, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31658`.

**ONeil:2005:CPS**

[O'N05] Kevin A. O'Neil. Critical points of the singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 27(2):459–473, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/61171`.

**Odeh:1998:BDN**

[OOvdD98] O. H. Odeh, D. D. Olesky, and P. van den Driessche. Bruhat decomposition and numerical stability. *SIAM Journal on Matrix Analysis and Applications*, 19(1):89–98, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30331`.

**Oliveira:2005:SLC**

[OP05] Ricardo C. L. F. Oliveira and Pedro L. D. Peres. A simple and less conservative test for **D**-stability. *SIAM Journal on Matrix Analysis and Applications*, 26(2):415–425, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43384`.

**Olkin:1993:MST**

[OR93] I. Olkin and S. T. Rachev. Maximum submatrix traces for positive definite matrices.

*SIAM Journal on Matrix Analysis and Applications*, 14(2): 390–397, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Orsi:2006:NMS**

[Ors06] Robert Orsi. Numerical methods for solving inverse eigenvalue problems for nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 28(1):190–212, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**OSullivan:2009:SPI**

[OS09] Michael J. O'Sullivan and Michael A. Saunders. Stabilizing policy improvement for large-scale infinite-horizon dynamic programming. *SIAM Journal on Matrix Analysis and Applications*, 31(2):434–459, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Olshanskii:2010:ACP**

[OS10] M. A. Olshanskii and V. Simoncini. Acquired clustering properties and solution of certain saddle point systems. *SIAM Journal on Matrix Analysis and Applications*, 31(5): 2754–2768, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Oseledets:2010:AMU**

[Ose10] I. V. Oseledets. Approximation of $2^d \times 2^d$ matrices using tensor decomposition. *SIAM Journal on Matrix Analysis and Applications*, 31(4):2130–2145, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ottaviani:2014:ESS**

[OSS14] Giorgio Ottaviani, Pierre-Jean Spaenlehauer, and Bernd Sturmfels. Exact solutions in structured low-rank approximation. *SIAM Journal on Matrix Analysis and Applications*, 35(4):1521–1542, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Oseledets:2008:TDR**

[OST08] I. V. Oseledets, D. V. Savostianov, and E. E. Tyrtyshnikov. Tucker dimensionality reduction of three-dimensional arrays in linear time. *SIAM Journal on Matrix Analysis and Applications*, 30(3):939–956, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Oseledets:2009:FSO**

[OST09] I. V. Oseledets, D. V. Savostyanov, and E. E. Tyrtyshnikov. Fast simultaneous orthogonal reduction to triangular matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(2):316–330, ????

2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ostrouchov:2010:MCV**

[Ost10] George Ostrouchov. A matrix computation view of FastMap and RobustMap dimension reduction algorithms. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1351–1360, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Oarua:1999:MDC**

[OV99] Cristian Oarua and Andras Varga. Minimal degree coprime factorization of rational matrices. *SIAM Journal on Matrix Analysis and Applications*, 21(1):245–278, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33997`.

**Overton:1988:MME**

[Ove88] Michael L. Overton. On minimizing the maximum eigenvalue of a symmetric matrix. *SIAM Journal on Matrix Analysis and Applications*, 9(2):256–268, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). SIAM Conference on Linear Algebra in Signals, Systems, and Control (Boston, Mass., 1986).

**Overton:1988:MSR**

[OW88] Michael L. Overton and Robert S. Womersley. On minimizing the spectral radius of a nonsymmetric matrix function: optimality conditions and duality theory. *SIAM Journal on Matrix Analysis and Applications*, 9(4):473–498, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Overton:1992:SLE**

[OW92] Michael L. Overton and Robert S. Womersley. On the sum of the largest eigenvalues of a symmetric matrix. *SIAM Journal on Matrix Analysis and Applications*, 13(1):41–45, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Overton:1995:SDO**

[OW95] Michael L. Overton and Robert S. Womersley. Second derivatives for optimizing eigenvalues of symmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 16(3):697–718, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24598`.

**OLeary:1996:BGA**

[OW96] Dianne P. O'Leary and Yuan-Jye Jason Wu. A block-GTH

algorithm for finding the stationary vector of a Markov chain. *SIAM Journal on Matrix Analysis and Applications*, 17(3):470–488, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26253`.

**Oksa:2019:AQC**

[OYBV19] Gabriel Oksa, Yusaku Yamamoto, Martin Becka, and Marián Vajtersic. Asymptotic quadratic convergence of the two-sided serial and parallel block-Jacobi SVD algorithm. *SIAM Journal on Matrix Analysis and Applications*, 40(2): 639–671, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Oksa:2022:CST**

[OYV22] Gabriel Oksa, Yusaku Yamamoto, and Marián Vajtersic. Convergence to singular triplets in the two-sided block-Jacobi SVD algorithm with dynamic ordering. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1238–1262, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1411895`.

**Ozguler:1991:EPI**

[Özg91] A. Bülent Özgüler. The equation $AXB + CYD = E$ over a principal ideal domain. *SIAM Journal on Matrix Analysis and Applications*, 12(3): 581–591, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Paton:2017:CAM**

[PAH17] Martin Paton, Kerem Akartunali, and Desmond J. Higham. Centrality analysis for modified lattices. *SIAM Journal on Matrix Analysis and Applications*, 38(3):1055–1073, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Paige:2009:UFU**

[Pai09] Christopher C. Paige. A useful form of unitary matrix obtained from any sequence of unit 2-norm $n$-vectors. *SIAM Journal on Matrix Analysis and Applications*, 31(2):565–583, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Paige:2010:ASR**

[Pai10] Christopher C. Paige. An augmented stability result for the Lanczos Hermitian matrix tridiagonalization process. *SIAM Journal on Matrix Analysis and Applications*, 31(5): 2347–2359, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Paige:2019:ALP**

[Pai19] Christopher C. Paige. Accuracy of the Lanczos process for the eigenproblem and solution of equations. *SIAM Journal on Matrix Analysis and Applications*, 40(4):1371–1398, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Palfia:2011:MET**

[Pál11] Miklós Pálfia. A multivariable extension of two-variable matrix means. *SIAM Journal on Matrix Analysis and Applications*, 32(2): 385–393, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p385_s1`.

**Pang:1991:IDA**

[Pan91] Jong-Shi Pang. Iterative descent algorithms for a row sufficient linear complementarity problem. *SIAM Journal on Matrix Analysis and Applications*, 12(4):611–624, October 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pan:1993:DDR**

[Pan93] Victor Pan. Decreasing the displacement rank of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 14(1): 118–121, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pan:2016:HBV**

[Pan16] Victor Y. Pan. How bad are Vandermonde matrices? *SIAM Journal on Matrix Analysis and Applications*, 37(2): 676–694, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Padiy:2000:GAM**

[PAP00] Alexander Padiy, Owe Axelsson, and Ben Polman. Generalized augmented matrix preconditioning approach and its application to iterative solution of ill-conditioned algebraic systems. *SIAM Journal on Matrix Analysis and Applications*, 22(3):793–818, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35675`.

**Parlett:1992:RTF**

[Par92] Beresford N. Parlett. Reduction to tridiagonal form and minimal realizations. *SIAM Journal on Matrix Analysis and Applications*, 13(2):567–593, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Park:1994:EDA**

[Par94] Haesun Park. ESPRIT direction-of-arrival estimation

in the presence of spatially correlated noise. *SIAM Journal on Matrix Analysis and Applications*, 15(1):185–193, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/19550`.

**Park:1999:RAE**

[Par99] Hyungju Park. A realization algorithm for $SL_2(R[x_1, \ldots, x_m])$ over the Euclidean domain. *SIAM Journal on Matrix Analysis and Applications*, 21(1): 178–184, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33109`.

**Parlett:2005:BMD**

[Par05] Beresford N. Parlett. A bidiagonal matrix determines its hyperbolic SVD to varied relative accuracy. *SIAM Journal on Matrix Analysis and Applications*, 26(4):1022–1057, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42498`.

**Pati:2000:MPI**

[Pat00] S. Pati. Moore–Penrose inverse of matrices on idempotent semirings. *SIAM Journal on Matrix Analysis and Applications*, 22(2):617–626, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35551`.

**Patel:2016:HTM**

[PCB16] Rushabh Patel, Andrea Carron, and Francesco Bullo. The hitting time of multiple random walks. *SIAM Journal on Matrix Analysis and Applications*, 37(3):933–954, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Persson:2022:IVH**

[PCK22] David Persson, Alice Cortinovis, and Daniel Kressner. Improved variants of the Hutch++ algorithm for trace estimation. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1162–1185, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1447623`.

**Parlett:2016:IEP**

[PDF16] Beresford Parlett, Froilán M. Dopico, and Carla Ferreira. The inverse eigenvector problem for real tridiagonal matrices. *SIAM Journal on Matrix Analysis and Applications*, 37 (2):577–597, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Park:1995:DRR**

[PE95] Haesun Park and Lars Eldén. Downdating the rank-revealing URV decomposition. *SIAM Journal on Matrix Analysis and Applications*, 16(1):138–155, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24191`.

**Pearson:1988:BSA**

[Pea88] Ronald K. Pearson. Block-sequential algorithms for set-theoretic estimation. *SIAM Journal on Matrix Analysis and Applications*, 9(4):513–527, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pena:1995:MSC**

[Peñ95] J. M. Peña. Matrices with sign consistency of a given order. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1100–1106, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26443`.

**Pena:1998:RBG**

[Peñ98] J. M. Peña. On the relationship between graphs and totally positive matrices. *SIAM Journal on Matrix Analysis and Applications*, 19(2):369–377, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30396`.

**Pena:2001:CMA**

[Peñ01] J. M. Peña. A class of $P$-matrices with applications to the localization of the eigenvalues of a real matrix. *SIAM Journal on Matrix Analysis and Applications*, 22(4):1027–1037, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pena:2005:EII**

[Peñ05] J. M. Peña. Exclusion and inclusion intervals for the real eigenvalues of positive matrices. *SIAM Journal on Matrix Analysis and Applications*, 26(4):908–917, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/61074`.

**Perline:1988:SDP**

[Per88] Ron Perline. Self-dual polynomials, Hermite matrices, and Heisenberg functionals. *SIAM Journal on Matrix Analysis and Applications*, 9(3):373–377, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Perline:1991:TMC**

[Per91] Ronald Perline. Toeplitz matrices and commuting tridiagonal matrices. *SIAM Journal*

*on Matrix Analysis and Applications*, 12(2):321–326, April 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pestana:2014:EEB**

[Pes14] Jennifer Pestana. On the eigenvalues and eigenvectors of block triangular preconditioned block matrices. *SIAM Journal on Matrix Analysis and Applications*, 35(2):517–525, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pestana:2019:PST**

[Pes19] J. Pestana. Preconditioners for symmetrized Toeplitz and multilevel Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 40(3): 870–887, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Petkov:2021:CPA**

[Pet21] Petko H. Petkov. Componentwise perturbation analysis of the Schur decomposition of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 42(1):108–133, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Peyton:2001:MOR**

[Pey01] Barry W. Peyton. Minimal orderings revisited. *SIAM Journal on Matrix Analysis and Applications*, 23(1):271–294, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36443`.

**Pichon:2017:RSB**

[PFRR17] Gregoire Pichon, Mathieu Faverge, Pierre Ramet, and Jean Roman. Reordering strategy for blocking optimization in sparse linear solvers. *SIAM Journal on Matrix Analysis and Applications*, 38(1):226–248, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pintelon:1998:ADA**

[PGVR98] Rik Pintelon, Patrick Guillaume, Gerd Vandersteen, and Yves Rolain. Analyses, development, and applications of TLS algorithms in frequency domain system identification. *SIAM Journal on Matrix Analysis and Applications*, 19(4):983–1004, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30907`.

**Pham:2001:JAD**

[Pha01] Dinh Tuan Pham. Joint approximate diagonalization of positive definite Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 22(4):1136–1152, ???? 2001. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic).

**PillersDobler:1994:MAF**

[Pil94] Carolyn Pillers Dobler. A matrix approach to finding a set of generators and finding the polar (dual) of a class of polyhedral cones. *SIAM Journal on Matrix Analysis and Applications*, 15(3):796–803, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/19969`.

**Pinar:2019:NSC**

[Pin19] Mustafa Ç Pinar. Necessary and sufficient conditions for noiseless sparse recovery via convex quadratic splines. *SIAM Journal on Matrix Analysis and Applications*, 40(1): 194–209, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Protasov:2010:JSC**

[PJB10] Vladimir Y. Protasov, Raphaël M. Jungers, and Vincent D. Blondel. Joint spectral characteristics of matrices: a conic programming approach. *SIAM Journal on Matrix Analysis and Applications*, 31(4):2146–2162, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Patel:2021:IRI**

[PJM21] Vivak Patel, Mohammad Jahangoshahi, and Daniel A. Maldonado. An implicit representation and iterative solution of randomly sketched linear systems. *SIAM Journal on Matrix Analysis and Applications*, 42(2):800–831, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Patel:2023:RBA**

[PJM23] Vivak Patel, Mohammad Jahangoshahi, and D. Adrian Maldonado. Randomized block adaptive linear system solvers. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1349–1369, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1488715`.

**Pal:1993:FTF**

[PK93] Debajyoti Pal and Thomas Kailath. Fast triangular factorization and inversion of Hermitian, Toeplitz, and related matrices with arbitrary rank profile. *SIAM Journal on Matrix Analysis and Applications*, 14 (4):1016–1042, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pal:1994:FTF**

[PK94] Debajyoti Pal and Thomas Kailath. Fast triangular factor-

ization and inversion of Hankel and related matrices with arbitrary rank profile. *SIAM Journal on Matrix Analysis and Applications*, 15(2):451–478, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/17264`.

**Persson:2023:RLR**

[PK23] David Persson and Daniel Kressner. Randomized low-rank approximation of monotone matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 44 (2):894–918, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1523923`.

**Parlett:1993:FIT**

[PL93] Beresford N. Parlett and Jian Le. Forward instability of tridiagonal $QR$. *SIAM Journal on Matrix Analysis and Applications*, 14(1):279–316, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pierce:1997:SMR**

[PL97] Daniel J. Pierce and John G. Lewis. Sparse multifrontal rank revealing $QR$ factorization. *SIAM Journal on Matrix Analysis and Applications*, 18(1):159–180, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24435`.

**Protasov:2014:ROC**

[PL14] Vladimir Yu. Protasov and Dmitrii O. Logofet. Rank-one corrections of nonnegative matrices, with an application to matrix population models. *SIAM Journal on Matrix Analysis and Applications*, 35(2): 749–764, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Perera:2018:LCS**

[PL18] Sirani M. Perera and Jianhua Liu. Lowest complexity self-recursive radix-2 DCT II/III algorithms. *SIAM Journal on Matrix Analysis and Applications*, 39(2):664–682, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Plestenjak:2000:CMR**

[Ple00] Bor Plestenjak. A continuation method for a right definite two-parameter eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1163–1184, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34619`.

**Plestenjak:2006:NMT**

[Ple06] Bor Plestenjak. Numerical methods for the tridiagonal hyperbolic quadratic eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 28(4):1157–1172, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Patel:1994:CSI**

[PLM94] R. V. Patel, Z. Lin, and P. Misra. Computation of stable invariant subspaces of Hamiltonian matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(1):284–298, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/17135`.

**Pelaez:2006:AFE**

[PM06] María José Peláez and Julio Moro. Accurate factorization and eigenvalue algorithms for symmetric DSTU and TSC matrices. *SIAM Journal on Matrix Analysis and Applications*, 28(4):1173–1198, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Peca-Medlin:2023:GFR**

[PMT23] John Peca-Medlin and Thomas Trogdon. Growth factors of random butterfly matrices and the stability of avoiding pivoting. *SIAM Journal on Matrix Analysis and Applications*, 44(3):945–970, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M148762X`.

**Pan:2018:ONM**

[PN18] Junjun Pan and Michael K. Ng. Orthogonal nonnegative matrix factorization by sparsity and nuclear norm optimization. *SIAM Journal on Matrix Analysis and Applications*, 39(2):856–875, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pan:2023:CNM**

[PN23] Junjun Pan and Michael K. Ng. Coseparable nonnegative matrix factorization. *SIAM Journal on Matrix Analysis and Applications*, 44 (3):1393–1420, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1510509`.

**Pruessner:2003:BDU**

[PO03] Armin Pruessner and Dianne P. O'Leary. Blind deconvolution using a regularized structured total least norm algorithm. *SIAM Journal on Matrix Analysis and Applications*, 24(4):1018–1037, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-

7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39544`.

**Popova:2012:EDA**

[Pop12] Evgenija D. Popova. Explicit description of $AE$ solution sets for parametric linear systems. *SIAM Journal on Matrix Analysis and Applications*, 33(4): 1172–1189, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Popova:2015:SPI**

[Pop15] Evgenija D. Popova. Solvability of parametric interval linear systems of equations and inequalities. *SIAM Journal on Matrix Analysis and Applications*, 36(2):615–633, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Powers:1988:EDR**

[Pow88] David L. Powers. Eigenvectors of distance-regular graphs. *SIAM Journal on Matrix Analysis and Applications*, 9(3): 399–407, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pierce:1992:FAC**

[PP92] Daniel J. Pierce and Robert J. Plemmons. Fast adaptive condition estimation. *SIAM Journal on Matrix Analysis and Applications*, 13(1):274–291, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Park:2005:NDA**

[PP05a] Cheong Hee Park and Haesun Park. Nonlinear discriminant analysis using kernel functions and the generalized singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 27(1):87–102, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/44233`.

**Park:2005:RBL**

[PP05b] Cheong Hee Park and Haesun Park. A relationship between linear discriminant analysis and the generalized minimum squared error solution. *SIAM Journal on Matrix Analysis and Applications*, 27(2):474–492, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/60759`.

**Paige:2011:HMP**

[PP11] Christopher C. Paige and Ivo Panayotov. Hessenberg matrix properties and Ritz vectors in the finite-precision Lanczos tridiagonalization process. *SIAM Journal on Matrix Analysis and Applications*, 32(4): 1079–1094, ???? 2011. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1079_s1`.

**Pougkakiotis:2020:FSM**

[PPLG20] Spyridon Pougkakiotis, John W. Pearson, Santolo Leveque, and Jacek Gondzio. Fast solution methods for convex quadratic optimization of fractional differential equations. *SIAM Journal on Matrix Analysis and Applications*, 41(3):1443–1476, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pierce:1988:LPC**

[PR88] Stephen Pierce and Leiba Rodman. Linear preservers of the class of Hermitian matrices with balanced inertia. *SIAM Journal on Matrix Analysis and Applications*, 9(4):461–472, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pierce:1991:SCN**

[PR91] Stephen Pierce and Leiba Rodman. On simultaneous congruence and norms of Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 12(1):70–83, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Petersen:2001:MSS**

[PR01] M. A. Petersen and A. C. M. Ran. Minimal square spectral factors via triples. *SIAM Journal on Matrix Analysis and Applications*, 22(4):1222–1244, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Poloni:2012:DAL**

[PR12] Federico Poloni and Timo Reis. A deflation approach for large-scale Lur'e equations. *SIAM Journal on Matrix Analysis and Applications*, 33(4):1339–1368, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pestana:2016:NSP**

[PR16] Jennifer Pestana and Tyrone Rees. Null-space preconditioners for saddle point systems. *SIAM Journal on Matrix Analysis and Applications*, 37(3):1103–1128, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Protasov:2013:CPS**

[Pro13] V. Yu. Protasov. Classification of $k$-primitive sets of matrices. *SIAM Journal on Matrix Analysis and Applications*, 34(3):1174–1188, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Paige:2006:MGS**

[PRS06] Christopher C. Paige, Miroslav Rozložník, and Zdenvek Strakos. Modified Gram–Schmidt (MGS), least squares, and backward stability of MGS-GMRES. *SIAM Journal on Matrix Analysis and Applications*, 28(1): 264–284, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pan:1988:SBP**

[PS88] C. T. Pan and Kermit Sigmon. A sharp bound for products of hyperbolic plane rotations. *SIAM Journal on Matrix Analysis and Applications*, 9(4):587–593, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pan:1994:BIP**

[PS94] C.-T. Pan and Kermit Sigmon. A bottom-up inductive proof of the singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 15(1):59–61, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22990`.

**Powell:2004:OPR**

[PS04] Catherine Elizabeth Powell and David Silvester. Optimal preconditioning for Raviart–Thomas mixed formulation of second-order elliptic problems. *SIAM Journal on Matrix Analysis and Applications*, 25(3):718–738, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40442`.

**Paige:2005:CPL**

[PS05] Christopher C. Paige and Zdenek Strakos. Core problems in linear algebraic systems. *SIAM Journal on Matrix Analysis and Applications*, 27(3):861–875, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Popolizio:2008:ATA**

[PS08] M. Popolizio and V. Simoncini. Acceleration techniques for approximating the matrix exponential operator. *SIAM Journal on Matrix Analysis and Applications*, 30(2):657–683, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Prajapati:2022:ESD**

[PS22] Anshul Prajapati and Punit Sharma. Estimation of structured distances to singularity for matrix pencils with symmetry structures: a linear Algebra–Based approach. *SIAM Journal on Matrix Analysis and Applications*, 43 (2):740–763, ???? 2022. CODEN SJMAEL. ISSN

0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1423269`.

**Pothen:1990:PSM**

[PSL90] Alex Pothen, Horst D. Simon, and Kang-Pu Liou. Partitioning sparse matrices with eigenvectors of graphs. *SIAM Journal on Matrix Analysis and Applications*, 11(3):430–452, July 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Sparse matrices (Gleneden Beach, OR, 1989).

**Pfeffer:2019:LPS**

[PSS19] Max Pfeffer, Anna Seigal, and Bernd Sturmfels. Learning paths from signature tensors. *SIAM Journal on Matrix Analysis and Applications*, 40(2):394–416, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pearson:2012:RRP**

[PSW12] John W. Pearson, Martin Stoll, and Andrew J. Wathen. Regularization-robust preconditioners for time-dependent PDE-constrained optimization problems. *SIAM Journal on Matrix Analysis and Applications*, 33(4):1126–1152, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Poon:2022:FSM**

[PSW22] Edward Poon, Ilya M. Spitkovsky, and Hugo J. Woerdeman. Factorization of singular matrix polynomials and matrices with circular higher rank numerical ranges. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1423–1439, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1475934`.

**Petz:2005:MPN**

[PT05] Dénes Petz and Róbert Temesi. Means of positive numbers and matrices. *SIAM Journal on Matrix Analysis and Applications*, 27(3):712–720, July 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/62190`.

**Pozza:2018:SNI**

[PT18] Stefano Pozza and Francesco Tudisco. On the stability of network indices defined by means of matrix functions. *SIAM Journal on Matrix Analysis and Applications*, 39(4):1521–1546, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Phan:2013:LCD**

[PTC13] Anh-Huy Phan, Petr Tichavský, and Andrzej Cichocki. Low

complexity damped Gauss–Newton algorithms for CANDECOMP/PARAFAC. *SIAM Journal on Matrix Analysis and Applications*, 34(1):126–147, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Powell:2010:PSG**

[PU10] Catherine E. Powell and Elisabeth Ullmann. Preconditioning stochastic Galerkin saddle point systems. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2813–2840, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See erratum [PU14].

**Powell:2014:EPS**

[PU14] Catherine E. Powell and Elisabeth Ullmann. Erratum: Preconditioning Stochastic Galerkin Saddle Point Systems. *SIAM Journal on Matrix Analysis and Applications*, 35 (1):314–315, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See [PU10].

**Pultarova:2013:FAA**

[Pul13] I. Pultarová. Fourier analysis of the aggregation based algebraic multigrid for stochastic matrices. *SIAM Journal on Matrix Analysis and Applications*, 34(4):1596–1610, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Parlett:2009:SGM**

[PV09] Beresford N. Parlett and Christof Vömel. The spectrum of a glued matrix. *SIAM Journal on Matrix Analysis and Applications*, 31(1):114–132, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ponce:2017:SGL**

[PV17] Colin Ponce and Panayot S. Vassilevski. Solving graph Laplacian systems through recursive partitioning and two-grid preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 38(2):621–648, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Plemmons:1990:SMC**

[PW90] R. J. Plemmons and R. E. White. Substructuring methods for computing the nullspace of equilibrium matrices. *SIAM Journal on Matrix Analysis and Applications*, 11(1):1–22, January 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pan:2003:IDO**

[PW03] Victor Y. Pan and Xinmao Wang. Inversion of displacement operators. *SIAM Journal on Matrix Analysis and Applications*, 24(3):660–677, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/38627.

**Paige:2014:PUM**

[PW14a] Christopher C. Paige and Wolfgang Wülling. Properties of a unitary matrix obtained from a sequence of normalized vectors. *SIAM Journal on Matrix Analysis and Applications*, 35(2):526–545, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pestana:2014:AFS**

[PW14b] J. Pestana and A. J. Wathen. The antitriangular factorization of saddle point matrices. *SIAM Journal on Matrix Analysis and Applications*, 35(2):339–353, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pestana:2015:PMM**

[PW15] J. Pestana and A. J. Wathen. A preconditioned MINRES method for nonsymmetric Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 36(1):273–288, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Pardalos:1993:SML**

[PYHK93] Panos M. Pardalos, Yinyu Ye, Chi-Geun Han, and John A. Kaliski. Solution of $P_0$-matrix linear complementarity problems using a potential reduction algorithm. *SIAM Journal on Matrix Analysis and Applications*, 14(4):1048–1060, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Qian:2013:CDR**

[QACT13] Jiang Qian, Alan L. Andrew, Delin Chu, and Roger C. E. Tan. Computing derivatives of repeated eigenvalues and corresponding eigenvectors of quadratic eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 34(3):1089–1111, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Qi:2021:TDT**

[QCBZ21] Liqun Qi, Yannan Chen, Mayank Bakshi, and Xinzhen Zhang. Triple decomposition and tensor recovery of third order tensors. *SIAM Journal on Matrix Analysis and Applications*, 42(1):299–329, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Qian:2017:EEU**

[QCCT17] Jiang Qian, Yunfeng Cai, Delin Chu, and Roger C. E. Tan. Eigenvalue embedding of undamped vibroacoustic systems with no-spillover. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1190–1209, ???? 2017. CODEN SJMAEL.

ISSN 0895-4798 (print), 1095-7162 (electronic).

**Qi:2016:SGN**

[QCL16] Yang Qi, Pierre Comon, and Lek-Heng Lim. Semialgebraic geometry of nonnegative tensor rank. *SIAM Journal on Matrix Analysis and Applications*, 37 (4):1556–1580, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Qian:2015:ASE**

[QCT15] Jiang Qian, Delin Chu, and Roger C. E. Tan. Analyticity of semisimple eigenvalues and corresponding eigenvectors of matrix-valued functions. *SIAM Journal on Matrix Analysis and Applications*, 36 (4):1542–1566, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Qian:2016:SAA**

[QCT16] Jiang Qian, Delin Chu, and Roger C. E. Tan. A systematic analysis on analyticity of semisimple eigenvalues of matrix-valued functions. *SIAM Journal on Matrix Analysis and Applications*, 37(4):1581–1599, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Qi:2011:BRO**

[Qi11] Liqun Qi. The best rank-one approximation ratio of a tensor space. *SIAM Journal on Matrix Analysis and Applications*, 32(2):430–442, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p430_s1`.

**Qi:2013:SNM**

[Qi13] Hou-Duo Qi. A semismooth Newton method for the nearest Euclidean distance matrix problem. *SIAM Journal on Matrix Analysis and Applications*, 34(1):67–93, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Qiao:1988:RLS**

[Qia88] San Zheng Qiao. Recursive least squares algorithm for linear prediction problems. *SIAM Journal on Matrix Analysis and Applications*, 9(3): 323–328, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Qi:1999:SNM**

[QL99] Hou-Duo Qi and Li-Zhi Liao. A smoothing Newton method for extended vertical linear complementarity problems. *SIAM Journal on Matrix Analysis and Applications*, 21(1):45–66, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32983`.

**Qi:2006:QCN**

[QS06] Houduo Qi and Defeng Sun. A quadratically convergent Newton method for computing the nearest correlation matrix. *SIAM Journal on Matrix Analysis and Applications*, 28(2): 360–385, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Qi:2014:NTF**

[QXX14] Liqun Qi, Changqing Xu, and Yi Xu. Nonnegative tensor factorization, completely positive tensors, and a hierarchical elimination algorithm. *SIAM Journal on Matrix Analysis and Applications*, 35(4): 1227–1241, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Qi:2004:SSF**

[QY04] Houduo Qi and Xiaoqi Yang. Semismoothness of spectral functions. *SIAM Journal on Matrix Analysis and Applications*, 25(3):766–783, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41792`.

**Qiu:2005:UIM**

[QZL05] Li Qiu, Yanxia Zhang, and Chi-Kwong Li. Unitarily invariant metrics on the Grassmann space. *SIAM Journal on Matrix Analysis and Applications*, 27(2):507–531, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/60760`.

**Ralha:2009:PSM**

[Ral09] Rui Ralha. Perturbation splitting for more accurate eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 31(1):75–91, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ralha:2011:RES**

[Ral11] Rui Ralha. Reliable eigenvalues of symmetric tridiagonals. *SIAM Journal on Matrix Analysis and Applications*, 32(4): 1524–1536, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1524_s1`.

**Ransford:2007:PPG**

[Ran07] Thomas Ransford. On pseudospectra and power growth. *SIAM Journal on Matrix Analysis and Applications*, 29(3): 699–711, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rauhala:2002:AAEa**

[Rau02a] Urho A. Rauhala. Array algebra expansion of matrix and tensor calculus: Part 1. *SIAM*

*Journal on Matrix Analysis and Applications*, 24(2):490–508, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40683`.

**Rauhala:2002:AAEb**

[Rau02b] Urho A. Rauhala. Array algebra expansion of matrix and tensor calculus: Part 2. *SIAM Journal on Matrix Analysis and Applications*, 24(2):509–528, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40684`.

**Ram:1990:EEB**

[RBB90] Yitsak M. Ram, Joab J. Blech, and Simon G. Braun. Eigenproblem error bounds with application to symmetric dynamic system modification. *SIAM Journal on Matrix Analysis and Applications*, 11(4):553–564, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rajih:2008:ELS**

[RCH08] Myriam Rajih, Pierre Comon, and Richard A. Harshman. Enhanced line search: a novel method to accelerate PARAFAC. *SIAM Journal on Matrix Analysis and Applications*, 30(3):1128–1147, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Regalia:1995:DSC**

[RD95] Phillip A. Regalia and François Desbouvries. Displacement structures of covariance matrices, lossless systems, and numerical algorithm design. *SIAM Journal on Matrix Analysis and Applications*, 16(2):536–564, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23880`.

**Richter:1993:ECS**

[RDC93] Stephen Richter, Larry D. Davis, and Emmanuel G. Collins. Efficient computation of the solutions to modified Lyapunov equations. *SIAM Journal on Matrix Analysis and Applications*, 14(2):420–431, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rothberg:1998:NSS**

[RE98] Edward Rothberg and Stanley C. Eisenstat. Node selection strategies for bottom-up sparse matrix ordering. *SIAM Journal on Matrix Analysis and Applications*, 19(3):682–695, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30269`.

**Reddy:2013:FPD**

[RE13] Puduru Viswanadha Reddy and Jacob Christiaan Engwerda. Feedback properties of descriptor systems using matrix projectors and applications to descriptor differential games. *SIAM Journal on Matrix Analysis and Applications*, 34(2):686–708, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Reichel:1991:FDV**

[Rei91] Lothar Reichel. Fast $QR$ decomposition of Vandermonde-like matrices and polynomial least squares approximation. *SIAM Journal on Matrix Analysis and Applications*, 12(3): 552–564, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Reusken:2002:ADL**

[Reu02] Arnold Reusken. Approximation of the determinant of large sparse symmetric positive definite matrices. *SIAM Journal on Matrix Analysis and Applications*, 23(3):799–818, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36869`.

**Fang:2006:SFS**

[rFO06] Haw ren Fang and Dianne P. O'Leary. Stable factorizations of symmetric tridiagonal and triadic matrices. *SIAM Journal on Matrix Analysis and Applications*, 28(2):576–595, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Renaut:2005:EAS**

[RG05] Rosemary A. Renaut and Hongbin Guo. Efficient algorithms for solution of regularized total least squares. *SIAM Journal on Matrix Analysis and Applications*, 26(2):457–476, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41988`.

**Rezghi:2014:BKP**

[RHE14] Mansoor Rezghi, S. Mohammad Hosseini, and Lars Eldén. Best Kronecker product approximation of the blurring operator in three dimensional image restoration problems. *SIAM Journal on Matrix Analysis and Applications*, 35(3): 1086–1104, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rehman:2011:CCP**

[RI11] Rizwana Rehman and Ilse C. F. Ipsen. Computing characteristic polynomials from eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 32(1):90–114, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (elec-

tronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p90_s1`.

**Riedel:1992:SMW**

[Rie92] Kurt S. Riedel. A Sherman–Morrison–Woodbury identity for rank augmenting matrices with application to centering. *SIAM Journal on Matrix Analysis and Applications*, 13 (2):659–662, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rump:2014:IBE**

[RJ14] Siegfried M. Rump and Claude-Pierre Jeannerod. Improved backward error bounds for *LU* and Cholesky factorizations. *SIAM Journal on Matrix Analysis and Applications*, 35(2): 684–698, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ringh:2021:NTP**

[RJ21] Emil Ringh and Elias Jarlebring. Nonlinearizing two-parameter eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 42 (2):775–799, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rohn:1995:CEC**

[RK95] Jiří Rohn and Vladik Kreinovich. Computing exact componentwise bounds on solutions of linear systems with interval data is NP-Hard. *SIAM Journal on Matrix Analysis and Applications*, 16(2):415–420, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25119`.

**Ramos:2020:PDM**

[RKN20] Luis García Ramos, René Kehl, and Reinhard Nabben. Projections, deflation, and multigrid for nonsymmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 41(1):83–105, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ramos:2018:SDM**

[RN18] Luis García Ramos and Reinhard Nabben. On the spectrum of deflated matrices with applications to the deflated shifted Laplace preconditioner for the Helmholtz equation. *SIAM Journal on Matrix Analysis and Applications*, 39(1): 262–286, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Robeva:2016:ODS**

[Rob16] Elina Robeva. Orthogonal decomposition of symmetric tensors. *SIAM Journal on Matrix Analysis and Applications*, 37 (1):86–102, ???? 2016. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic).

**Rodman:2005:ISS**

[Rod05] Leiba Rodman. Invariant subspaces of skew-adjoint matrices in skew-symmetric inner products. *SIAM Journal on Matrix Analysis and Applications*, 26(4):901–907, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43921`.

**Rodriguez:2006:FST**

[Rod06] G. Rodriguez. Fast solution of Toeplitz- and Cauchy-like least-squares problems. *SIAM Journal on Matrix Analysis and Applications*, 28(3):724–748, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rozloznik:2015:CLF**

[RODS15] M. Rozložník, F. Okulicka-Dłuzewska, and A. Smoktunowicz. Cholesky-like factorization of symmetric indefinite matrices and orthogonalization with respect to bilinear forms. *SIAM Journal on Matrix Analysis and Applications*, 36(2):727–751, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rogozhin:2005:SVB**

[Rog05] A. Rogozhin. The singular value behavior of the finite sections of block Toeplitz operators. *SIAM Journal on Matrix Analysis and Applications*, 27(1):273–293, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/44197`.

**Rohn:1993:IMS**

[Roh93] Jiří Rohn. Interval matrices: Singularity and real eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 14 (1):82–91, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rohn:1994:PDS**

[Roh94] Jiří Rohn. Positive definiteness and stability of interval matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(1):175–184, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/21921`.

**Rohn:2003:SSL**

[Roh03] Jiri Rohn. Solvability of systems of linear interval equations. *SIAM Journal on Matrix Analysis and Applications*, 25(1):237–245, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39895`.

**Russo:2010:PHS**

[RP10] Alessandro Russo and Cristina Tablino Possio. Preconditioned Hermitian and skew-Hermitian splitting method for finite element approximations of convection-diffusion equations. *SIAM Journal on Matrix Analysis and Applications*, 31(3):997–1018, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rosen:1996:TLN**

[RPG96] J. Ben Rosen, Haesun Park, and John Glick. Total least norm formulation and solution for structured problems. *SIAM Journal on Matrix Analysis and Applications*, 17(1):110–126, January 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25880`.

**Rosen:1998:STL**

[RPG98] J. B. Rosen, Haesun Park, and John Glick. Structured total least norm for nonlinear problems. *SIAM Journal on Matrix Analysis and Applications*, 20(1):14–30, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30166`.

**Ran:1994:FMP**

[RR94] A. C. M. Ran and L. Rodman. Factorization of matrix polynomials with symmetries. *SIAM Journal on Matrix Analysis and Applications*, 15(3):845–864, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23550`.

**Rohn:1996:IM**

[RR96] Jiří Rohn and Georg Rex. Interval $P$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 17(4):1020–1024, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rex:1998:SCR**

[RR98] Georg Rex and Jiri Rohn. Sufficient conditions for regularity and singularity of interval matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(2):437–445, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31074`.

**Ran:2008:ICS**

[RR08] André C. M. Ran and Leiba Rodman. On the index of conditional stability of stable invariant Lagrangian subspaces. *SIAM Journal on Matrix Analysis and Applications*, 29(4):1181–1190, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ran:2006:PAN**

[RRR06] A. C. M. Ran, M. C. B. Reurings, and L. Rodman. A perturbation analysis for nonlinear selfadjoint operator equations. *SIAM Journal on Matrix Analysis and Applications*, 28 (1):89–104, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rader:1988:HHT**

[RS88] Charles M. Rader and Allan O. Steinhardt. Hyperbolic Householder transforms. *SIAM Journal on Matrix Analysis and Applications*, 9(2): 269–290, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). SIAM Conference on Linear Algebra in Signals, Systems, and Control (Boston, Mass., 1986).

**Rodman:1992:IST**

[RS92] Leiba Rodman and Tamir Shalom. On inversion of symmetric Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 13(2): 530–549, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Robey:1994:ROS**

[RS94] Thomas H. Robey and Deborah L. Sulsky. Row ordering for a sparse $QR$ decomposition. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1208–1225, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/18564`.

**Radjabalipour:1996:EQM**

[RS96] M. Radjabalipour and A. Salemi. On eigenvalues of quadratic matrix polynomials and their perturbations. *SIAM Journal on Matrix Analysis and Applications*, 17(3):563–569, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27360`.

**Rozloznik:2002:KSM**

[RS02] M. Rozložník and V. Simoncini. Krylov subspace methods for saddle point problems with indefinite preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 24(2):368–391, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37554`.

**Reid:2006:RTB**

[RS06] J. K. Reid and J. A. Scott. Reducing the total bandwidth of a sparse unsymmetric matrix. *SIAM Journal on Matrix Analysis and Applications*, 28(3):805–821, January 2006. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic).

**Rommes:2008:CDP**

[RS08] Joost Rommes and Gerard L. G. Sleijpen. Convergence of the dominant pole algorithm and Rayleigh quotient iteration. *SIAM Journal on Matrix Analysis and Applications*, 30 (1):346–363, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ransford:2018:RCP**

[RS18] Thomas Ransford and Felix L. Schwenninger. Remarks on the Crouzeix–Palencia proof that the numerical range is a $(1 + \sqrt{2})$-spectral set. *SIAM Journal on Matrix Analysis and Applications*, 39(1):342–345, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ruetz:2021:SNS**

[RS21] Simon Ruetz and Karin Schnass. Submatrices with NonUniformly selected random supports and insights into sparse approximation. *SIAM Journal on Matrix Analysis and Applications*, 42(3):1268–1289, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ramlau:2021:SRB**

[RSH21] Ronny Ramlau, Kirk M. Soodhalter, and Victoria Hutterer. Subspace recycling-based regularization methods. *SIAM Journal on Matrix Analysis and Applications*, 42(4):1480–1505, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rothblum:1994:SMP**

[RSS94] Uriel G. Rothblum, Hans Schneider, and Michael H. Schneider. Scaling matrices to prescribed row and column maxima. *SIAM Journal on Matrix Analysis and Applications*, 15(1):1–14, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22208`.

**Robbe:2009:IIS**

[RSS09] Mickaël Robbé, Miloud Sadkane, and Alastair Spence. Inexact inverse subspace iteration with preconditioning applied to non-Hermitian eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 31(1):92–113, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ron:2001:CSR**

[RST01] Amos Ron, Zuowei Shen, and Kim-Chuan Toh. Computing the Sobolev regularity of refinable functions by the Arnoldi method. *SIAM Journal on Matrix Analysis and Applications*, 23(1):57–

76, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36301`.

**Rokhlin:2010:RAP**

[RST10] Vladimir Rokhlin, Arthur Szlam, and Mark Tygert. A randomized algorithm for principal component analysis. *SIAM Journal on Matrix Analysis and Applications*, 31(3): 1100–1124, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ruiz:2018:RLB**

[RST18] Daniel Ruiz, Annick Sartenaer, and Charlotte Tannier. Refining the lower bound on the positive eigenvalues of saddle point matrices with insights on the interactions between the blocks. *SIAM Journal on Matrix Analysis and Applications*, 39(2):712–736, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ran:1993:LQP**

[RT93] A. C. M. Ran and H. L. Trentelman. Linear quadratic problems with indefinite cost for discrete time systems. *SIAM Journal on Matrix Analysis and Applications*, 14(3): 776–797, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rossi:1999:NCR**

[RT99] Tuomo Rossi and Jari Toivanen. A nonstandard cyclic reduction method, its variants and stability. *SIAM Journal on Matrix Analysis and Applications*, 20(3):628–645, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31705`.

**Richtarik:2020:SRL**

[RT20] Peter Richtárik and Martin Takác. Stochastic reformulations of linear systems: Algorithms and convergence theory. *SIAM Journal on Matrix Analysis and Applications*, 41 (2):487–524, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rump:1991:CAI**

[Rum91] Siegfried M. Rump. A class of arbitrarily ill-conditioned floating-point matrices. *SIAM Journal on Matrix Analysis and Applications*, 12(4):645–653, October 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rump:1997:BCD**

[Rum97] S. M. Rump. Bounds for the componentwise distance to the nearest singular matrix. *SIAM Journal on Matrix Analysis and Applications*, 18(1):83–103, January

1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28917`.

**Rump:2003:SPPa**

[Rum03a] Siegfried M. Rump. Structured perturbations Part I: Normwise distances. *SIAM Journal on Matrix Analysis and Applications*, 25(1):1–30, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40573`.

**Rump:2003:SPPb**

[Rum03b] Siegfried M. Rump. Structured perturbations Part II: Componentwise distances. *SIAM Journal on Matrix Analysis and Applications*, 25(1):31–56, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40574`.

**Rump:2012:VBL**

[Rum12] Siegfried M. Rump. Verified bounds for least squares problems and underdetermined linear systems. *SIAM Journal on Matrix Analysis and Applications*, 33(1):130–148, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v33/i1/p130_s1`.

**Rump:2015:CSU**

[Rum15] Siegfried M. Rump. The componentwise structured and unstructured backward errors can be arbitrarily far apart. *SIAM Journal on Matrix Analysis and Applications*, 36(2):385–392, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rump:2022:VEB**

[Rum22] Siegfried M. Rump. Verified error bounds for all eigenvalues and eigenvectors of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 43(4):1736–1754, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1451440`.

**Ragnarsson:2012:BTU**

[RV12] Stefan Ragnarsson and Charles F. Van Loan. Block tensor unfoldings. *SIAM Journal on Matrix Analysis and Applications*, 33(1):149–169, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v33/i1/p149_s1`.

**Ratnarajah:2005:ECN**

[RVA05] T. Ratnarajah, R. Vaillancourt, and M. Alvo. Eigenvalues and condition numbers of complex random matrices. *SIAM Journal on*

*Matrix Analysis and Applications*, 26(2):441–456, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42204`.

**Robol:2017:FSL**

[RVV17] Leonardo Robol, Raf Vandebril, and Paul Van Dooren. A framework for structured linearizations of matrix polynomials in various bases. *SIAM Journal on Matrix Analysis and Applications*, 38(1):188–216, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Rusten:1992:PIM**

[RW92] Torgeir Rusten and Ragnar Winther. A preconditioned iterative method for saddle-point problems. *SIAM Journal on Matrix Analysis and Applications*, 13(3):887–904, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). Iterative methods in numerical linear algebra (Copper Mountain, CO, 1990).

**Ramage:1994:PFE**

[RW94] Alison Ramage and Andrew J. Wathen. On preconditioning for finite element equations on irregular grids. *SIAM Journal on Matrix Analysis and Applications*, 15(3):909–921, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22325`.

**Rodman:1995:PSV**

[RW95] Leiba Rodman and Hugo J. Woerdeman. Perturbations, singular values, and ranks of partial triangular matrices. *SIAM Journal on Matrix Analysis and Applications*, 16(1):278–288, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23976`.

**Rosenthal:2001:MIE**

[RW01] Joachim Rosenthal and Xiaochang Wang. The multiplicative inverse eigenvalue problem over an algebraically closed field. *SIAM Journal on Matrix Analysis and Applications*, 23(2):517–523, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37819`.

**Reichel:2005:BFG**

[RY05] Lothar Reichel and Qiang Ye. Breakdown-free GMRES for singular systems. *SIAM Journal on Matrix Analysis and Applications*, 26(4):1001–1021, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43780`.

**Shustin:2022:SIL**

[SA22] Paz Fink Shustin and Haim Avron. Semi-infinite linear regression and its applications. *SIAM Journal on Matrix Analysis and Applications*, 43(1):479–511, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1411950`.

**Saad:1997:AAK**

[Saa97] Yousef Saad. Analysis of augmented Krylov subspace methods. *SIAM Journal on Matrix Analysis and Applications*, 18(2):435–449, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29428`.

**Saad:2006:FCR**

[Saa06] Yousef Saad. Filtered conjugate residual-type algorithms with applications. *SIAM Journal on Matrix Analysis and Applications*, 28(3):845–870, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Saad:2016:ASI**

[Saa16] Yousef Saad. Analysis of subspace iteration for eigenvalue problems with evolving matrices. *SIAM Journal on Matrix Analysis and Applications*, 37 (1):103–122, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Son:2021:CSE**

[SAGS21] Nguyen Thanh Son, P.-A. Absil, Bin Gao, and Tatjana Stykel. Computing symplectic eigenpairs of symmetric positive-definite matrices via trace minimization and Riemannian optimization. *SIAM Journal on Matrix Analysis and Applications*, 42(4):1732–1757, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Saibaba:2016:HHO**

[Sai16] Arvind K. Saibaba. HOID: Higher order interpolatory decomposition for tensors based on Tucker representation. *SIAM Journal on Matrix Analysis and Applications*, 37(3): 1223–1249, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Saibaba:2019:RSI**

[Sai19] Arvind K. Saibaba. Randomized subspace iteration: Analysis of canonical angles and unitarily invariant norms. *SIAM Journal on Matrix Analysis and Applications*, 40(1):23–48, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Salzberg:1988:TPS**

[Sal88] Pablo M. Salzberg. Tomography in projective spaces: a

heuristic for limited angle reconstructive models. *SIAM Journal on Matrix Analysis and Applications*, 9(3):393–398, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Santos:1988:NNI**

[San88] Maria Célia Santos. A note on the Newton iteration for the algebraic eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 9(4):561–569, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Shapiro:1988:DAO**

[SB88] A. Shapiro and J. D. Botha. Dual algorithms for orthogonal Procrustes rotations. *SIAM Journal on Matrix Analysis and Applications*, 9(3):378–383, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Shroff:1992:ACE**

[SB92] Gautam M. Shroff and Christian H. Bischof. Adaptive condition estimation for rank-one updates of $QR$ factorizations. *SIAM Journal on Matrix Analysis and Applications*, 13(4):1264–1278, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sun:1995:BKR**

[SB95] Xiaobai Sun and Christian Bischof. A basis-kernel representation of orthogonal matrices. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1184–1196, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27636`.

**Su:2001:CPA**

[SB01] Yangfeng Su and Amit Bhaya. Convergence of pseudocontractions and applications to two-stage and asynchronous multisplitting for singular $M$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 22(3):948–964, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33941`.

**Sun:2003:KPR**

[SB03] Xiaobai Sun and Yujuan Bao. A Kronecker product representation of the fast Gauss transform. *SIAM Journal on Matrix Analysis and Applications*, 24(3):768–786, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38037`.

**Simoncini:2004:SPH**

[SB04] Valeria Simoncini and Michele Benzi. Spectral properties of the Hermitian and skew-Hermitian splitting preconditioner for saddle point problems. *SIAM Journal on Matrix Analysis and Applications*, 26(2):377–389, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43492`.

**Sidje:2005:BTA**

[SB05] Roger B. Sidje and K. Burrage. $QRT$: a $QR$-based tridiagonalization algorithm for nonsymmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 26(3):878–900, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Su:2011:SRE**

[SB11] Yangfeng Su and Zhaojun Bai. Solving rational eigenvalue problems via linearization. *SIAM Journal on Matrix Analysis and Applications*, 32 (1):201–216, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p201_s1`.

**Shim:2003:LSS**

[SC03] Sang-Yeun Shim and Yu Chen. Least squares solution of matrix equation $AXB^* + CYD^* = E$. *SIAM Journal on Matrix Analysis and Applications*, 24(3):802–808, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40105`.

**Serra-Capizzano:2005:JCF**

[SC05] Stefano Serra-Capizzano. Jordan canonical form of the Google matrix: a potential contribution to the PageRank computation. *SIAM Journal on Matrix Analysis and Applications*, 27(2):305–312, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/44140`. See comments [WW08].

**Singer:2010:ULR**

[SC10] Amit Singer and Mihai Cucuringu. Uniqueness of low-rank matrix completion by rigidity theory. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1621–1641, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stein:2012:DFP**

[SCA12] Michael L. Stein, Jie Chen, and Mihai Anitescu. Difference filter preconditioning for large covariance matrices. *SIAM Journal on Matrix Analysis and Applications*, 33(1):

52–72, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v33/i1/p52_s1`.

**Shabat:2021:FAG**

[SCBC21] Gil Shabat, Era Choshen, Dvir Ben Or, and Nadav Carmel. Fast and accurate Gaussian kernel ridge regression using matrix decompositions for preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 42(3):1073–1095, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Serra-Capizzano:2005:HDP**

[SCBG05] Stefano Serra-Capizzano, Daniele Bertaccini, and Gene H. Golub. How to deduce a proper eigenvalue cluster from a proper singular value cluster in the nonnormal case. *SIAM Journal on Matrix Analysis and Applications*, 27(1): 82–86, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/60802`.

**Scherer:1995:ARE**

[Sch95a] Carsten W. Scherer. The algebraic Riccati equation and inequality for systems with uncontrollable modes on the imaginary axis. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1308–1327, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23477`.

**Schmid:1995:TDM**

[Sch95b] Hans Joachim Schmid. Two-dimensional minimal cubature formulas and matrix equations. *SIAM Journal on Matrix Analysis and Applications*, 16(3):898–921, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25240`.

**Scherer:2005:RRL**

[Sch05] C. W. Scherer. Relaxations for robust linear matrix inequality problems with verifications for exactness. *SIAM Journal on Matrix Analysis and Applications*, 27(2):365–395, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43095`.

**Schweitzer:2023:SMF**

[Sch23] Marcel Schweitzer. Sensitivity of matrix function based network communicability measures: Computational methods and a priori bounds. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1321–1348, ???? 2023. CODEN SJMAEL. ISSN

0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/23M1556708`.

**Steel:2021:MMR**

[SCMV21] Thijs Steel, Daan Camps, Karl Meerbergen, and Raf Vandebril. A multishift, multipole rational $QZ$ method with aggressive early deflation. *SIAM Journal on Matrix Analysis and Applications*, 42(2):753–774, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Saunderson:2012:DLR**

[SCPW12] J. Saunderson, V. Chandrasekaran, P. A. Parrilo, and A. S. Willsky. Diagonal and low-rank matrix decompositions, correlation matrices, and ellipsoid fitting. *SIAM Journal on Matrix Analysis and Applications*, 33(4):1395–1416, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stegeman:2009:MAD**

[SD09] Alwin Stegeman and Lieven De Lathauwer. A method to avoid diverging components in the Candecomp/Parafac model for generic $I \times J \times 2$ arrays. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1614–1638, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sustik:2012:ZFP**

[SD12] Mátyás A. Sustik and Inderjit S. Dhillon. On a zero-finding problem involving the matrix exponential. *SIAM Journal on Matrix Analysis and Applications*, 33(4):1237–1249, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sorensen:2015:CCPa**

[SD15a] Mikael Sørensen and Lieven De Lathauwer. Coupled canonical polyadic decompositions and (coupled) decompositions in multilinear rank-$(L_r, n, L_r, n, 1)$ terms — Part I: Uniqueness. *SIAM Journal on Matrix Analysis and Applications*, 36(2):496–522, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sorensen:2015:NUC**

[SD15b] Mikael Sørensen and Lieven De Lathauwer. New uniqueness conditions for the canonical polyadic decomposition of third-order tensors. *SIAM Journal on Matrix Analysis and Applications*, 36(4):1381–1403, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Savas:2016:CMA**

[SD16] Berkant Savas and Inderjit S. Dhillon. Clustered matrix approximation. *SIAM Journal on Matrix Analysis and Applications*, 37(4):1531–1555, ????

2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sorensen:2019:FSA**

[SD19] Mikael Sørensen and Lieven De Lathauwer. Fiber sampling approach to canonical polyadic decomposition and application to tensor completion. *SIAM Journal on Matrix Analysis and Applications*, 40(3):888–917, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stegeman:2010:UCC**

[SdA10] Alwin Stegeman and André L. F. de Almeida. Uniqueness conditions for constrained three-way factor decompositions with linearly dependent loadings. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1469–1490, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sorensen:2012:CPD**

[SDC+12] Mikael Sørensen, Lieven De Lathauwer, Pierre Comon, Sylvie Icart, and Luc Deneire. Canonical polyadic decomposition with a columnwise orthonormal factor matrix. *SIAM Journal on Matrix Analysis and Applications*, 33(4): 1190–1213, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sorensen:2015:CCPb**

[SDD15] Mikael Sørensen, Ignat Domanov, and Lieven De Lathauwer. Coupled canonical polyadic decompositions and (coupled) decompositions in multilinear rank-$(L_{r,n}, L_{r,n}, 1)$ terms — Part II: Algorithms. *SIAM Journal on Matrix Analysis and Applications*, 36(3): 1015–1045, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Shao:2018:SPL**

[SdJL+18] Meiyue Shao, Felipe H. da Jornada, Lin Lin, Chao Yang, Jack Deslippe, and Steven G. Louie. A structure preserving Lanczos algorithm for computing the optical absorption spectrum. *SIAM Journal on Matrix Analysis and Applications*, 39 (2):683–711, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Song:2021:LRP**

[SDN21] Guangjing Song, Weiyang Ding, and Michael K. Ng. Low rank pure quaternion approximation for pure quaternion matrices. *SIAM Journal on Matrix Analysis and Applications*, 42(1):58–82, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sebastiani:1996:DMP**

[Seb96] Paola Sebastiani. On the derivatives of matrix powers. *SIAM Journal on Matrix Analysis and Applications*, 17(3):640–648, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28274`.

**Seeger:2011:QEP**

[See11] Alberto Seeger. Quadratic eigenvalue problems under conic constraints. *SIAM Journal on Matrix Analysis and Applications*, 32(3): 700–721, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p700_s1`.

**Sifuentes:2013:GCP**

[SEM13] Josef A. Sifuentes, Mark Embree, and Ronald B. Morgan. GMRES convergence for perturbed coefficient matrices, with application to approximate deflation preconditioning. *SIAM Journal on Matrix Analysis and Applications*, 34 (3):1066–1088, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Seneta:1998:CSM**

[Sen98] E. Seneta. Complementation in stochastic matrices and the GTH algorithm. *SIAM Journal on Matrix Analysis and Applications*, 19(2):556–563, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31017`.

**Sendov:2006:GHP**

[Sen06] Hristo S. Sendov. Generalized Hadamard product and the derivatives of spectral functions. *SIAM Journal on Matrix Analysis and Applications*, 28(3):667–681, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Serra:1996:PSH**

[Ser96] Stefano Serra. Preconditioning strategies for Hermitian Toeplitz systems with nondefinite generating functions. *SIAM Journal on Matrix Analysis and Applications*, 17(4):1007–1019, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27141`.

**Serra:1998:ARS**

[Ser98] Stefano Serra. Asymptotic results on the spectra of block Toeplitz preconditioned matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(1):31–44, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162

(electronic). URL http://epubs.siam.org/sam-bin/dbq/article/31016.

**Stoica:1995:OWM**

[SES95] Petre Stoica, Anders Eriksson, and Torsten Söderström. Optimally weighted MUSIC for frequency estimation. *SIAM Journal on Matrix Analysis and Applications*, 16(3):811–827, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/23052.

**Severini:2003:DUM**

[Sev03] Simone Severini. On the digraph of a unitary matrix. *SIAM Journal on Matrix Analysis and Applications*, 25(1):295–300, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/41029.

**Sobczyk:2021:ELS**

[SG21] Aleksandros Sobczyk and Efstratios Gallopoulos. Estimating leverage scores via rank revealing methods and randomization. *SIAM Journal on Matrix Analysis and Applications*, 42(3):1199–1228, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Shao:2014:ATT**

[SGX14] Meiyue Shao, Weiguo Gao, and Jungong Xue. Aggressively truncated Taylor series method for accurate computation of exponentials of essentially nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 35(2):317–338, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Slapnicar:1991:QCF**

[SH91a] Ivan Slapničar and Vjeran Hari. On the quadratic convergence of the Falk–Langemeyer method. *SIAM Journal on Matrix Analysis and Applications*, 12(1):84–114, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stam:1991:ORM**

[SH91b] Antonie Stam and Steven C. Hillmer. Order reductions of the marginals and identification of multiple ARMA models. *SIAM Journal on Matrix Analysis and Applications*, 12(4):679–689, October 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Suffridge:1993:AHP**

[SH93] T. J. Suffridge and T. L. Hayden. Approximation by a Hermitian positive semidefinite Toeplitz matrix. *SIAM*

*Journal on Matrix Analysis and Applications*, 14(3):721–734, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Simoncini:2023:ATC**

[SH23] Valeria Simoncini and Yue Hao. Analysis of the truncated conjugate gradient method for linear matrix equations. *SIAM Journal on Matrix Analysis and Applications*, 44 (1):359–381, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M147880X`.

**Shader:1995:LSS**

[Sha95] Bryan L. Shader. Least squares sign-solvability. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1056–1073, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27237`.

**Shao:2023:DKA**

[Sha23a] Changpeng Shao. A deterministic Kaczmarz algorithm for solving linear systems. *SIAM Journal on Matrix Analysis and Applications*, 44(1):212–239, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1463306`.

**Shao:2023:HON**

[Sha23b] Meiyue Shao. Householder orthogonalization with a non-standard inner product. *SIAM Journal on Matrix Analysis and Applications*, 44 (2):481–502, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1414814`.

**Shen:2009:IEI**

[SHJ09] Shu-Qian Shen, Ting-Zhu Huang, and Yan-Fei Jing. On inclusion and exclusion intervals for the real eigenvalues of real matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(2):816–830, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Shao:2003:MSS**

[SHS03] Jia-Yu Shao, Jin-Ling He, and Hai-Ying Shan. Matrices with special sign patterns of signed generalized inverses. *SIAM Journal on Matrix Analysis and Applications*, 24(4):990–1002, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40148`.

**Shen:2010:EEP**

[SHY10] Shu-Qian Shen, Ting-Zhu Huang, and Juan Yu. Eigenvalue estimates for preconditioned nonsymmetric saddle

point matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2453–2476, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Shen:2012:ABT**

[SHZ12] Shu-Qian Shen, Ting-Zhu Huang, and Jian-Song Zhang. Augmentation block triangular preconditioners for regularized saddle point problems. *SIAM Journal on Matrix Analysis and Applications*, 33(3): 721–741, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sidi:1995:AVV**

[Sid95] Avram Sidi. Application of vector-valued rational approximations to the matrix eigenvalue problem and connections with Krylov subspace methods. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1341–1369, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24316`.

**Silbermann:2003:MFS**

[Sil03] Bernd Silbermann. Modified finite sections for Toeplitz operators and their singular values. *SIAM Journal on Matrix Analysis and Applications*, 24(3):678–692, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39515`.

**Simoncini:1997:SQV**

[Sim97] V. Simoncini. A stabilized QMR version of block BiCG. *SIAM Journal on Matrix Analysis and Applications*, 18(2):419–434, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26467`.

**Simoncini:2000:CRK**

[Sim00] V. Simoncini. On the convergence of restarted Krylov subspace methods. *SIAM Journal on Matrix Analysis and Applications*, 22(2):430–452, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34850`.

**Simoncini:2016:ARK**

[Sim16] V. Simoncini. Analysis of the rational Krylov subspace projection method for large-scale algebraic Riccati equations. *SIAM Journal on Matrix Analysis and Applications*, 37 (4):1655–1674, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Szyld:1992:TSM**

[SJ92] Daniel B. Szyld and Mark T. Jones. Two-stage and multisplitting methods for the parallel solution of linear systems. *SIAM Journal on Matrix Analysis and Applications*, 13(2): 671–679, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sayed:1995:LAB**

[SK95] Ali H. Sayed and Thomas Kailath. A look-ahead block Schur algorithm for Toeplitz-like matrices. *SIAM Journal on Matrix Analysis and Applications*, 16(2):388–414, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23264`.

**Sirkovic:2016:SAL**

[SK16] Petar Sirković and Daniel Kressner. Subspace acceleration for large-scale parameter-dependent Hermitian eigenproblems. *SIAM Journal on Matrix Analysis and Applications*, 37(2):695–718, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sherman:2020:EHO**

[SK20] Samantha Sherman and Tamara G. Kolda. Estimating higher-order moments using symmetric tensor decomposition. *SIAM Journal on Matrix Analysis and Applications*, 41(3): 1369–1387, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sandryhaila:2011:ASP**

[SKP11] Aliaksei Sandryhaila, Jelena Kovacević, and Markus Püschel. Algebraic signal processing theory: Cooley–Tukey-type algorithms for polynomial transforms based on induction. *SIAM Journal on Matrix Analysis and Applications*, 32(2): 364–384, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p364_s1`.

**Syrmos:1994:DQS**

[SL94] V. L. Syrmos and F. L. Lewis. Decomposability and quotient subspaces for the pencil $sL - M$. *SIAM Journal on Matrix Analysis and Applications*, 15(3):865–880, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/17366`.

**Stegeman:2012:IUC**

[SL12] Alwin Stegeman and Tam T. T. Lam. Improved uniqueness conditions for canonical tensor decompositions with linearly dependent loadings. *SIAM Journal on Matrix Anal-*

*ysis and Applications*, 33(4): 1250–1271, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Slemons:2009:RTS**

[Sle09] Jason Slemons. The result of two steps of the $LR$ algorithm is diagonally similar to the result of one step of the $HR$ algorithm. *SIAM Journal on Matrix Analysis and Applications*, 31(1):68–74, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sosa:2016:FOA**

[SM16] Fredy Sosa and Julio Moro. First order asymptotic expansions for eigenvalues of multiplicatively perturbed matrices. *SIAM Journal on Matrix Analysis and Applications*, 37 (4):1478–1504, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Shaked-Monderer:2013:RMF**

[SMBJS13] Naomi Shaked-Monderer, Immanuel M. Bomze, Florian Jarre, and Werner Schachinger. On the *cp*-rank and minimal *cp* factorizations of a completely positive matrix. *SIAM Journal on Matrix Analysis and Applications*, 34(2):355–368, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Smith:2003:SAC**

[Smi03] Matthew I. Smith. A Schur algorithm for computing matrix $p$ th roots. *SIAM Journal on Matrix Analysis and Applications*, 24(4):971–989, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39269`.

**Sosa:2020:FOS**

[SMM20] Fredy Sosa, Julio Moro, and Christian Mehl. First order structure-preserving perturbation theory for eigenvalues of symplectic matrices. *SIAM Journal on Matrix Analysis and Applications*, 41(2):657–690, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sayed:2002:RRD**

[SNC02] A. H. Sayed, V. H. Nascimento, and F. A. M. Cipparrone. A regularized robust design criterion for uncertain data. *SIAM Journal on Matrix Analysis and Applications*, 23(4):1120–1142, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38079`.

**So:1992:ECM**

[So92] Wasin So. Equality cases in matrix exponential inequalities. *SIAM Journal on Matrix Analysis and Applications*, 13

(4):1154–1158, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sorensen:1992:IAP**

[Sor92] D. C. Sorensen. Implicit application of polynomial filters in a $k$-step Arnoldi method. *SIAM Journal on Matrix Analysis and Applications*, 13(1): 357–385, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Southworth:2019:NCT**

[Sou19] Ben S. Southworth. Necessary conditions and tight two-level convergence bounds for parareal and multigrid reduction in time. *SIAM Journal on Matrix Analysis and Applications*, 40(2):564–608, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Spears:1998:CAP**

[Spe98] William M. Spears. A compression algorithm for probability transition matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(1):60–77, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31691`.

**Song:2013:SPP**

[SQ13] Yisheng Song and Liqun Qi. Spectral properties of positively homogeneous operators induced by higher order tensors. *SIAM Journal on Matrix Analysis and Applications*, 34 (4):1581–1595, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Shroff:1989:CCJ**

[SS89] Gautam Shroff and Robert Schreiber. On the convergence of the cyclic Jacobi method for parallel block orderings. *SIAM Journal on Matrix Analysis and Applications*, 10(3): 326–346, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sezer:1991:NED**

[SŠ91] M. E. Sezer and D. D. Šiljak. Nested epsilon decompositions of linear systems: Weakly coupled and overlapping blocks. *SIAM Journal on Matrix Analysis and Applications*, 12(3): 521–533, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stewart:1998:HTS**

[SS98] Michael Stewart and G. W. Stewart. On hyperbolic triangularization: Stability and pivoting. *SIAM Journal on Matrix Analysis and Applications*, 19(4):847–860, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/31958.

**Shah:2006:SPS**

[SS06] Mili I. Shah and Danny C. Sorensen. A symmetry preserving singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 28(3):749–769, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Shah:2010:BNS**

[SS10] Mili I. Shah and Danny C. Sorensen. Best nonspherical symmetric low rank approximation. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1019–1039, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Shank:2013:KSM**

[SS13] Stephen D. Shank and Valeria Simoncini. Krylov subspace methods for large-scale constrained Sylvester equations. *SIAM Journal on Matrix Analysis and Applications*, 34(4): 1448–1463, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Son:2017:SPD**

[SS17] Nguyen Thanh Son and Tatjana Stykel. Solving parameter-dependent Lyapunov equations using the reduced basis method with application to parametric model order reduction. *SIAM Journal on Matrix Analysis and Applications*, 38(2):478–504, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sacchi:2019:GCA**

[SS19] Giulia Sacchi and Valeria Simoncini. A GMRES convergence analysis for localized invariant subspace ill-conditioning. *SIAM Journal on Matrix Analysis and Applications*, 40(2):542–563, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sugiyama:2023:KRE**

[SS23] Tomohiro Sugiyama and Kazuhiro Sato. Kron reduction and effective resistance of directed graphs. *SIAM Journal on Matrix Analysis and Applications*, 44(1):270–292, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL https://epubs.siam.org/doi/10.1137/22M1480823.

**Southworth:2020:FPK**

[SSR20] Ben S. Southworth, Abdullah A. Sivas, and Sander Rhebergen. On fixed-point, Krylov, and $2 \times 2$ block preconditioners for nonsymmetric problems. *SIAM Journal on Matrix Analysis and Applications*, 41(2):871–900, ???? 2020. CODEN SJMAEL. ISSN

0895-4798 (print), 1095-7162 (electronic).

**Sala:2005:ICB**

[SST05] Marzio Sala, John N. Shadid, and Ray S. Tuminaro. An improved convergence bound for aggregation-based domain decomposition preconditioners. *SIAM Journal on Matrix Analysis and Applications*, 27(3):744–756, July 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/61745`.

**Sankar:2006:SAC**

[SST06] Arvind Sankar, Daniel A. Spielman, and Shang-Hua Teng. Smoothed analysis of the condition numbers and growth factors of matrices. *SIAM Journal on Matrix Analysis and Applications*, 28(2):446–476, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sonin:2001:RAF**

[ST01] Isaac Sonin and John Thornton. Recursive algorithm for the fundamental/group inverse matrix of a Markov chain from an explicit formula. *SIAM Journal on Matrix Analysis and Applications*, 23(1):209–224, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35123`.

**Shklarski:2008:RFE**

[ST08] Gil Shklarski and Sivan Toledo. Rigidity in finite-element matrices: Sufficient conditions for the rigidity of structures and substructures. *SIAM Journal on Matrix Analysis and Applications*, 30(1):7–40, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Spielman:2014:NLT**

[ST14] Daniel A. Spielman and Shang-Hua Teng. Nearly linear time algorithms for preconditioning and solving symmetric, diagonally dominant linear systems. *SIAM Journal on Matrix Analysis and Applications*, 35(3):835–885, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Shi:2021:CT**

[ST21] Tianyi Shi and Alex Townsend. On the compressibility of tensors. *SIAM Journal on Matrix Analysis and Applications*, 42 (1):275–298, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stathopoulos:2002:CBJ**

[Sta02] Andreas Stathopoulos. A case for a biorthogonal Jacobi–Davidson method: Restarting and correction equation. *SIAM Journal on Matrix Analysis and Applications*, 24(1):238–259, 2002. CODEN SJMAEL.

ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37337`.

**Stampach:2022:ASP**

[Sta22] Frantisek Stampach. Asymptotic spectral properties of the Hilbert $L$-matrix. *SIAM Journal on Matrix Analysis and Applications*, 43(4):1658–1679, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1476794`.

**Stepniak:1991:ICM**

[Ste91a] Czesław Stepniak. Inversion of covariance matrices: Explicit formulae. *SIAM Journal on Matrix Analysis and Applications*, 12(3):577–580, July 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stewart:1991:TSR**

[Ste91b] G. W. Stewart. Two simple residual bounds for the eigenvalues of a Hermitian matrix. *SIAM Journal on Matrix Analysis and Applications*, 12(2):205–208, April 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stewart:1993:PCF**

[Ste93a] G. W. Stewart. On the perturbation of $LU$, Cholesky, and $QR$ factorizations. *SIAM Journal on Matrix Analysis and Applications*, 14(4):1141–1145, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stewart:1993:URR**

[Ste93b] G. W. Stewart. Updating a rank-revealing $ULV$ decomposition. *SIAM Journal on Matrix Analysis and Applications*, 14(2):494–499, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stewart:2001:KSA**

[Ste01] G. W. Stewart. A Krylov–Schur algorithm for large eigenproblems. *SIAM Journal on Matrix Analysis and Applications*, 23(3):601–614, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37152`.

**Stewart:2002:AKS**

[Ste02] G. W. Stewart. Addendum to "A Krylov–Schur Algorithm for Large Eigenproblems". *SIAM Journal on Matrix Analysis and Applications*, 24(2):599–601, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40315`.

**Stewart:2003:STS**

[Ste03] Michael Stewart. A superfast Toeplitz solver with improved

numerical stability. *SIAM Journal on Matrix Analysis and Applications*, 25(3):669–693, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41791`.

**Stewart:2005:EAQ**

[Ste05] G. W. Stewart. Error analysis of the quasi-Gram–Schmidt algorithm. *SIAM Journal on Matrix Analysis and Applications*, 27(2):493–506, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/60779`.

**Stewart:2006:EAU**

[Ste06] Michael Stewart. An error analysis of a unitary Hessenberg QR algorithm. *SIAM Journal on Matrix Analysis and Applications*, 28(1):40–67, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stegeman:2008:LRA**

[Ste08] Alwin Stegeman. Low-rank approximation of generic $p \times q \times 2$ arrays and diverging components in the Candecomp/Parafac model. *SIAM Journal on Matrix Analysis and Applications*, 30(3):988–1007, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stegeman:2010:UTO**

[Ste10a] Alwin Stegeman. On uniqueness of the $n$ th order tensor decomposition into rank-1 terms with linear independence in one mode. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2498–2516, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stewart:2010:SAM**

[Ste10b] G. W. Stewart. On the semidefinite $B$-Arnoldi method. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1458–1468, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stegeman:2011:UCT**

[Ste11a] Alwin Stegeman. On uniqueness of the canonical tensor decomposition with some form of symmetry. *SIAM Journal on Matrix Analysis and Applications*, 32(2):561–583, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p561_s1`.

**Stewart:2011:NAO**

[Ste11b] G. W. Stewart. On the numerical analysis of oblique projectors. *SIAM Journal on Matrix Analysis and Applications*, 32(1):309–348, ???? 2011. CO-

DEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p309_s1`.

**Stegeman:2012:CPD**

[Ste12] Alwin Stegeman. Candecomp/Parafac: From diverging components to a decomposition in block terms. *SIAM Journal on Matrix Analysis and Applications*, 33(2):291–316, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stegeman:2013:TWJ**

[Ste13] Alwin Stegeman. A three-way Jordan canonical form as limit of low-rank tensor approximations. *SIAM Journal on Matrix Analysis and Applications*, 34(2):624–650, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stewart:2016:CCR**

[Ste16a] G. W. Stewart. A canonical CS representation of a pair of subspaces. *SIAM Journal on Matrix Analysis and Applications*, 37(2):539–549, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stewart:2016:DSO**

[Ste16b] Michael Stewart. On the description and stability of orthogonal transformations of rank structured matrices. *SIAM Journal on Matrix Analysis and Applications*, 37(4):1505–1530, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stewart:2016:RDM**

[Ste16c] Michael Stewart. Rank decisions in matrix quotient decompositions. *SIAM Journal on Matrix Analysis and Applications*, 37(4):1729–1746, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stewart:2018:NRD**

[Ste18] Michael Stewart. Numerical rank deficiency in matrix products. *SIAM Journal on Matrix Analysis and Applications*, 39(1):365–399, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Steinerberger:2021:RKC**

[Ste21] Stefan Steinerberger. Randomized Kaczmarz converges along small singular vectors. *SIAM Journal on Matrix Analysis and Applications*, 42(2):608–615, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Steinerberger:2023:ASL**

[Ste23] Stefan Steinerberger. Approximate solutions of linear systems at a universal

rate. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1436–1446, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1517196`.

**Szlam:2017:ALR**

[STT17] Arthur Szlam, Andrew Tulloch, and Mark Tygert. Accurate low-rank approximations via a few iterations of alternating least squares. *SIAM Journal on Matrix Analysis and Applications*, 38(2):425–433, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stuart:1988:IMM**

[Stu88] Jeffrey L. Stuart. Inflation matrices and ZME-matrices that commute with a permutation matrix. *SIAM Journal on Matrix Analysis and Applications*, 9(3):408–418, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stuart:1989:ETI**

[Stu89] Jeffrey L. Stuart. An eigenvector test for inflation matrices and zme-matrices. *SIAM Journal on Matrix Analysis and Applications*, 10(4):520–532, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stuart:1991:DHM**

[Stu91] Jeffrey L. Stuart. Determinants of Hessenberg $L$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 12(1):7–15, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Schaub:2017:SMF**

[STvDD17] Michael T. Schaub, Maguy Trefois, Paul van Dooren, and Jean-Charles Delvenne. Sparse matrix factorizations for fast linear solvers with application to Laplacian systems. *SIAM Journal on Matrix Analysis and Applications*, 38(2):505–529, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stanford:1994:SCP**

[SU94] David P. Stanford and José Miguel Urbano. Some convergence properties of matrix sets. *SIAM Journal on Matrix Analysis and Applications*, 15 (4):1132–1140, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22821`.

**Sun:1989:NLB**

[Sun89] Ji Guang Sun. A note on local behavior of multiple eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 10 (4):533–541, ???? 1989. CO-

DEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sun:1995:PAC**

[Sun95a] Ji Guang Sun. Perturbation analysis of the Cholesky downdating and $QR$ updating problems. *SIAM Journal on Matrix Analysis and Applications*, 16(3):760–775, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24993`.

**Sun:1995:PBG**

[Sun95b] Ji Guang Sun. Perturbation bounds for the generalized Schur decomposition. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1328–1340, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24218`.

**Sun:1996:PAP**

[Sun96] Ji-Guang Sun. Perturbation analysis of the pole assignment problem. *SIAM Journal on Matrix Analysis and Applications*, 17(2):313–331, April 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27677`.

**Sun:2004:BPA**

[Sun04] Ji-Guang Sun. Backward perturbation analysis of the periodic discrete-time algebraic Riccati equation. *SIAM Journal on Matrix Analysis and Applications*, 26(1):1–19, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41492`.

**Sutton:2012:SCC**

[Sut12] Brian D. Sutton. Stable computation of the CS decomposition: Simultaneous bidiagonalization. *SIAM Journal on Matrix Analysis and Applications*, 33(1):1–21, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v33/i1/p1_s1`.

**Sutton:2013:DCC**

[Sut13] Brian D. Sutton. Divide and conquer the CS decomposition. *SIAM Journal on Matrix Analysis and Applications*, 34(2):417–444, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stern:1993:NDS**

[SV93] Julio M. Stern and Stephen A. Vavasis. Nested dissection for sparse nullspace bases. *SIAM Journal on Matrix Analysis and Applications*, 14(3):766–775, July 1993. CODEN

SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stewart:1997:SIF**

[SV97] Michael Stewart and Paul Van Dooren. Stability issues in the factorization of structured matrices. *SIAM Journal on Matrix Analysis and Applications*, 18(1):104–118, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28692`.

**Stewart:2000:UGD**

[SV00] Michael Stewart and Paul Van Dooren. Updating a generalized *URV* decomposition. *SIAM Journal on Matrix Analysis and Applications*, 22(2):479–500, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32046`.

**Stewart:2005:FHU**

[SV05] Michael Stewart and Paul Van Dooren. On the factorization of hyperbolic and unitary transformations into rotations. *SIAM Journal on Matrix Analysis and Applications*, 27(3):876–890, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sun:2015:DMS**

[SV15] Yifan Sun and Lieven Vandenberghe. Decomposition methods for sparse matrix nearness problems. *SIAM Journal on Matrix Analysis and Applications*, 36(4):1691–1717, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sleijpen:1996:JDI**

[SvdV96] Gerard L. G. Sleijpen and Henk A. van der Vorst. A Jacobi–Davidson iteration method for linear eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 17(2):401–425, April 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27042`.

**Sleijpen:2000:DER**

[SvdVM00] Gerard L. G. Sleijpen, Henk A. van der Vorst, and Jan Modersitzki. Differences in the effects of rounding errors in Krylov solvers for symmetric indefinite linear systems. *SIAM Journal on Matrix Analysis and Applications*, 22(3):726–751, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32308`.

**Stern:1991:ENI**

[SW91] Ronald J. Stern and Henry Wolkowicz. Exponential non-

negativity on the ice cream cone. *SIAM Journal on Matrix Analysis and Applications*, 12(1):160–165, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Stern:1994:TRP**

[SW94] Ronald J. Stern and Henry Wolkowicz. Trust region problems and nonsymmetric eigenvalue perturbations. *SIAM Journal on Matrix Analysis and Applications*, 15(3):755–778, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/19971`.

**So:1997:ESS**

[SW97] Wasin So and Jianzhong Wang. Estimating the support of a scaling vector. *SIAM Journal on Matrix Analysis and Applications*, 18(1):66–73, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28146`.

**Sun:1998:IOR**

[SW98] Wenyu Sun and Yimin Wei. Inverse order rule for weighted generalized inverse. *SIAM Journal on Matrix Analysis and Applications*, 19(3):772–775, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30544`.

**Stoll:2008:CPB**

[SW08] Martin Stoll and Andy Wathen. Combination preconditioning and the Bramble–Pasciak preconditioner. *SIAM Journal on Matrix Analysis and Applications*, 30(2):582–608, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Sweet:1993:UPI**

[Swe93] Douglas Sweet. The use of pivoting to improve the numerical performance of algorithms for Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 14(2):468–493, April 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Shivakumar:1996:TSB**

[SWYM96] P. N. Shivakumar, Joseph J. Williams, Qiang Ye, and Corneliu A. Marinov. On two-sided bounds related to weakly diagonally dominant $M$-matrices with application to digital circuit dynamics. *SIAM Journal on Matrix Analysis and Applications*, 17(2):298–312, April 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27637`.

**Shi:2011:CGN**

[SWZ11] Xinghua Shi, Yimin Wei, and Wen Zhang. Convergence of general nonstationary iterative methods for solving singular linear equations. *SIAM Journal on Matrix Analysis and Applications*, 32(1): 72–89, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p72_s1`.

**Szyld:2011:EPI**

[SX11] Daniel B. Szyld and Fei Xue. Efficient preconditioned inner solves for inexact Rayleigh quotient iteration and their connections to the single-vector Jacobi–Davidson method. *SIAM Journal on Matrix Analysis and Applications*, 32(3):993–1018, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p993_s1`.

**Sorensen:1998:TRI**

[SY98] D. C. Sorensen and C. Yang. A truncated RQ iteration for large scale eigenvalue calculations. *SIAM Journal on Matrix Analysis and Applications*, 19(4):1045–1073, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30539`.

**Shen:2000:ESF**

[SYJ00] Kai Shen, Tao Yang, and Xiangmin Jiao. $S^+$: Efficient 2D sparse $LU$ factorization on parallel machines. *SIAM Journal on Matrix Analysis and Applications*, 22(1):282–305, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33738`.

**Saad:1999:BDB**

[SZ99] Yousef Saad and Jun Zhang. BILUTM: a domain-based multilevel block ILUT preconditioner for general sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 21(1):279–299, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34126`.

**Schoberl:2007:SIP**

[SZ07] Joachim Schöberl and Walter Zulehner. Symmetric indefinite preconditioners for saddle point problems with applications to PDE-constrained optimization problems. *SIAM Journal on Matrix Analysis and Applications*, 29(3):752–773, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Song:2022:MRT**

[SZH22] Xiaoyu Song, Baodong Zheng, and Riguang Huang. Maximal

rank of $m \times n \times 2$ tensors over arbitrary fields. *SIAM Journal on Matrix Analysis and Applications*, 43(2):867–881, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1431424`.

**Syrmos:1995:EDS**

[SZK95] Vassilis Syrmos, Petr Zagalak, and Vladimír Kučera. External descriptions and staircase forms in implicit systems. *SIAM Journal on Matrix Analysis and Applications*, 16(1):289–306, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23879`.

**Tam:1997:BSD**

[Tam97] Tin Yau Tam. On the behavior of a sequence defined by a periodic recursive relation. *SIAM Journal on Matrix Analysis and Applications*, 18(4):842–860, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30197`.

**Tam:1998:PSE**

[Tam98] Tin-Yau Tam. Partial superdiagonal elements and singular values of a complex skew-symmetric matrix. *SIAM Journal on Matrix Analysis and Applications*, 19(3):737–754, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31255`.

**Tam:1999:IIC**

[Tam99] Tin-Yau Tam. Interlacing inequalities and Cartan subspaces of classical real simple Lie algebras. *SIAM Journal on Matrix Analysis and Applications*, 21(2):581–592, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34352`.

**Tang:1994:DCE**

[Tan94] Ping Tak Peter Tang. Dynamic condition estimation and Rayleigh–Ritz approximation. *SIAM Journal on Matrix Analysis and Applications*, 15(1):331–346, January 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22660`.

**Tang:1999:TES**

[Tan99] Wei-Pai Tang. Toward an effective sparse approximate inverse preconditioner. *SIAM Journal on Matrix Analysis and Applications*, 20(4):970–986, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/32007.

**Taslaman:2015:AQE**

[Tas15a] Leo Taslaman. An algorithm for quadratic eigenproblems with low rank damping. *SIAM Journal on Matrix Analysis and Applications*, 36(1): 251–272, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Taslaman:2015:SDQ**

[Tas15b] Leo Taslaman. Strongly damped quadratic matrix polynomials. *SIAM Journal on Matrix Analysis and Applications*, 36(2):461–475, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Tippett:2000:CSD**

[TCTM00] Michael K. Tippett, Stephen E. Cohn, Ricardo Todling, and Dan Marchesin. Conditioning of the stable, discrete-time Lyapunov operator. *SIAM Journal on Matrix Analysis and Applications*, 22(1):56–65, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/35482.

**Teran:2015:MPC**

[TDV15] Fernando De Terán, Froilán M. Dopico, and Paul Van Dooren. Matrix polynomials with completely prescribed eigenstructure. *SIAM Journal on Matrix Analysis and Applications*, 36 (1):302–328, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Teng:1997:FND**

[Ten97] Shang-Hua Teng. Fast nested dissection for finite element meshes. *SIAM Journal on Matrix Analysis and Applications*, 18(3):552–565, July 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/28428.

**Tunyan:2005:EAL**

[TETA05] K. Tunyan, K. Egiazarian, A. Tuniev, and J. Astola. An efficient approach to the linear least squares problem. *SIAM Journal on Matrix Analysis and Applications*, 26(2):583–598, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/38659.

**Tan:2011:NMI**

[TFL11] Chee Wei Tan, Shmuel Friedland, and Steven Low. Nonnegative matrix inequalities and their application to nonconvex power control optimization. *SIAM Journal on Matrix Analysis and Applications*, 32 (3):1030–1055, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (elec-

tronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i3/p1030_s1`.

**Tisseur:2001:SPP**

[TH01] Françoise Tisseur and Nicholas J. Higham. Structured pseudospectra for polynomial eigenvalue problems, with applications. *SIAM Journal on Matrix Analysis and Applications*, 23(1):187–208, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37145`.

**Thompson:1994:DTM**

[Tho94] Robert C. Thompson. The diagonal torus of a matrix under special unitary equivalence. *SIAM Journal on Matrix Analysis and Applications*, 15(3):968–973, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22651`.

**Tigelaar:1991:MLO**

[Tig91] Harry H. Tigelaar. On monotone linear operators and the spectral radius of their representing matrices. *SIAM Journal on Matrix Analysis and Applications*, 12(4):726–729, October 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Tismenetsky:1993:MGM**

[Tis93] Miron Tismenetsky. Matrix generalizations of a moment problem theorem. I. the Hermitian case. *SIAM Journal on Matrix Analysis and Applications*, 14(1):92–112, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Tisseur:2001:NMF**

[Tis01a] Françoise Tisseur. Newton's method in floating point arithmetic and iterative refinement of generalized eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 22 (4):1038–1057, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Tisseur:2001:SSH**

[Tis01b] Françoise Tisseur. Stability of structured Hamiltonian eigensolvers. *SIAM Journal on Matrix Analysis and Applications*, 23(1):103–125, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36800`.

**Tisseur:2003:CBE**

[Tis03] Françoise Tisseur. A chart of backward errors for singly and doubly structured eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 24(3):877–897,

2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39995`.

**Tisseur:2004:TDR**

[Tis04] Françoise Tisseur. Tridiagonal-diagonal reduction of symmetric indefinite pairs. *SIAM Journal on Matrix Analysis and Applications*, 26(1):215–232, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41478`.

**Tian:2006:ERS**

[TL06] Yongge Tian and Yonghui Liu. Extremal ranks of some symmetric matrix expressions with applications. *SIAM Journal on Matrix Analysis and Applications*, 28(3):890–905, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Tebbens:2012:RVB**

[TM12] Jurjen Duintjer Tebbens and Gérard Meurant. Any Ritz value behavior is possible for Arnoldi and for GMRES. *SIAM Journal on Matrix Analysis and Applications*, 33(3):958–978, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Tang:2010:CTL**

[TMNV10] J. M. Tang, S. P. MacLachlan, R. Nabben, and C. Vuik. A comparison of two-level preconditioners based on multigrid and deflation. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1715–1739, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Telen:2018:SPS**

[TMV18] Simon Telen, Bernard Mourrain, and Marc Van Barel. Solving polynomial systems via truncated normal forms. *SIAM Journal on Matrix Analysis and Applications*, 39(3):1421–1447, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Toh:1997:GVI**

[Toh97] Kim-Chuan Toh. GMRES vs. ideal GMRES. *SIAM Journal on Matrix Analysis and Applications*, 18(1):30–36, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27909`.

**Toledo:1997:LRD**

[Tol97] Sivan Toledo. Locality of reference in *LU* decomposition with partial pivoting. *SIAM Journal on Matrix Analysis and Applications*, 18(4):1065–1081, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-

7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29774`.

**Tang:2014:FSI**

[TP14] Ping Tak Peter Tang and Eric Polizzi. FEAST as a subspace iteration eigensolver accelerated by approximate spectral projection. *SIAM Journal on Matrix Analysis and Applications*, 35(2):354–390, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Thanwerdas:2022:TCC**

[TP22] Yann Thanwerdas and Xavier Pennec. Theoretically and computationally convenient geometries on full-rank correlation matrices. *SIAM Journal on Matrix Analysis and Applications*, 43(4):1851–1872, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1471729`.

**Thanwerdas:2023:BWM**

[TP23] Yann Thanwerdas and Xavier Pennec. Bures–Wasserstein minimizing geodesics between covariance matrices of different ranks. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1447–1476, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M149168X`.

**Trench:1988:NSE**

[Tre88a] William F. Trench. Numerical solution of the eigenvalue problem for symmetric rationally generated Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 9(2):291–303, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). SIAM Conference on Linear Algebra in Signals, Systems, and Control (Boston, Mass., 1986).

**Trench:1988:TSA**

[Tre88b] William F. Trench. Toeplitz systems associated with the product of a formal Laurent series and a Laurent polynomial. *SIAM Journal on Matrix Analysis and Applications*, 9(2):181–193, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Trench:1989:NSE**

[Tre89] William F. Trench. Numerical solution of the eigenvalue problem for Hermitian Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 10(2):135–146, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Trench:1990:SEO**

[Tre90] William F. Trench. Spectral evolution of a one-parameter extension of a real symmetric Toeplitz matrix. *SIAM*

*Journal on Matrix Analysis and Applications*, 11(4):601–611, October 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Trench:1994:SSP**

[Tre94] William F. Trench. Some spectral properties of Hermitian Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 15(3):938–942, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23900`.

**Trench:2005:CPS**

[Tre05] William F. Trench. Characterization and properties of $(R, S)$-symmetric, $(R, S)$-skew symmetric, and $(R, S)$-conjugate matrices. *SIAM Journal on Matrix Analysis and Applications*, 26(3):748–757, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43134`.

**Troutt:1990:EFR**

[Tro90] Marvin D. Troutt. An eigenvalue formula for the radius of stability of a stable game matrix. *SIAM Journal on Matrix Analysis and Applications*, 11 (3):369–372, July 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Truhar:2006:RRB**

[Tru06] Ninoslav Truhar. Relative residual bounds for eigenvalues of Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 28(4):949–960, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Trefethen:1990:ACS**

[TS90] Lloyd N. Trefethen and Robert S. Schreiber. Average-case stability of Gaussian elimination. *SIAM Journal on Matrix Analysis and Applications*, 11(3): 335–360, July 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Tong:1999:OBP**

[TS99] Zhanye Tong and Ahmed Sameh. On optimal banded preconditioners for the five-point Laplacian. *SIAM Journal on Matrix Analysis and Applications*, 21(2):477–480, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34455`.

**Tsao:1994:EMS**

[Tsa94] Nai Kuan Tsao. An error model for Swarztrauber's parallel tridiagonal equation solver. *SIAM Journal on Matrix Analysis and Applications*, 15(2):692–713, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-

7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22958`.

**Tsatsomeros:1998:SCS**

[Tsa98] Michael J. Tsatsomeros. Sign controllability: Sign patterns that require complete controllability. *SIAM Journal on Matrix Analysis and Applications*, 19(2):355–364, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30034`.

**Tsui:1993:SME**

[Tsu93] Chia-Chi Tsui. On the solution to matrix equation $TA - FT = LC$ and its applications. *SIAM Journal on Matrix Analysis and Applications*, 14 (1):33–44, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Toh:1998:CPM**

[TT98] Kim-Chuan Toh and Lloyd N. Trefethen. The Chebyshev polynomials of a matrix. *SIAM Journal on Matrix Analysis and Applications*, 20(2):400–419, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30373`.

**Toh:1999:KMT**

[TT99] Kim-Chuan Toh and Lloyd N. Trefethen. The Kreiss matrix theorem on a general complex domain. *SIAM Journal on Matrix Analysis and Applications*, 21(1):145–165, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32402`.

**Tebbens:2014:ICE**

[TT14] Jurjen Duintjer Tebbens and Miroslav Tuma. On incremental condition estimators in the 2-norm. *SIAM Journal on Matrix Analysis and Applications*, 35(1):174–197, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Tsing:1991:INR**

[TU91] Nam-Kiu Tsing and Frank Uhlig. Inertia, numerical range, and zeros of quadratic forms for matrix pencils. *SIAM Journal on Matrix Analysis and Applications*, 12(1):146–159, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Tuma:2002:NDM**

[Tům02] Miroslav Tůma. A note on the $LDL^T$ decomposition of matrices from saddle-point problems. *SIAM Journal on Matrix Analysis and Applications*, 23(4):903–915, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http:`

//epubs.siam.org/sam-bin/dbq/article/32108.

**Turcajova:1997:NCD**

[Tur97] Radka Turcajová. Numerical condition of discrete wavelet transforms. *SIAM Journal on Matrix Analysis and Applications*, 18(4):981–999, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/27831.

**Turcajova:2003:ACS**

[Tur03] Radka Turcajová. An algorithm for the construction of symmetric orthogonal multiwavelets. *SIAM Journal on Matrix Analysis and Applications*, 25(2):532–550, January 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Truhar:2009:EME**

[TV09] Ninoslav Truhar and Krešimir Veselić. An efficient method for estimating the optimal dampers' viscosity for linear vibrating systems using Lyapunov equation. *SIAM Journal on Matrix Analysis and Applications*, 31(1):18–39, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Thiede:2015:SEP**

[TVW15] Erik Thiede, Brian Van Koten, and Jonathan Weare. Sharp entrywise perturbation bounds for Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 36(3):917–941, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Tang:2000:SAI**

[TW00] Wei-Pai Tang and Wing Lok Wan. Sparse approximate inverse smoother for multigrid. *SIAM Journal on Matrix Analysis and Applications*, 21(4):1236–1252, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/33934.

**Tretter:2003:BNR**

[TW03] Christiane Tretter and Markus Wagenhofer. The block numerical range of an $n \times n$ block operator matrix. *SIAM Journal on Matrix Analysis and Applications*, 24(4):1003–1017, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/39407.

**Tao:2002:SCG**

[TY02] David Tao and Mark Yasuda. A spectral characterization of generalized real symmetric centrosymmetric and generalized real symmetric skew-centrosymmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 23(3):885–895, 2002.

CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38673`.

**Tyrtyshnikov:1992:OSC**

[Tyr92] Evgenij E. Tyrtyshnikov. Optimal and superoptimal circulant preconditioners. *SIAM Journal on Matrix Analysis and Applications*, 13(2):459–473, April 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Tropp:2017:PSA**

[TYUC17] Joel A. Tropp, Alp Yurtsever, Madeleine Udell, and Volkan Cevher. Practical sketching algorithms for low-rank matrix approximation. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1454–1485, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Tisseur:2013:TQM**

[TZ13] Françoise Tisseur and Ion Zaballa. Triangularizing quadratic matrix polynomials. *SIAM Journal on Matrix Analysis and Applications*, 34(2):312–337, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ubaru:2017:FES**

[UCS17] Shashanka Ubaru, Jie Chen, and Yousef Saad. Fast estimation of $\mathrm{tr}(f(A))$ via stochastic Lanczos quadrature. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1075–1099, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Uhlmann:2018:GMI**

[Uhl18] Jeffrey Uhlmann. A generalized matrix inverse that is consistent with respect to diagonal transformations. *SIAM Journal on Matrix Analysis and Applications*, 39(2):781–800, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Uhlig:2020:CEC**

[Uhl20] Frank Uhlig. Coalescing eigenvalues and crossing eigencurves of 1-parameter matrix flows. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1528–1545, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Urschel:2021:UEE**

[Urs21] John C. Urschel. Uniform error estimates for the Lanczos method. *SIAM Journal on Matrix Analysis and Applications*, 42(3):1423–1450, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Uschmajew:2012:LCA**

[Usc12] André Uschmajew. Local convergence of the alternating least squares algorithm for

canonical tensor approximation. *SIAM Journal on Matrix Analysis and Applications*, 33 (2):639–652, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Vaccaro:1994:SOP**

[Vac94] Richard J. Vaccaro. A second-order perturbation expansion for the SVD. *SIAM Journal on Matrix Analysis and Applications*, 15(2):661–671, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22424`.

**VanHuffel:1992:SNT**

[Van92] Sabine Van Huffel. On the significance of nongeneric total least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 13(1): 20–35, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**VanDongen:2008:GCD**

[Van08] Stijn Van Dongen. Graph clustering via a discrete uncoupling process. *SIAM Journal on Matrix Analysis and Applications*, 30(1):121–141, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**VanVleck:2010:EPD**

[Van10] Erik S. Van Vleck. On the error in the product $QR$ decomposition. *SIAM Journal on Matrix Analysis and Applications*, 31 (4):1775–1791, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Vandebril:2011:CBR**

[Van11] Raf Vandebril. Chasing bulges or rotations? A metamorphosis of the $QR$-algorithm. *SIAM Journal on Matrix Analysis and Applications*, 32(1): 217–247, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p217_s1`.

**Varah:1994:BEE**

[Var94] J. M. Varah. Backward error estimates for Toeplitz systems. *SIAM Journal on Matrix Analysis and Applications*, 15(2):408–417, April 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/21997`.

**Vavasis:1992:PBI**

[Vav92] Stephen A. Vavasis. Preconditioning for boundary integral equations. *SIAM Journal on Matrix Analysis and Applications*, 13(3):905–925, July 1992. CODEN SJMAEL. ISSN

0895-4798 (print), 1095-7162 (electronic). Iterative methods in numerical linear algebra (Copper Mountain, CO, 1990).

**Vavasis:1994:SNA**

[Vav94] Stephen A. Vavasis. Stable numerical algorithms for equilibrium systems. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1108–1131, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23094`.

**Vandenberghe:1998:DML**

[VBW98] Lieven Vandenberghe, Stephen Boyd, and Shao-Po Wu. Determinant maximization with linear matrix inequality constraints. *SIAM Journal on Matrix Analysis and Applications*, 19(2):499–533, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30343`.

**vanDuin:1999:SPP**

[vD99] Arno C. N. van Duin. Scalable parallel preconditioning with the sparse approximate inverse of triangular matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(4):987–1006, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31778`.

**Vanderstukken:2021:SPEa**

[VD21] Jeroen Vanderstukken and Lieven De Lathauwer. Systems of polynomial equations, higher-order tensor decompositions, and multidimensional harmonic retrieval: a unifying framework. Part I: The canonical polyadic decomposition. *SIAM Journal on Matrix Analysis and Applications*, 42 (2):883–912, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**vandenEshof:2004:IKS**

[vdES04] Jasper van den Eshof and Gerard L. G. Sleijpen. Inexact Krylov subspace methods for linear systems. *SIAM Journal on Matrix Analysis and Applications*, 26(1):125–153, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/40345`.

**vandeGeijn:1993:DSS**

[vdG93] Robert A. van de Geijn. Deferred shifting schemes for parallel $QR$ methods. *SIAM Journal on Matrix Analysis and Applications*, 14(1):180–194, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**vanDorsselaer:2000:CPB**

[vDHvdV00] Jos L. M. van Dorsselaer, Michiel E. Hochstenbach, and

Henk A. van der Vorst. Computing probabilistic bounds for extreme eigenvalues of symmetric matrices with the Lanczos method. *SIAM Journal on Matrix Analysis and Applications*, 22(3):837–852, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36685`.

**vanderMee:2001:RHP**

[vdMRR01] Cornelis V. M. van der Mee, André C. M. Ran, and Leiba Rodman. Real Hamiltonian polar decompositions. *SIAM Journal on Matrix Analysis and Applications*, 22(4):1263–1273, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**vanderMee:2005:MGI**

[vdMS05] C. V. M. van der Mee and S. Seatzu. A method for generating infinite positive self-adjoint test matrices and Riesz bases. *SIAM Journal on Matrix Analysis and Applications*, 26(4):1132–1149, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43250`.

**vanderStappen:1993:PSD**

[vdSBvdV93] A. Frank van der Stappen, Rob H. Bisseling, and Johannes G. G. van de Vorst. Parallel sparse *LU* decomposition on a mesh network of transputers. *SIAM Journal on Matrix Analysis and Applications*, 14(3):853–879, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**vanderVeen:1996:SML**

[vdV96] Alle-Jan van der Veen. A Schur method for low-rank matrix approximation. *SIAM Journal on Matrix Analysis and Applications*, 17(1):139–160, January 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26134`.

**vanderWoude:1995:DDP**

[vdWM95] Jacob van der Woude and Kazuo Murota. Disturbance decoupling with pole placement for structured systems: a graph-theoretic approach. *SIAM Journal on Matrix Analysis and Applications*, 16(3):922–942, July 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25134`.

**Vecchio:2003:BIL**

[Vec03] Antonia Vecchio. A bound for the inverse of a lower triangular Toeplitz matrix. *SIAM Journal on Matrix Analysis and Applications*, 24(4):1167–1174, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-

7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39676`.

**Venkateswaran:1993:ALC**

[Ven93] V. Venkateswaran. An algorithm for the linear complementarity problem with a $P_0$-matrix. *SIAM Journal on Matrix Analysis and Applications*, 14(4):967–977, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Verhaegen:1996:SMI**

[Ver96] Michel Verhaegen. A subspace model identification solution to the identification of mixed causal, anti-causal *LTI* systems. *SIAM Journal on Matrix Analysis and Applications*, 17(2):332–347, April 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26203`.

**Valcher:2000:AAC**

[VF00] Maria Elena Valcher and Lorenzo Farina. An algebraic approach to the construction of polyhedral invariant cones. *SIAM Journal on Matrix Analysis and Applications*, 22(2):453–471, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33546`.

**VanBarel:2005:ORF**

[VFGM05] Marc Van Barel, Dario Fasino, Luca Gemignani, and Nicola Mastronardi. Orthogonal rational functions and structured matrices. *SIAM Journal on Matrix Analysis and Applications*, 26(3):810–829, 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/44445`.

**VanDooren:2010:OMR**

[VGA10] Paul Van Dooren, Kyle A. Gallivan, and P.-A. Absil. $\mathcal{H}_\in$-optimal model reduction with higher-order poles. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2738–2753, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Vandebril:2009:QSA**

[VGV09] Raf Vandebril, Gene Golub, and Marc Van Barel. A quasi-separable approach to solve the symmetric definite tridiagonal generalized eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 31 (1):154–174, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Veerman:2016:TMB**

[VH16] J. J. P. Veerman and David K. Hammond. Tridiagonal matrices and boundary conditions.

*SIAM Journal on Matrix Analysis and Applications*, 37(1): 1–17, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**VanBarel:2001:SSS**

[VHK01] Marc Van Barel, Georg Heinig, and Peter Kravanja. A stabilized superfast solver for nonsymmetric Toeplitz systems. *SIAM Journal on Matrix Analysis and Applications*, 23(2):494–510, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36230`.

**Vong:2007:UIN**

[VJ07] Seak-Weng Vong and Xiao-Qing Jin. Unitarily invariant norms of Toeplitz matrices with Fisher–Hartwig singularities. *SIAM Journal on Matrix Analysis and Applications*, 29 (3):850–854, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Vanderstukken:2021:SPEb**

[VKDD21] Jeroen Vanderstukken, Patrick Kürschner, Ignat Domanov, and Lieven De Lathauwer. Systems of polynomial equations, higher-order tensor decompositions, and multidimensional harmonic retrieval: a unifying framework. Part II: The block term decomposition. *SIAM Journal on Matrix Analysis and Applications*, 42(2):913–953, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**VanBeeumen:2015:CRK**

[VMM15] Roel Van Beeumen, Karl Meerbergen, and Wim Michiels. Compact rational Krylov methods for nonlinear eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 36(2):820–838, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Vannieuwenhoven:2014:GNS**

[VNVM14] N. Vannieuwenhoven, J. Nicaise, R. Vandebril, and K. Meerbergen. On generic nonexistence of the Schmidt–Eckart–Young decomposition for complex tensors. *SIAM Journal on Matrix Analysis and Applications*, 35(3):886–903, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Vogel:1999:SMC**

[Vog99] Curtis R. Vogel. Sparse matrix computations arising in distributed parameter identification. *SIAM Journal on Matrix Analysis and Applications*, 20(4):1027–1037, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31770`.

**vonRosen:1993:SRH**

[von93] D. von Rosen. Some results on homogeneous matrix equations. *SIAM Journal on Matrix Analysis and Applications*, 14(1):137–145, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Voos:2012:RVR**

[Voo12] Friederike Voos. Result verification for the real quadratic eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 33(2):369–387, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Vijayan:1993:FTF**

[VP93] Rajiv Vijayan and H. Vincent Poor. Fast triangular factorization of covariance matrices of differenced time series. *SIAM Journal on Matrix Analysis and Applications*, 14(4):1096–1102, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Vecharynski:2014:FUA**

[VS14] Eugene Vecharynski and Yousef Saad. Fast updating algorithms for latent semantic indexing. *SIAM Journal on Matrix Analysis and Applications*, 35(3):1105–1131, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Viswanath:1998:CNR**

[VT98] D. Viswanath and L. N. Trefethen. Condition numbers of random triangular matrices. *SIAM Journal on Matrix Analysis and Applications*, 19(2):564–581, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31286`.

**VanHuffel:1988:ASN**

[VV88] Sabine Van Huffel and Joos Vandewalle. Analysis and solution of the nongeneric total least squares problem. *SIAM Journal on Matrix Analysis and Applications*, 9(3):360–372, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**VanHuffel:1989:APG**

[VV89] Sabine Van Huffel and Joos Vandewalle. Analysis and properties of the generalized total least squares problem $AX \approx B$ when some or all columns in $A$ are subject to error. *SIAM Journal on Matrix Analysis and Applications*, 10 (3):294–315, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Vandereycken:2010:ROA**

[VV10] Bart Vandereycken and Stefan Vandewalle. A Riemannian optimization approach for

computing low-rank solutions of Lyapunov equations. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2553–2579, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**VanLoan:2015:AMM**

[VV15] Charles F. Van Loan and Joseph P. Vokt. Approximating matrices with multiple symmetries. *SIAM Journal on Matrix Analysis and Applications*, 36(3):974–993, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**VanBarel:2005:OSR**

[VVM05] M. Van Barel, R. Vandebril, and N. Mastronardi. An orthogonal similarity reduction of a matrix into semiseparable form. *SIAM Journal on Matrix Analysis and Applications*, 27(1):176–197, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/42822`.

**Vandebril:2012:GMA**

[VW12] Raf Vandebril and David S. Watkins. A generalization of the multishift $QR$ algorithm. *SIAM Journal on Matrix Analysis and Applications*, 33(3):759–779, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Voss:2011:NLR**

[VYH11] Heinrich Voss, Kemal Yildiztekin, and Xin Huang. Nonlinear low rank modification of a symmetric eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 32(2):515–535, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p515_s1`.

**VanHuffel:1991:RTL**

[VZ91] Sabine Van Huffel and Hong Yuan Zha. The restricted total least squares problem: Formulation, algorithm, and properties. *SIAM Journal on Matrix Analysis and Applications*, 12(2):292–309, April 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Vassilevski:2006:MVP**

[VZ06] Panayot S. Vassilevski and Ludmil T. Zikatanov. Multiple vector preserving interpolation mappings in algebraic multigrid. *SIAM Journal on Matrix Analysis and Applications*, 27(4):1040–1055, ???? 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wang:2007:JSV**

[WA07] Shuangquan Wang and Ali Abdi. Joint singular value distribution of two correlated

rectangular Gaussian matrices and its application. *SIAM Journal on Matrix Analysis and Applications*, 29(3):972–981, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Walshaw:1995:DDP**

[Wal95] Chris H. Walshaw. Diagonal dominance in the parallel partition method for tridiagonal systems. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1086–1099, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24549`.

**Walker:2003:RCT**

[Wal03] Stephen G. Walker. On recent Cheeger-type bounds for non-maximal eigenvalues applied to positive matrices. *SIAM Journal on Matrix Analysis and Applications*, 25(2):574–581, January 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wang:1998:SLM**

[Wan98a] Bo-Ying Wang. On the singularity of LCM matrices. *SIAM Journal on Matrix Analysis and Applications*, 19(4):1040–1044, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31374`.

**Wang:1998:BIR**

[Wan98b] Yiju Wang. On the block independence in reflexive inner inverse and $M$-$P$ inverse of block matrix. *SIAM Journal on Matrix Analysis and Applications*, 19(2):407–415, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30186`.

**Wang:2015:SVP**

[Wan15] Rongrong Wang. Singular vector perturbation under Gaussian noise. *SIAM Journal on Matrix Analysis and Applications*, 36(1):158–177, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Watson:1992:AMT**

[Wat92a] G. A. Watson. Algorithms for minimum trace factor analysis. *SIAM Journal on Matrix Analysis and Applications*, 13 (4):1039–1053, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Watson:1992:CSS**

[Wat92b] G. A. Watson. Computing the structured singular value. *SIAM Journal on Matrix Analysis and Applications*, 13(4): 1054–1066, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Watkins:1993:BCA**

[Wat93] David S. Watkins. Bidirectional chasing algorithms for the eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 14(1):166–179, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Watkins:1995:FST**

[Wat95] David S. Watkins. Forward stability and transmission of shifts in the $QR$ algorithm. *SIAM Journal on Matrix Analysis and Applications*, 16(2):469–487, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24599`.

**Watkins:1998:BEA**

[Wat98] David S. Watkins. Bulge exchanges in algorithms of $QR$ type. *SIAM Journal on Matrix Analysis and Applications*, 19(4):1074–1096, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29995`.

**Watkins:2000:PAP**

[Wat00] David S. Watkins. Performance of the $QZ$ algorithm in the presence of infinite eigenvalues. *SIAM Journal on Matrix Analysis and Applications*, 22(2):364–375, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36037`.

**Watson:2001:DFP**

[Wat01] G. A. Watson. Data fitting problems with bounded uncertainties in the data. *SIAM Journal on Matrix Analysis and Applications*, 22(4):1274–1293, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Watson:1989:CHL**

[WBP89] Layne T. Watson, J. Patrick Bixler, and Aubrey B. Poore. Continuous homotopies for the linear complementarity problem. *SIAM Journal on Matrix Analysis and Applications*, 10 (2):259–277, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Chu:2003:PEM**

[wC03] Eric King wah Chu. Perturbation of eigenvalues for matrix polynomials via the Bauer–Fike theorems. *SIAM Journal on Matrix Analysis and Applications*, 25(2):551–573, January 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wang:2014:GCA**

[WC14] Liqi Wang and Moody T. Chu. On the global convergence of the alternating least

squares method for rank-one approximation to generic tensors. *SIAM Journal on Matrix Analysis and Applications*, 35 (3):1058–1072, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wentz:2022:ASV**

[WCB22] Jacqueline Wentz, Jeffrey C. Cameron, and David M. Bortz. Analytical singular value decomposition for a class of stoichiometry matrices. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1109–1147, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1418927`.

**Wei:2016:GRO**

[WCCL16] Ke Wei, Jian-Feng Cai, Tony F. Chan, and Shingyu Leung. Guarantees of Riemannian optimization for low rank matrix recovery. *SIAM Journal on Matrix Analysis and Applications*, 37(3):1198–1222, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wei:2010:CDR**

[WCW10] Musheng Wei, Xuehan Cheng, and Qian Wang. A canonical decomposition of the right invertible system with applications. *SIAM Journal on Matrix Analysis and Applications*, 31 (4):1958–1981, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wang:2015:OLR**

[WCY15] Liqi Wang, Moody T. Chu, and Bo Yu. Orthogonal low rank tensor approximation: Alternating least squares method and its global convergence. *SIAM Journal on Matrix Analysis and Applications*, 36(1): 1–19, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wicks:1994:RRC**

[WD94] M. A. Wicks and R. A. DeCarlo. Rank robustness of complex matrices with respect to real perturbations. *SIAM Journal on Matrix Analysis and Applications*, 15(4):1182–1207, October 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/19429`.

**Wicks:1995:CMN**

[WD95] M. A. Wicks and R. A. DeCarlo. Computing most nearly rank-reducing structured matrix perturbations. *SIAM Journal on Matrix Analysis and Applications*, 16(1):123–137, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22758`.

**Wei:2000:UPB**

[WD00] Musheng Wei and Alvaro R. De Pierro. Upper perturbation bounds of weighted projections, weighted and constrained least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 21(3):931–951, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33630`.

**Watkins:1989:SEF**

[WE89] D. S. Watkins and L. Elsner. Self-equivalent flows associated with the singular value decomposition. *SIAM Journal on Matrix Analysis and Applications*, 10(2):244–258, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Watkins:1990:RAS**

[WE90] D. S. Watkins and L. Elsner. On Rutishauser's approach to self-similar flows. *SIAM Journal on Matrix Analysis and Applications*, 11(2): 301–311, April 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Watkins:1991:CAE**

[WE91] D. S. Watkins and L. Elsner. Chasing algorithms for the eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 12(2):374–384, April 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Watkins:1994:TDB**

[WE94] David Watkins and Ludwig Elsner. Theory of decomposition and bulge-chasing algorithms for the generalized eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 15(3):943–967, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22377`.

**Wei:1992:ATL**

[Wei92] Mu Sheng Wei. The analysis for the total least squares problem with more than one solution. *SIAM Journal on Matrix Analysis and Applications*, 13 (3):746–763, July 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Weissler:1995:SRC**

[Wei95] Fred B. Weissler. Some remarks concerning iterative methods for linear systems. *SIAM Journal on Matrix Analysis and Applications*, 16(2): 448–461, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/23041`.

**Wei:1996:CRD**

[Wei96] Yimin Wei. A characterization and representation of the Drazin inverse. *SIAM Journal on Matrix Analysis and Applications*, 17(4):744–747, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/28069`.

**Welters:2011:ERF**

[Wel11] Aaron Welters. On explicit recursive formulas in the spectral perturbation analysis of a Jordan block. *SIAM Journal on Matrix Analysis and Applications*, 32(1):1–22, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i1/p1_s1`.

**White:1989:MDW**

[Whi89] R. E. White. Multisplitting with different weighting schemes. *SIAM Journal on Matrix Analysis and Applications*, 10(4):481–493, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**White:1990:MSP**

[Whi90] R. E. White. Multisplitting of a symmetric positive definite matrix. *SIAM Journal on Matrix Analysis and Applications*, 11(1):69–82, January 1990. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**White:2000:MMO**

[Whi00] R. E. White. Multisplitting methods: Optimal schemes for the unknowns in a given overlap. *SIAM Journal on Matrix Analysis and Applications*, 22(2):554–568, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33467`.

**Wills:2009:ORG**

[WI09] Rebecca S. Wills and Ilse C. F. Ipsen. Ordinal ranking for Google's PageRank. *SIAM Journal on Matrix Analysis and Applications*, 30(4):1677–1696, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Willms:2008:ARE**

[Wil08] Allan R. Willms. Analytic results for the eigenvalues of certain tridiagonal matrices. *SIAM Journal on Matrix Analysis and Applications*, 30(2):639–656, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wimmer:1988:EPH**

[Wim88a] Harald K. Wimmer. Extremal problems for Hölder norms of matrices and realizations of linear systems. *SIAM Journal on*

*Matrix Analysis and Applications*, 9(3):314–322, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wimmer:1988:LME**

[Wim88b] Harald K. Wimmer. Linear matrix equations, controllability and observability, and the rank of solutions. *SIAM Journal on Matrix Analysis and Applications*, 9(4): 570–578, ???? 1988. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wimmer:1992:ESM**

[Wim92] Harald K. Wimmer. Explicit solutions of the matrix equation $\sum A^i X D_i = C$. *SIAM Journal on Matrix Analysis and Applications*, 13(4):1123–1130, October 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wimmer:2006:ISH**

[Wim06] Harald K. Wimmer. Inertial signatures of Hermitian polynomial matrices. *SIAM Journal on Matrix Analysis and Applications*, 28(2):596–601, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Willems:2012:TFT**

[WL12] Paul R. Willems and Bruno Lang. Twisted factorizations and *qd*-type transformations for the $MR^3$ algorithm — new representations and analysis. *SIAM Journal on Matrix Analysis and Applications*, 33(2): 523–553, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wei:2005:PBD**

[WLB05] Yimin Wei, Xiezhang Li, and Fanbin Bu. A perturbation bound of the Drazin inverse of a matrix by separation of simple invariant subspaces. *SIAM Journal on Matrix Analysis and Applications*, 27(1):72–81, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43994`.

**Wang:2018:NRR**

[WLD18] Ruoxi Wang, Yingzhou Li, and Eric Darve. On the numerical rank of radial basis function kernels in high dimensions. *SIAM Journal on Matrix Analysis and Applications*, 39 (4):1810–1835, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wang:2019:BBF**

[WLMD19] Ruoxi Wang, Yingzhou Li, Michael W. Mahoney, and Eric Darve. Block basis factorization for scalable kernel evaluation. *SIAM Journal on Matrix Analysis and Applications*, 40 (4):1497–1526, ???? 2019. CO-

DEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Willems:2006:CBS**

[WLV06] Paul R. Willems, Bruno Lang, and Christof Vömel. Computing the bidiagonal SVD using multiple relatively robust representations. *SIAM Journal on Matrix Analysis and Applications*, 28(4):907–926, January 2006. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Woznicki:1993:EOR**

[Woź93] Z. I. Woźnicki. Estimation of the optimum relaxation factors in partial factorization iterative methods. *SIAM Journal on Matrix Analysis and Applications*, 14(1):59–73, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wright:1995:SLE**

[Wri95] Stephen J. Wright. Stability of linear equations solvers in interior-point methods. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1287–1307, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26049`.

**Wright:1997:SAS**

[Wri97] Stephen Wright. Stability of augmented system factorizations in interior-point methods. *SIAM Journal on Matrix Analysis and Applications*, 18(1):191–222, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27109`.

**Wu:2000:TRL**

[WS00] Kesheng Wu and Horst Simon. Thick-restart Lanczos method for large symmetric eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 22(2):602–616, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33460`.

**Wei:2012:MRS**

[WS12] Musheng Wei and Dongmei Shen. Minimum rank solutions to the matrix approximation problems in the spectral norm. *SIAM Journal on Matrix Analysis and Applications*, 33(3):940–957, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wirth:2006:SEA**

[WSSL06] F. Wirth, R. Stanojevi, R. Shorten, and D. Leith. Stochastic equilibria of AIMD communication networks. *SIAM Journal on Matrix Analysis and Applications*, 28(3):703–723, January 2006. CODEN

SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wubs:2011:RTL**

[WT11] Fred W. Wubs and Jonas Thies. A robust two-level incomplete factorization for (Navier-)Stokes saddle point matrices. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1475–1499, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1475_s1`.

**Wu:2017:CHR**

[Wu17] Gang Wu. The convergence of harmonic Ritz vectors and harmonic Ritz values, revisited. *SIAM Journal on Matrix Analysis and Applications*, 38 (1):118–133, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wulling:2005:SCC**

[Wül05] Wolfgang Wülling. On stabilization and convergence of clustered Ritz values in the Lanczos method. *SIAM Journal on Matrix Analysis and Applications*, 27(3):891–908, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Vong:2011:ULM**

[wVjBqJ11] Seak weng Vong, Zheng jian Bai, and Xiao qing Jin. An Ulm-like method for inverse singular value problems. *SIAM Journal on Matrix Analysis and Applications*, 32(2): 412–429, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p412_s1`.

**Wu:2008:CJC**

[WW08] Gang Wu and Yimin Wei. Comments on: "Jordan canonical form of the Google matrix: a potential contribution to the PageRank computation" [SIAM J. Matrix Anal. Appl. **27** (2005), no. 2, 305–312; MR2179674] by S. Serra-Capizzano. *SIAM Journal on Matrix Analysis and Applications*, 30(1):364–374, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See [SC05].

**Wei:2016:TRR**

[WXZ16] Yimin Wei, Pengpeng Xie, and Liping Zhang. Tikhonov regularization and randomized GSVD. *SIAM Journal on Matrix Analysis and Applications*, 37(2):649–675, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wang:2017:EBK**

[WY17] Hao Wang and Qiang Ye. Error bounds for the Krylov subspace methods for computations of matrix exponentials.

*SIAM Journal on Matrix Analysis and Applications*, 38(1): 155–187, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wang:1991:ASP**

[WZ91] Shou Gen Wang and Shu Qin Zhao. An algorithm for $Ax = \lambda Bx$ with symmetric and positive-definite $A$ and $B$. *SIAM Journal on Matrix Analysis and Applications*, 12(4): 654–660, October 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wang:1995:TEI**

[WZ95] Bo Ying Wang and Fu Zhen Zhang. Trace and eigenvalue inequalities for ordinary and Hadamard products of positive semidefinite Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1173–1183, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/25361`.

**Wen:2017:ACA**

[WZ17] Zaiwen Wen and Yin Zhang. Accelerating convergence by augmented Rayleigh–Ritz projections for large-scale eigenpair computation. *SIAM Journal on Matrix Analysis and Applications*, 38(2):273–296, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wu:2023:PHP**

[WZ23] Yaokun Wu and Yinfeng Zhu. Primitivity and Hurwitz primitivity of nonnegative matrix tuples: a unified approach. *SIAM Journal on Matrix Analysis and Applications*, 44(1):196–211, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1471535`.

**Won:2021:OTS**

[WZL21] Joong-Ho Won, Hua Zhou, and Kenneth Lange. Orthogonal trace-sum maximization: Applications, local algorithms, and global optimality. *SIAM Journal on Matrix Analysis and Applications*, 42 (2):859–882, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Wu:2022:USA**

[WZZ22] Shu-Lin Wu, Tao Zhou, and Zhi Zhou. A uniform spectral analysis for a preconditioned all-at-once system from first-order and second-order evolutionary problems. *SIAM Journal on Matrix Analysis and Applications*, 43(3):1331–1353, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https:`

//epubs.siam.org/doi/10.1137/21M145358X.

**Wu:2021:HPC**

[WZZH21] Feng Wu, Kailing Zhang, Li Zhu, and Jiayao Hu. High-performance computation of the exponential of a large sparse matrix. *SIAM Journal on Matrix Analysis and Applications*, 42(4):1636–1655, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xiao:2022:CUA**

[XBC22] Guiyun Xiao, Zheng-Jian Bai, and Wai-Ki Ching. A column-wise update algorithm for sparse stochastic matrix factorization. *SIAM Journal on Matrix Analysis and Applications*, 43(4):1712–1735, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL https://epubs.siam.org/doi/10.1137/21M145313X.

**Xing:2018:PPD**

[XC18] Xin Xing and Edmond Chow. Preserving positive definiteness in hierarchically semiseparable matrix approximations. *SIAM Journal on Matrix Analysis and Applications*, 39(2):829–855, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xing:2020:IDP**

[XC20] Xin Xing and Edmond Chow. Interpolative decomposition via proxy points for kernel matrices. *SIAM Journal on Matrix Analysis and Applications*, 41(1):221–243, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xia:2010:SMM**

[XCGL10] Jianlin Xia, Shivkumar Chandrasekaran, Ming Gu, and Xiaoye S. Li. Superfast multifrontal method for large structured linear systems of equations. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1382–1411, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xue:2010:CAI**

[XE10] Fei Xue and Howard C. Elman. Convergence analysis of iterative solvers in inexact Rayleigh quotient iteration. *SIAM Journal on Matrix Analysis and Applications*, 31(3):877–899, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xue:2012:FII**

[XE12] Fei Xue and Howard C. Elman. Fast inexact implicitly restarted Arnoldi method for generalized eigenvalue problems with spectral transformation. *SIAM Journal on Matrix Analysis and Applications*, 33(2):433–459, ???? 2012. CODEN SJMAEL. ISSN 0895-

4798 (print), 1095-7162 (electronic).

**Xue:1998:BPT**

[XG98] Jungong Xue and Weiguo Gao. Blockwise perturbation theory for Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 20(1):270–278, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29462`.

**Xia:2010:RAC**

[XG10] Jianlin Xia and Ming Gu. Robust approximate Cholesky factorization of rank-structured symmetric positive definite matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2899–2920, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v31/i5/p2899_s1`.

**Xing:2021:ECH**

[XHC21] Xin Xing, Hua Huang, and Edmond Chow. Efficient construction of an HSS preconditioner for symmetric positive definite $\mathcal{H}^{\in}$ matrices. *SIAM Journal on Matrix Analysis and Applications*, 42(2):683–707, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xia:2012:CSH**

[Xia12] Jianlin Xia. On the complexity of some hierarchical structured matrix algorithms. *SIAM Journal on Matrix Analysis and Applications*, 33(2):388–410, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xia:2013:RSD**

[Xia13] Jianlin Xia. Randomized sparse direct solvers. *SIAM Journal on Matrix Analysis and Applications*, 34(1):197–227, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xie:2023:ERL**

[Xie23] Fangzheng Xie. Euclidean representation of low-rank matrices and its geometric properties. *SIAM Journal on Matrix Analysis and Applications*, 44(2):822–866, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1489125`.

**Xu:1994:FEP**

[XK94] Guanghan Xu and Thomas Kailath. Fast estimation of principal eigenspace using Lanczos algorithm. *SIAM Journal on Matrix Analysis and Applications*, 15(3):974–994, July 1994. CODEN SJMAEL. ISSN 0895-4798

(print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/18384`.

**Xi:2016:AMP**

[XLS16] Yuanzhe Xi, Ruipeng Li, and Yousef Saad. An algebraic multilevel preconditioner with low-rank corrections for sparse symmetric matrices. *SIAM Journal on Matrix Analysis and Applications*, 37(1):235–259, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xu:2022:GIN**

[XNB22] Wei-Wei Xu, Michael K. Ng, and Zheng-Jian Bai. Geometric inexact Newton method for generalized singular values of Grassmann matrix pair. *SIAM Journal on Matrix Analysis and Applications*, 43(2):535–560, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M1383720`.

**Xu:2018:EEC**

[XPL+18] Weiwei Xu, Hong-Kui Pang, Wen Li, Xueping Huang, and Wenjie Guo. On the explicit expression of chordal metric between generalized singular values of Grassmann matrix pairs with applications. *SIAM Journal on Matrix Analysis and Applications*, 39(4):1547–1563, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xu:2008:DCM**

[XQ08] Wei Xu and Sanzheng Qiao. A divide-and-conquer method for the Takagi factorization. *SIAM Journal on Matrix Analysis and Applications*, 30(1):142–153, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xu:2010:SPD**

[XSW10] Qingxiang Xu, Chuanning Song, and Yimin Wei. The stable perturbation of the Drazin inverse of the square matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(3):1507–1520, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xu:1998:RBA**

[Xu98] Hongguo Xu. The relation between the $QR$ and $LR$ algorithms. *SIAM Journal on Matrix Analysis and Applications*, 19(2):551–555, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29993`.

**Xu:2005:NMC**

[Xu05] Hongguo Xu. A numerical method for computing an SVD-like decomposition.

*SIAM Journal on Matrix Analysis and Applications*, 26 (4):1058–1082, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41052`.

**Xu:2015:GCP**

[Xu15] Yuan Xu. Generalized characteristic polynomials and Gaussian cubature rules. *SIAM Journal on Matrix Analysis and Applications*, 36(3):1129–1142, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xu:2020:CCS**

[Xu20] Hongguo Xu. A core-chasing symplectic $QR$ algorithm. *SIAM Journal on Matrix Analysis and Applications*, 41(2): 901–927, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xue:1996:CSE**

[Xue96] Jungong Xue. Computing the smallest eigenvalue of an $M$-matrix. *SIAM Journal on Matrix Analysis and Applications*, 17(4):748–762, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27695`.

**Xiang:2007:NSB**

[XW07] Hua Xiang and Yimin Wei. On normwise structured backward errors for saddle point systems. *SIAM Journal on Matrix Analysis and Applications*, 29(3): 838–849, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xi:2016:SSH**

[XX16] Yuanzhe Xi and Jianlin Xia. On the stability of some hierarchical rank structured matrix algorithms. *SIAM Journal on Matrix Analysis and Applications*, 37(3):1279–1303, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xia:2017:ERP**

[XX17] Jianlin Xia and Zixing Xin. Effective and robust preconditioning of general SPD matrices via structured incomplete factorization. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1298–1322, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xi:2014:FRE**

[XXC14] Yuanzhe Xi, Jianlin Xia, and Raymond Chan. A fast randomized eigensolver with structured LDL factorization update. *SIAM Journal on Matrix Analysis and Applications*, 35(3):974–996, ???? 2014. CO-

DEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xi:2014:SSS**

[XXCB14] Yuanzhe Xi, Jianlin Xia, Stephen Cauley, and Venkataramanan Balakrishnan. Superfast and stable structured solvers for Toeplitz least squares via randomized sampling. *SIAM Journal on Matrix Analysis and Applications*, 35(1):44–72, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xia:2015:FSS**

[XXCB15] Jianlin Xia, Yuanzhe Xi, Stephen Cauley, and Venkataramanan Balakrishnan. Fast sparse selected inversion. *SIAM Journal on Matrix Analysis and Applications*, 36(3):1283–1314, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xia:2012:SSS**

[XXG12] Jianlin Xia, Yuanzhe Xi, and Ming Gu. A superfast structured solver for Toeplitz linear systems via randomized sampling. *SIAM Journal on Matrix Analysis and Applications*, 33(3):837–858, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Xu:2022:NAF**

[XZ22] Xuefeng Xu and Chen-Song Zhang. A new analytical framework for the convergence of inexact two-grid methods. *SIAM Journal on Matrix Analysis and Applications*, 43(1):512–533, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M140448X`.

**Xian:1999:RSE**

[XZC99] Zhang Xian, Yang Zhongpeng, and Cao Chongguang. Real solutions of the equation $\boldsymbol{\Phi^t(A) = \frac{1}{n} J_n}$. *SIAM Journal on Matrix Analysis and Applications*, 21(2):642–645, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31333`.

**Yalamov:2000:ASS**

[Yal00] Plamen Y. Yalamov. On the almost strong stability of the circular deconvolution algorithm. *SIAM Journal on Matrix Analysis and Applications*, 22(2):358–363, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35105`.

**Yanushevsky:1993:RCD**

[Yan93] R. T. Yanushevsky. Robust control of delay feedback

systems with bounded uncertainty. *SIAM Journal on Matrix Analysis and Applications*, 14(4):978–990, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Yan:1998:SCP**

[Yan98] Wei-Yong Yan. Stability and convergence of principal component learning algorithms. *SIAM Journal on Matrix Analysis and Applications*, 19(4):933–955, October 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31032`.

**Yang:2020:EAL**

[Yan20] Yuning Yang. The epsilon-alternating least squares for orthogonal low-rank tensor approximation and its global convergence. *SIAM Journal on Matrix Analysis and Applications*, 41(4):1797–1825, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Yasuda:2003:SCH**

[Yas03] Mark Yasuda. Spectral characterizations for Hermitian centrosymmetric $K$-matrices and Hermitian skew-centrosymmetric $K$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 25(3): 601–605, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41883`.

**Yang:1991:RCS**

[YB91] B. Yang and J. F. Böhme. Reducing the computations of the singular value decomposition array given by Brent and Luk. *SIAM Journal on Matrix Analysis and Applications*, 12(4):713–725, October 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Yao:2016:RFR**

[YBZC16] Teng-Teng Yao, Zheng-Jian Bai, Zhi Zhao, and Wai-Ki Ching. A Riemannian Fletcher–Reeves conjugate gradient method for doubly stochastic inverse eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 37(1):215–234, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Yeung:1997:PAG**

[YC97] Man-Chung Yeung and Tony F. Chan. Probabilistic analysis of Gaussian elimination without pivoting. *SIAM Journal on Matrix Analysis and Applications*, 18(2):499–517, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29174`.

**Ye:2009:RPB**

[Ye09] Qiang Ye. Relative perturbation bounds for eigenvalues of symmetric positive definite diagonally dominant matrices. *SIAM Journal on Matrix Analysis and Applications*, 31(1): 11–17, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Yu:2018:ERA**

[YGL18] Wenjian Yu, Yu Gu, and Yaohang Li. Efficient randomized algorithms for the fixed-precision low-rank matrix approximation. *SIAM Journal on Matrix Analysis and Applications*, 39(3):1339–1359, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Yang:2009:CSC**

[YGM09] Chao Yang, Weiguo Gao, and Juan C. Meza. On the convergence of the self-consistent field iteration for a class of nonlinear eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 30(4): 1773–1788, ???? 2009. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Yang:2000:SRO**

[YL00] Zhongpeng Yang and Jianzhou Liu. Some results on Oppenheim's inequalities for $M$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 21(3):904–912, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/33242`.

**Yang:2008:WPD**

[YL08] Hu Yang and Hanyu Li. Weighted polar decomposition and WGL partial ordering of rectangular complex matrices. *SIAM Journal on Matrix Analysis and Applications*, 30(2): 898–924, ???? 2008. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ye:2016:SVD**

[YL16] Ke Ye and Lek-Heng Lim. Schubert varieties and distances between subspaces of different dimensions. *SIAM Journal on Matrix Analysis and Applications*, 37(3):1176–1197, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Yu:1997:MAT**

[YLA97] S. Yu, G. A. Latham, and R. S. Anderssen. Matrix analysis of a two-stage-splitting iteration for maximum penalized likelihood estimation. *SIAM Journal on Matrix Analysis and Applications*, 18(2):348–359, April 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26016`.

**Yalamov:1998:SPA**

[YP98] Plamen Yalamov and Velisar Pavlov. On the stability of a partitioning algorithm for tridiagonal systems. *SIAM Journal on Matrix Analysis and Applications*, 20(1):159–181, 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31441`.

**Peng:2012:SME**

[yPWjP12] Zhen yun Peng, Lin Wang, and Jing jing Peng. The solutions of matrix equation $AX = B$ over a matrix inequality constraint. *SIAM Journal on Matrix Analysis and Applications*, 33(2):554–568, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Yserentant:2022:MCE**

[Yse22] Harry Yserentant. A measure concentration effect for matrices of high, higher, and even higher dimension. *SIAM Journal on Matrix Analysis and Applications*, 43(1):464–478, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/20M1376029`.

**Ye:2017:FCI**

[YXC+17] Xin Ye, Jianlin Xia, Raymond H. Chan, Stephen Cauley, and Venkataramanan Balakrishnan. A fast contour-integral eigensolver for non-Hermitian matrices. *SIAM Journal on Matrix Analysis and Applications*, 38(4):1268–1297, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ye:2021:PGP**

[YXS21] Xin Ye, Yuanzhe Xi, and Yousef Saad. Proxy-GMRES: Preconditioning via GMRES in polynomial space. *SIAM Journal on Matrix Analysis and Applications*, 42(3):1248–1267, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Ye:2020:ALR**

[YXY20] Xin Ye, Jianlin Xia, and Lexing Ying. Analytical low-rank compression via proxy point selection. *SIAM Journal on Matrix Analysis and Applications*, 41(3):1059–1085, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Yang:2010:FRP**

[YY10] Yuning Yang and Qingzhi Yang. Further results for Perron–Frobenius theorem for nonnegative tensors. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2517–2530, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Yang:2011:FRP**

[YY11] Qingzhi Yang and Yuning Yang. Further results for Perron–Frobenius theorem for nonnegative tensors II. *SIAM Journal on Matrix Analysis and Applications*, 32(4):1236–1250, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i4/p1236_s1`.

**Zaballa:1989:IFA**

[Zab89] Ion Zaballa. Invariant factor assignment on higher-order systems using state-feedback. *SIAM Journal on Matrix Analysis and Applications*, 10(2):147–154, ???? 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zaballa:1991:PAA**

[Zab91] Ion Zaballa. Pole assignment and additive perturbations of fixed rank. *SIAM Journal on Matrix Analysis and Applications*, 12(1):16–23, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhu:2013:BRQ**

[ZAK13] Peizhen Zhu, Merico E. Argentati, and Andrew V. Knyazev. Bounds for the Rayleigh quotient and the spectrum of self-adjoint operators. *SIAM Journal on Matrix Analysis and Applications*, 34(1):244–256, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhao:2015:RNA**

[ZBJ15] Zhi Zhao, Zheng-Jian Bai, and Xiao-Qing Jin. A Riemannian Newton algorithm for nonlinear eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 36(2):752–774, ???? 2015. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zeng:2016:SCD**

[Zen16] Zhonggang Zeng. Sensitivity and computation of a defective eigenvalue. *SIAM Journal on Matrix Analysis and Applications*, 37(2):798–817, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zeng:2019:SSI**

[Zen19] Zhonggang Zeng. On the sensitivity of singular and ill-conditioned linear systems. *SIAM Journal on Matrix Analysis and Applications*, 40(3):918–942, ???? 2019. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zouzias:2013:REK**

[ZF13] Anastasios Zouzias and Nikolaos M. Freris. Randomized extended Kaczmarz for solving least squares. *SIAM Journal*

*on Matrix Analysis and Applications*, 34(2):773–793, ???? 2013. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhou:2014:CMC**

[ZF14] Anwa Zhou and Jinyan Fan. The CP-Matrix completion problem. *SIAM Journal on Matrix Analysis and Applications*, 35(1):127–142, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:2007:SFA**

[ZFW07] Zhenyue Zhang, Min Fang, and Jing Wang. Stability and fast algorithms of incomplete *LU* factorization with zero-fill for nine-diagonal matrices. *SIAM Journal on Matrix Analysis and Applications*, 29(2): 530–553, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:2001:ROA**

[ZG01] Tong Zhang and Gene H. Golub. Rank-one approximation to high order tensors. *SIAM Journal on Matrix Analysis and Applications*, 23(2):534–550, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35204`.

**Zhang:2010:MSP**

[ZGP10] Qiang Zhang, Richard T. Guy, and Robert J. Plemmons. Matrix structures and parallel algorithms for image superresolution reconstruction. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1873–1893, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:2003:PML**

[ZH03] Zhenyue Zhang and Yushan Huang. A projection method for least squares problems with a quadratic equality constraint. *SIAM Journal on Matrix Analysis and Applications*, 25(1):188–212, 2003. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39871`.

**Zwaan:2017:KST**

[ZH17] Ian N. Zwaan and Michiel E. Hochstenbach. Krylov–Schur-Type restarts for the two-sided Arnoldi method. *SIAM Journal on Matrix Analysis and Applications*, 38(2):297–321, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zimmermann:2022:CRL**

[ZH22] Ralf Zimmermann and Knut Hüper. Computing the Riemannian logarithm on the Stiefel manifold: Metrics,

methods, and performance. *SIAM Journal on Matrix Analysis and Applications*, 43 (2):953–980, ???? 2022. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/21M1425426`.

**Zha:1991:RSV**

[Zha91] Hong Yuan Zha. The restricted singular value decomposition of matrix triplets. *SIAM Journal on Matrix Analysis and Applications*, 12(1):172–194, January 1991. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zha:1993:CPA**

[Zha93a] Hong Yuan Zha. A componentwise perturbation analysis of the $QR$ decomposition. *SIAM Journal on Matrix Analysis and Applications*, 14(4): 1124–1131, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:1993:SSN**

[Zha93b] Guo Dong Zhang. On the sensitivity of the solution of nearly uncoupled Markov chains. *SIAM Journal on Matrix Analysis and Applications*, 14(4):1112–1123, October 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zha:1995:CLL**

[Zha95] Hong Yuan Zha. Comments on: "Large least squares problems involving Kronecker products" [SIAM J. Matrix. Anal. Appl. **15** (1994), no. 1, 219–227 and MR 95d:65024] by D. W. Fausett and C. T. Fulton. *SIAM Journal on Matrix Analysis and Applications*, 16(4):1172, October 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/26500`. See [FF94].

**Zhan:1997:ISV**

[Zha97] Xingzhi Zhan. Inequalities for the singular values of Hadamard products. *SIAM Journal on Matrix Analysis and Applications*, 18(4):1093–1095, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30964`.

**Zhan:1999:IUI**

[Zha99] Xingzhi Zhan. Inequalities for unitarily invariant norms. *SIAM Journal on Matrix Analysis and Applications*, 20(2):466–470, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/32382`.

**Zhan:2000:SVD**

[Zha00] Xingzhi Zhan. Singular values of differences of positive semidefinite matrices. *SIAM Journal on Matrix Analysis and Applications*, 22(3):819–823, 2000. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/36984`.

**Zhang:2001:MDR**

[Zha01] Jun Zhang. A multilevel dual reordering strategy for robust incomplete *LU* factorization of indefinite matrices. *SIAM Journal on Matrix Analysis and Applications*, 22(3):925–947, 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35425`.

**Zhang:2004:ECI**

[Zha04] Xiao-Dong Zhang. The equality cases for the inequalities of Fischer, Oppenheim, and Ando for general $M$-matrices. *SIAM Journal on Matrix Analysis and Applications*, 25(3):752–765, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/41008`.

**Zhan:2005:EER**

[Zha05] Xingzhi Zhan. Extremal eigenvalues of real symmetric matrices with entries in an interval. *SIAM Journal on Matrix Analysis and Applications*, 27(3):851–860, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:2010:RNM**

[Zha10a] Lei-Hong Zhang. Riemannian Newton method for the multivariate eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 31(5):2972–2996, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v31/i5/p2972_s1`.

**Zhao:2010:LFC**

[Zha10b] Yun-Bin Zhao. The Legendre–Fenchel conjugate of the product of two positive definite quadratic forms. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1792–1811, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:2017:MMA**

[Zha17] Teng Zhang. A majorization-minimization algorithm for computing the Karcher mean of positive definite matrices. *SIAM Journal on Matrix Analysis and Applications*, 38(2):387–400, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zheng:1996:FSG**

[Zhe96] Dao-Sheng Zheng. Further study and generalization of Kahan's matrix extension theorem. *SIAM Journal on Matrix Analysis and Applications*, 17 (3):621–631, July 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). See note [Zhe98].

**Zheng:1998:NFS**

[Zhe98] Dao-Sheng Zheng. Note on "Further Study and Generalization of Kahan's Matrix Extension Theorem". *SIAM Journal on Matrix Analysis and Applications*, 19(1):277–278, January 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31443`. See [Zhe96].

**Zhlobich:2012:DAS**

[Zhl12] Pavel Zhlobich. Differential *qd* algorithm with shifts for rank-structured matrices. *SIAM Journal on Matrix Analysis and Applications*, 33(4):1153–1171, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:2016:CCR**

[ZHQ16] Xinzhen Zhang, Zheng-Hai Huang, and Liqun Qi. Comon's conjecture, rank decomposition, and symmetric rank decomposition of symmetric tensors. *SIAM Journal on Matrix Analysis and Applications*, 37 (4):1719–1728, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zheng:2016:MTI**

[ZHY16] Ning Zheng, Ken Hayami, and Jun-Feng Yin. Modulus-type inner outer iteration methods for nonnegative constrained least squares problems. *SIAM Journal on Matrix Analysis and Applications*, 37(3):1250–1278, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:2005:HGH**

[ZHZ05] Zhong-Zhi Zhang, Xi-Yan Hu, and Lei Zhang. On the Hermitian-generalized Hamiltonian solutions of linear matrix equations. *SIAM Journal on Matrix Analysis and Applications*, 27(1):294–303, January 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39672`.

**Zietak:1995:SAM**

[Zie95] K. Zietak. Strict approximation of matrices. *SIAM Journal on Matrix Analysis and Applications*, 16(1):232–234, January 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24138`.

**Zimmermann:2017:MAA**

[Zim17] Ralf Zimmermann. A matrix-algebraic algorithm for the Riemannian logarithm on the Stiefel manifold under the canonical metric. *SIAM Journal on Matrix Analysis and Applications*, 38(2):322–342, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhu:2017:RRM**

[ZK17] Peizhen Zhu and Andrew V. Knyazev. Rayleigh–Ritz majorization error bounds of mixed type. *SIAM Journal on Matrix Analysis and Applications*, 38(1):30–49, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhao:2023:EED**

[ZL23] Kang Zhao and Zhong Y. Liu. Eigenvalue embedding of damped vibroacoustic system with no-spillover. *SIAM Journal on Matrix Analysis and Applications*, 44(3):1189–1217, ???? 2023. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `https://epubs.siam.org/doi/10.1137/22M1527416`.

**Zhang:2010:FAG**

[ZLN10] Lei-Hong Zhang, Li-Zhi Liao, and Michael K. Ng. Fast algorithms for the generalized Foley–Sammon discriminant analysis. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1584–1605, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:2012:BRA**

[ZLQ12] Xinzhen Zhang, Chen Ling, and Liqun Qi. The best rank-1 approximation of a symmetric tensor and related spherical optimization problems. *SIAM Journal on Matrix Analysis and Applications*, 33(3):806–821, ???? 2012. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zanna:2002:GPD**

[ZMK02] A. Zanna and H. Z. Munthe-Kaas. Generalized polar decompositions for the approximation of the matrix exponential. *SIAM Journal on Matrix Analysis and Applications*, 23(3):840–862, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/37755`.

**Zheng:2017:CNM**

[ZMW17] Bing Zheng, Lingsheng Meng, and Yimin Wei. Condition numbers of the multidimensional total least squares problem. *SIAM Journal on Matrix Analysis and Applications*, 38(3):924–948, ???? 2017. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zeng:2021:ICT**

[ZN21] Chao Zeng and Michael K. Ng. Incremental CP tensor decomposition by alternating minimization method. *SIAM Journal on Matrix Analysis and Applications*, 42(2):832–858, ???? 2021. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zimmermann:2018:GSU**

[ZPW18] Ralf Zimmermann, Benjamin Peherstorfer, and Karen Willcox. Geometric subspace updates with applications to online adaptive nonlinear model reduction. *SIAM Journal on Matrix Analysis and Applications*, 39(1):234–261, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:2010:SIS**

[ZQ10] Yanxia Zhang and Li Qiu. From subadditive inequalities of singular values to triangle inequalities of canonical angles. *SIAM Journal on Matrix Analysis and Applications*, 31(4):1606–1620, ???? 2010. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:2014:TSA**

[ZQZ14] Liping Zhang, Liqun Qi, and Guanglu Zhou. $M$-tensors and some applications. *SIAM Journal on Matrix Analysis and Applications*, 35(2):437–452, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhu:1995:PAS**

[ZR95] Huixia Zhu and Gerhard X. Ritter. The $p$-product and its applications in signal processing. *SIAM Journal on Matrix Analysis and Applications*, 16(2):579–601, April 1995. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24449`.

**Zecevic:1994:BPN**

[ZŠ94] A. I. Zečević and D. D. Šiljak. A block-parallel Newton method via overlapping epsilon decompositions. *SIAM Journal on Matrix Analysis and Applications*, 15(3):824–844, July 1994. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/22911`.

**Zhou:2007:CDA**

[ZS07] Yunkai Zhou and Yousef Saad. A Chebyshev–Davidson algorithm for large symmetric eigenproblems. *SIAM Journal on Matrix Analysis and Applications*, 29(3):954–971, ???? 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zeng:2014:BSA**

[ZS14] Linghui Zeng and Yangfeng Su.

A backward stable algorithm for quadratic eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 35 (2):499–516, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:2018:LML**

[ZSYJ18] Lei-Hong Zhang, Chungen Shen, Wei Hong Yang, and Joaquim J. Júdice. A Lanczos method for large-scale extreme Lorentz eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 39 (2):611–631, ???? 2018. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zulehner:2011:NNR**

[Zul11] Walter Zulehner. Nonstandard norms and robust estimates for saddle point problems. *SIAM Journal on Matrix Analysis and Applications*, 32 (2):536–560, ???? 2011. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/simax/resource/1/sjmael/v32/i2/p536_s1`.

**Zeinaly:2020:LPS**

[ZvSD20] Yashar Zeinaly, Jan H. van Schuppen, and Bart De Schutter. Linear positive systems May have a reachable subset from the origin that is either polyhedral or nonpolyhedral. *SIAM Journal on Matrix Analysis and Applications*, 41(1): 279–307, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:2005:NSC**

[ZWF05] Zhenyue Zhang, Jing Wang, and Min Fang. Necessary and sufficient conditions for the existence of positive definite solutions to the symmetric recursive inverse eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 26(4):1115–1131, October 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/43133`.

**Zhang:2014:RRA**

[ZXL14] Lei-Hong Zhang, Jungong Xue, and Ren-Cang Li. Rayleigh–Ritz approximation for the linear response eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 35 (2):765–782, ???? 2014. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zheng:2021:PSC**

[ZXS21] Qingqing Zheng, Yuanzhe Xi, and Yousef Saad. A power Schur complement low-rank correction preconditioner for general sparse linear systems. *SIAM Journal on Matrix Analysis and Applications*, 42(2): 659–682, ???? 2021. CO-

DEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:1993:IHI**

[ZY93] Xiao Dong Zhang and Shang Jun Yang. An improvement of Hadamard's inequality for totally nonnegative matrices. *SIAM Journal on Matrix Analysis and Applications*, 14(3): 705–711, July 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhang:2020:EBM**

[ZYSY20] Lei-Hong Zhang, Wei Hong Yang, Chungen Shen, and Jiaqi Ying. An eigenvalue-based method for the unbalanced Procrustes problem. *SIAM Journal on Matrix Analysis and Applications*, 41(3): 957–983, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zha:1998:CCP**

[ZZ98a] Hongyuan Zha and Zhenyue Zhang. A cubically convergent parallelizable method for the Hermitian eigenvalue problem. *SIAM Journal on Matrix Analysis and Applications*, 19(2):468–486, April 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30203`.

**Zhong:1998:FAI**

[ZZ98b] Xu Zhong and You Zhaoyong. A fast algorithm for inversion of confluent Vandermonde-like matrices involving polynomials that satisfy a three-term recurrence relation. *SIAM Journal on Matrix Analysis and Applications*, 19(3):797–806, July 1998. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30749`.

**Zha:1999:MLR**

[ZZ99] Hongyuan Zha and Zhenyue Zhang. Matrices with low-rank-plus-shift structure: Partial SVD and latent semantic indexing. *SIAM Journal on Matrix Analysis and Applications*, 21(2):522–536, 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34444`.

**Zhang:2001:SPA**

[ZZ01] Zhenyue Zhang and Hongyuan Zha. Structure and perturbation analysis of truncated SVDs for column-partitioned matrices. *SIAM Journal on Matrix Analysis and Applications*, 22(4):1245–1262, ???? 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

**Zhou:2002:VGF**

[ZZLY02] Jie Zhou, Yunmin Zhu, X. Rong Li, and Zhisheng You. Variants of the Greville formula with applications to exact recursive least squares. *SIAM Journal on Matrix Analysis and Applications*, 24(1):150–164, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38819`.

**Zhang:2002:LRA**

[ZZS02] Zhenyue Zhang, Hongyuan Zha, and Horst Simon. Low-rank approximations with sparse factors I: Basic algorithms and error analysis. *SIAM Journal on Matrix Analysis and Applications*, 23(3):706–727, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35963`.

**Zhang:2004:LRA**

[ZZS04] Zhenyue Zhang, Hongyuan Zha, and Horst Simon. Low-rank approximations with sparse factors II: Penalized methods with discrete Newton-like iterations. *SIAM Journal on Matrix Analysis and Applications*, 25(4):901–920, 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39447`.

**Zizler:2002:FAE**

[ZZTA02] Peter Zizler, Rob A. Zuidwijk, Keith F. Taylor, and Shigeru Arimoto. A finer aspect of eigenvalue distribution of selfadjoint band Toeplitz matrices. *SIAM Journal on Matrix Analysis and Applications*, 24(1):59–67, 2002. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/34915`.