A Bibliography of Publications about the Fast Multipole Method

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Title word cross-reference

1 [TPKP12]. \$15K [WGL+98]. 2
[ Bord04, HHL+21, Lab98, Liu08, ON08a, RS94, VGZB09, WYW05, WXQL08]. 3
[BDMN03b, BHR04, BHGR04, CDM98, DDL13, Dar02, GP08, GD03, HLN24,
JMC97, LHYS24, NW89, NH97, ON08b, PG94, Pta21, QCG15, Sar03, TCD17, WY05,
WLL+07, WZC+17, WZC19, WZC+20, WZC21a, WZC21b, iYNK02, YB01, ZY05].

\$50/Mflop [WSB+97]. \$7.3/Mflops [KFM99]. 3 [PG96b]. h = 0 [DNS90]. H2
[HXC21]. K [MG05, CK95b].
K(x, y) = K(x − y) [LX22]. LU [MG07]. m
[YRB16]. R11 [CBN02]. H2 [Bör23]. N
[Aar85, Alu94, APG94, Alu96, AGPS98, AAL+01, And99, Ano94a, Ano94c, ADB94,
ABDBG099, Bag02, Bar86, BADP06, BAAD+97, BADG00, BAD01, BS97, BN97,
BOX00, Bor86, BDS07, BME90, BME93, BEM94, DH86, Dem95, Dem96a, Dem96b,
DHM03, FRE+08, FM95, FM96, FQG+92, HTG02, HJ96, IFM09, IHM05, Kat89,
KFM99, KFMT00, KMT94, LKM02, Liu94, MIES90, MTES94, MT95, MD12, MG05,
MMC99, McD97, NH06, Oku96, PG05, Per99, PRL03, SWW94, Shl96, Sha06, SP99,
Sin92, SHG95, SHT+95, SRK+12, TMES94, TWYC06, TYON12, Ten98, TL14,
WPM+02, WS92, WS93, WN14, WSWL95, WSH+12, Xu95, Yin15, YF05, Ano94b,
CK95a, CK95b, GKS94, GKS98, Gre90b, HNY+09, HN10, HS95, INS+20, KK95,
Xue98]. N log N [AO10, DYP93, ADO11]. ν
\[ O(\log_2 n) \] [JBL02]. \( O(N) \) [BSL11, Deh02, DTG96, OKF14, Xue98]. \( O(N \log N) \) [BH86, FGM11, PJY95]. \( r^{-\frac{\lambda}{2}} \) [CJ05]. \( R^{-\nu} \) [SH07]. \( r \pm 1.12 \) [Pan95].

-Body

[Ano94b, CK95b, GKS94, KK95, BEM94, CK95a, GSK98, G906b, HNY+09, HN10, HS95, INS+20, Xue98, AGPS98, AAL+01, And99, ADB94, Bag02, BADG00, BS97, BN97, BOX00, FM96, HTG02, HJ96, KFM99, KFM00, SWW94, SHG95, SHT+95, Ten98, WPM+02, WS93, Xu95, Yin15, YF05, Aar85, Aar94, APG94, Alu96, Ano94a, Ano94c, ADBGP99, Bar86, BADP96, BAAD+97, BAD01, BDS07, BME90, BME93, DH86, Dem95, Dem96a, Dem96b, DFM03, FRE+08, FM95, FOM99, IFM09, IHM05, Kat89, KTM94, LKM02, Liu94, MIES90, MTES94, MT95, MD12, MG05, MMC99, NMIH06, Oku96, PGB05, Per99, PRL03, Sa96, Sha06, SP99, Sin92, SRK+12, TMES94, TWY06, TYON12, TYNO12, TL14, WS92, WN14, WSWL95, WSH+12].

-2-D \[ [FMI+93, HF98, KMT94], 1.349 \] \[ [MKFD02, MKFD03, MFKN03], 6 \] \[ [Ano97b], 2A \] \[ [EIM+92], 2D \] \[ [CCZ97], 2nd \] \[ [HOST95, Mak93], 2A \]

-3-D \[ [Lab98], 3-D [HOST95, Mak93] \]

-Accurate [BSSJ23, SRPD06, AHLP93, Dac06, EG90a, ACM97, HTA+97, IEEE97].

-accuracy [CDCD97, DY98, CB09, GL96, JP89, RKRRL22].

-Accelerated [BSSJ23, CL+92, EB96, SH07, WZC+17, WN14, AC17, BHE+94, BHER94, EB94, EG01, GD90, GODZ10, GAD13, Ham11, HN08, LCM07, MR07, QCG15, Tak14, WLL+07, WVK21, ZD05].

-Acceleration [GHRW98, MG90, WC94a].

-Accelerator [ATMK03, MD12].

-Accomplishments [Ano90].

-Accentuate [XTH09].

-Accuracy [CDCD97, DY98, CB09, GL96, JP89, RKRRL22].

-accuracy [ATMK03, MD12].

-2-D \[ [BCAD06, GA96b, MHI07, Spr05], 2-D [GA96b], 2-Pflops [MHI07], 20.5Gflops [MD12], 20.5Gflops/W [MD12], 2003 [ACM03, CHJN03], 2009 [ERT12], 2011 [LCK11], 2012 [Hol12], 20th [Cip00], 240-Processor [WWF02], 25th [Ano95a], 29.5 [MKFD02], 2A [EIM+92], 2D [CCZ97], 2nd [HOST95, Mak93].

-3-D \[ [OME+92], 3-D [WY07a], 3051-66 [YB97], 33rd [IEEE92a], 3D [LO96b].

-4 \[ [Ano94a, FM95, FM96, MTES94, MT95, TMES94], 42 [HNY+09].

-Accelerating [ATMK03, MD12].

-Acceleration [ATMK03, MD12].

-Accelerator [ATMK03, MD12].

-Accomplishments [Ano90].

-Accuracy [CDCD97, DY98, CB09, GL96, JP89, RKRRL22].

-Accurate [BSSJ23, SRPD06, AHLP93, Dac06, EG90a, ACM97, HTA+97, IEEE97].

-accuracy [ATMK03, MD12].

-Accomplishments [Ano90].

-Accuracy [CDCD97, DY98, CB09, GL96, JP89, RKRRL22].
EG13, HHKP09, HHM19, ZGD+16].

achieves [WGL+98]. Achieving [SSF96].

ACM [ACM97, IEE02, Kar95].

ACM/IEEE [ACM97, Kar95], acoustic [AD05, BSL09, BN07, CWW08, GF06b, GF06a, HW10, TCW08, WJYO06, ZGD+16].

acoustic-structure [GF06b, GF06a].

acoustics [AD05, YBZ04, Yin06, YB12, ZCG00, ZBS11, ZCL+98, ZB95, ZD05, Lea92, MB16].

Algorithms [APG94, AGPS98, Ano94c, ADBGP99, BF78, Bha97, BN97, Boy92a, CK95a, Cip00, DMO00, DGR96, LCE+06, Liu94, MBS+00, MBS15, Pri94, Ten98, BCP08, BHE+94, BHER94, BME93, BEM94, DHM03, Ess95, Gre94, K+96, Mak93, PRT92, Pel98, WJ95, Yin09].

ALICE [HTG02]. All-to-All [HP95].

almost [FL13]. Alpha [WGL+98].

Alpha/Linux [WGL+98]. Alternative [AC05, CL91]. AMBER [DK93].

AMBERCUBE [DK93]. AMS [RSS96].

Analyse [Ano97b]. analyses [HM11, XWY+08]. Analysis [AP99, AP00, BH89, ERT12, HAS02, Hol12, JMC98, LCK11, Sat10, VTG91, Ano97b, Car07, Car09, Dar00a, EG13, JMC98, JKCGJ08, KSC99, NH97, OC03, OLL04, Pel98, RC97, RSS96, SGD+04, SS07, Sud04, WY05, WY07a]. Analytic [ABD04, BSS96a, LDA14, BSS96b, DD13].

Analytical [Gus98, LBGS16, CC13].

analyze [SHM98]. Analyzing [CSMXX, JMC97, HLL+21, HLN24].

Arrange [AG88, Rod89]. Anger [CC04].

angular [GW08, WHG96b]. Animated [BT95]. anisotropic [AY02]. Ankara [Ano97b]. Annual [Ano95b, Ano96, Ano97a, IEE92a, Mak93, PA02]. anomalies [ON09a].

Antennas [IEE94a, IEE95, IEE96a, IEE97, MI95].

anterpolation [Sar03]. Appendix [Ano90].

Application [LSCM96, LJ96b, LJ96a, NH97, SG+04, TC17, VOD08, WSL+95, HNM03, ESR01, GROZ04, HH006, LWM+02, SGD+04, TC20, YR98].

Applications [CK95b, CCKL09, OSW05, RSBS19, BHER94, HNY+09, LGG+13, OF07,
Based [AAB+17, CD13, CCF23, GS29a, GS00, MPAA96, YB01, A010, BLA05, B98, BHG03, FMI+93, GROZ04, GKG00, GP08, GA24, HHK09, HLL08, HHL+21, HLL+18, KKLZ23, LM02, LDB06, LX23, Lx08, NN12, Sd22, Su04, Ta14, WL96, WCZ+20, WVK21, ZHPS11, ZGD+16].
bases [FB09, T03]. \textit{basis} [BLA05, BL97, BN98, BCR01, Buh03, CB02, GH08, GDC08, GD07a, LC07, Yin06]. \textbf{BE} [SGD+04]. \textit{Beach} [IEE95]. \textit{Behaviour} [ON09a], \textit{Beltrami} [SHMC97, SM97, SMCM97]. \textbf{BEM} [Sel22, A08, B07, FPG05, GF06b, GF06a, H05, HLN24, MB05, Hu09, PSJ04, WWY05, XWT09, XXY+08, hYtlWbWL08, YB+11, ZY05, ZGD+16].

\textbf{BEM-FEM} [MB05]. \textit{Beowulf} [WWF02]. \textbf{Best} [Cip00], \textit{better} [GA24]. \textit{Between} [AAB+17, Pie93, CDM98, RSZ09]. \textit{beyond} [ZB14]. \textbf{Biaxial}, \textit{Biaxial} [SHMC97, SM98].

\textit{BIE} [Lu08]. \textit{biharmonic} [GD06]. \textit{billion} [YB+11]. \textbf{binary} [PD89]. \textit{binding} [KSS10]. \textbf{biomacromolecular} [SKT94].

\textbf{Biomolecular} [SRPD06, YB+11, GCH+18, KP08, LCM07, LCHM10, LCHM13, SKT93].

\textit{biomolecules} [A09, FMG9]. \textbf{Biot} [Ros06]. \textit{black} [FD09, MFK00, WCLD21].

\textbf{black-box} [FD09, WCLD21]. \textit{BLAS} [CFF08, CFR10]. \textit{Blob} [DD95]. \textbf{blobs} [HM95]. \textit{block} [CG04]. \textit{block-diagonal} [CG04]. \textit{blocking} [TSM16]. \textit{Blue} [FR+08]. \textbf{BO12} [LB91]. \textit{board} [ATMK03].

\textbf{Bodies} [BT95]. \textit{Body} [AGPS98, AAL+01, And99, A094b, A094c, Bad94, B02, G04, BS97, BN97, BOX00, CK95b, FM96, GKS94, HP95, HTG02, HJ96, KFM99, KFM00, KK95, Pie93, SLW94, SHG95, SHT+95, Ten98, WPM+02, WCZ+17, WS93, Xn95, Yin15, Y05, Aar85, Ahu94, APG94, Ahu96, A094a, A094c, ADBGP99, App85, Bar86,}
BADP96, BAAD$^+$97, BAD01, BDS07, BME90, BME93, BEM94, CK95a, DH86, Dem95, Dem96a, Dem96b, DM03, EIM$^+$92, EFT$^+$93, FRE$^+$08, FM95, FQG$^+$92, GKS98, Gre90b, HFKM98, HNY$^+$09, HN10, HS95, IFM09, INS$^+$20, IHM05, Kat89, KMT94, LKM02, Liu94, MIES90, MTES94, MT95, MD12, MG05, MMC99, MHE06, OME$^+$92, Oku96, PGB05, Per99, PG96a, PRL03, Sal96, Sha06, SP99, Sin92, SRK$^+$12, SCM$^+$90, TMES94, TWYC06, TYON12, TYNO12, TL14, WS92, WN14, WSWL95.

body

[BWSH$^+$12, Xue98, ZBG15].

Bologna

[Ano95a].

Boltzmann

[BH03, LCHM10, LCHM13, WZC21b]. Book

[Gav11].

Born

[ADO11, HC10].

Boston

[K$^+$96]. both [HN$^+$09].

Boulevard

[ACM99]. boundaries [Mil08]. Boundary

[BSSJ23, BH03, Boe23, BR93, Bre04, LJ96b, LJ96a, MBA97, OWS06b, SO07, Sel22, WZC$^+$17, WMOZ22, WSW$^+$95, YRB16, Ap03, Atk97, BSO9, Bes00, BWS$^+$95, BHR04, BHGR04, Car06, Car07, CWHG97, CWK08, DMC20, Gav97, GBMN06, Gav11, GOS99, GP08, GD90, GODZ10, GAD13, Ham11, HHL$^+$21, KMC09, KCF$^+$05, LS05, LOSZ07a, LOSZ07b, LCPQ18, LHL08, Lin95, Lin08, Lin09, LC94, Mil08, OWS05, OWS06a, Of08, OKS09, ON08a, ON09a, ON09b, PN95, QCG15, RS20, R$^+$97, SGG$^+$04, Sat10, SK93, Sin95, Tak14, TCD17, TCD20, TW03, Tau04, VGZB09, WY05, WY07b, WY07a, WLB22, WSWL95, XJM08, Yin09, iYNK02, YAO18, YAO20, YSM05, BR93].

Boundary-Integral [LJ96b].

boundary-value [Lin95]. Bounds

[GS98a, GS00, WK18]. box

[FD09, WCLD21]. breast [ES04].

Breit

[JD$^+$18].

Broadband [WJO06, GD09]. Brownian

[DHM03].

Building [TD09]. buried

[ESRS01, GSC01].

Burton

[Sel22].
Convergence [FDvW21, VTG91, Lab98, RO04].
convolution [BKM09, HW10, PSN04].
cooperation [ATMK03]. Coordinate [BF78], coordinates [HF92].
Copper [MC92]. core [HYS21, INS+20, LHYS24, MHI07].
Corrected [Das10, GORV21]. correction [JH08]. corrections [MCBB07]. correlated [Sal96].
Corrections [Dac10, GORV21]. correction [JH08]. corrections [MCBB07]. correlated [Sal96].
Correlations [ZQSW94]. Cosmological
Coulomb [ADG96, BFO99, CFH89, DNS90, DKG92a, DKG92b, DTG96, GGM01, GH02, HJZ09, HLL+18, HS92, SFS96, ZHS10].
Coulombic [HA17, PG96b, SKT93]. Coupled [LS05, MBS15, PB94, SGD+04, NMD99, RSBS19].
Coupling [MD98, MSS20]. course [BG97]. CPU [HEGH14].
crack [iYNK02]. cracks [ON08a, WYW05]. CRAY [BAAD+97].
creeping [Kro99, Kro01, Kro02]. Cross [Gue97, GP08]. Crystal [MPPA96].
crystals [ON08b]. CS [Dem95, Dem96a, Dem96b]. Cubic [WWF02]. CUDA [KKB+21], cultura [Ano95a].
cutoffs [DKG92b]. cylinders [CG97, ZCG00].
Cylindrical [SHMC97, SME97, SM97, SHM98].
D [HHL+21, NH97, WZC21b, BDMN03b, BHR04, BHG904, CD98, DDL13, Dar02, GROZ04, GP08, GD93, GAA9b, HLN24, JMC97, Liu08, LHYS24, NW89, ON08a, ON08b, PG94, Pta21, QC95, RS94, Sar03, TCD17, TPK12, VGB90, WYW05, WY05, WY07a, WLL+07, WXLQ08, WZC+17, WZC19, WZC+20, WZC21a, iYNK02, YB01, ZY05]. Dame [IEE96c].

dangers [BS93]. Dark [ZQSW94]. Data
AAL+01, And99, BGLM05, HJ96, LY14,
NPR93, SS95, SHT+95, WPM+02, BAPD96,
BAAD+97, DR95, KP08, LOSZ07a, RŠŽ09,
WS92, YGSR01]. Data-driven [LY14].
Data-Parallel [HJ96, NPR93].
data-sharing [BAPD96]. Data-Parallel [BADP96].
data-sparse [LOSZ07a]. databases [Mak93]. DC [IEE94c]. debugging [RC97].
December [Ano92, IEE98, Kar95, K+96, Rod89].
Decomposition [CK95b, BJWS96, BP03, BCOY93, BCOY94, CvlHMS94, CWD08, LM02, OSTER06b, RTA+08, ZT07].
Decoupled [PGdS+15]. deferred [JH08].
deformable [Ros06, ZD05]. della [Ano95a]. Delta [FQG+92]. Dense
[CPD17, GSS98b, BGGC06, CG97, PG94].
densities [GY08]. Density [AC94, BS19, LBGS16, PB94, WWF02, CK20, KAN95, KAN96, MSS20, WJGHG96a, WJGHG96b].
dependence [RC97], dependent
[MD98, MSS20]. deployment [FL13].
Derivation [WH94], derivative [BN07].
Derivatives [BSS96b]. Derive [RGK91].
Descent [JMC97, JMB98, ESRS01].
Descent-Fast [ABMC98]. description [HF92].
Design [BG1+99, Lea92, ZBS15, And08]. detect
[TD09]. Detection
[BT95, ESRS01, JdR+18]. Determination
[PN94, Dac06]. Developer [IEE96c].
Development [ATMK03, TDBE11].
developments [CC15]. Diagional
[Rah96, AP99, CG04, ESM98, KSC99, Rok98].
Diagonalizations [HC08]. Diego [Kar95].
Dielectric [BVW96, MG11, CD07, DOC07,
EG09a, Erg11, JBCM98, WZC21b, ZCG00].
difference [LC14], different
[BME93, BEM94]. Differentiation
[DGR96, KL+06, TXL19]. Difficulties
[BSS97]. Diffusion
[BSSJ23, CM06, KP08, STZ14]. digest
[IEE94a, IEE95, IEE96a, IEE97]. DIMACS
Bha97. dimension [MR07]. Dimensional
[JMBC98, LS93, Pri94, SC95, WSW+95, BSL09, BL97, BCR01, CWK08, CC10, CC12, ESRS01, ES04, ECL02, ESM98, GH98, GD90, Kro01, Lab98, LCQF18, LQGQ21, NT09, OLLL03, PSPS95, PSS95, RR03, SK04, Tak14, TC09, TG08, WY07b, WSWL95, XJM08, YAO20].

Dimensions [CS98a, LO96a, McK96, Nil04, RRR05, SL91, BPT07, CGR99, CHL06, CCG06a, CCG06b, EG01, GR88a, GR97, GD06, LB92b, MCBB07, Rok90, Rok98, Sel22, SKPP95, TSIM16, YBZ04, SL97a].

dipolar [CPP93, CFH89, KN95].

Direct [Aar85, CPD17, BME90, BME93, BEM94, FL13, GL96, GA24, LHL08, NMH06].

direction [HM95]. Directional [BPT+14, CCFG23]. directions [YAO20].

discretization [BDMN03a, BDMN03b, Dar02, GBMN06]. discretizations [Beb06]. Discretized [VTG91]. dispersions [CG97].

displacement [RSBS19]. distorted [HC10].


dna [FOCB96]. domain [BCOY93, BCOY94, CWD08, GP08, LM02, Liu08, LCZ07, Mil08, OSW06b, OFH+08, RS09, WW20]. domains [BHR04, GGM93, GK04, RS20]. Don’t [Bar90]. doubly [GK04]. doubly-periodic [GK04].


dual-level [LCQF18]. Dynamic [HEGH14, BAAAD+97, CK95a, FG96, MG05]. Dynamical [SSW94, WSWL95].

Dynamics [BGGT90, BHGS90, BP88, CDCD97, HM86, JBL02, LCP93, MPPA96, NT96, OKF14, Sch94, TBEE11, WLM99, ATMK03, AIIS+21, BSL11, BAL91, BSS97, BCL+92, BHE+94, BHER94, BCOY93, BCOY94, BP93, CvHMS94, DK93, EGHT97, FMI+93, GDDK89, GKZ07, HS90, Ich02, KM00, KP05a, LM02, LBC91, LB+97, LMCP92, LWM+92, LRI+99, NKV94, NT94, OMH+94, OYK+14, OP07, PGB05, SF18, Ske89, VGB09, VMC00, WS91, Win95, ZB95].

Dynamo [BSL11].

Economization [LRW95]. Editor [GW98]. Editors [Cip00, MB+00, DSO0]. EEG [KCF+05]. effects [AB95, BPT85].

Efficiency [HZH+18, HLL+18, KK16]. Efficient [BS97, DH04a, EG08, HS08, HYS21, NT96, RS06, SRT93, Ami00, App85, Bar86, BHR04, CL91, CCZ97, CWD08, EG09b, GR88b, KM00, KKB+21, Kro01, KS98a, LDB96, OF08, PN95, RS20, TSIM16, WL96, WHG94, YF98, ZGD+16].

eigendecomposition [CG94]. eigensolver [ZGD+16]. Eighth [HT+97]. elastic [CCZ97, TC97]. elasticity [GKM96].

elastodynamic [CB14]. elastoplastic [WY07b]. Elastostatic [WZ+17, GG16, GH98, HLL08, Liu08, MB+05, iYNK02, ZY05].

elastostatics [OSW05, PN95]. Electric [Gus98, PNB94, ZZ93, ABD04, CS82, HF92, WFC08]. Electrically [HAS02, GDDC08].

Electrode [HB93]. Electrode-Electrolyte [HB93]. Electrolyte [HB93, WZC21b]. electrolyte-dielectric [WZC21b].

Electromagnetic [CSMCxx, EMRV92, GA96a, GA96b, SLC97, BGCG06, Cur09, ESRS01, ES04, GH98, HYS21, LHY924, MG07, MD98].

electromagnetics [An95b, An96, An97a, An98].
CJL+97, Erg11, Gib08, LZL04, OMC08].

**Electromagnetism**
[CDGS03, CDGS05, BDMN03a, BDMN03b, Car06, Car07, DM07, Sy03], electron [GIS98, NH97].

**Electrostatic**
[CDGS03, CDGS05, BDMN03a, BDMN03b, Car06, Car07, CCZ97, DH04b, Fuj98, Gas97, GBMN06, GOS99, GD07b, Hav03, LZL04, LX22, LC93, NT09, ON08b, ON09a, ON09b, RŠ09, RO04, Rok85, Rok90, RS94, Tau04, TG08, VW02, WLL+07, WCZ+20, Yin09, ZC00].

**Equispaced** [CCFG23, DR95]. equivalent [RKRRL21]. equivalent/check [RKRRL21]. Erratum [BEM94, FLZB97a, SL97a]. Error [BH89, CC04, CC05, GKD09, GSS98a, GSS00, KSC99, OC05, PSS95, PSS95, SP97, Sac09, Sac10, Sac11, Pel98, WK18, Dar00a]. error-controlled [Sac09, Sac10]. Error-estimates [PSS95]. errors [AP00].

**estimates** [CC04, CC05, PSS95, PSS95, SP97]. Euler [RS94]. Eulerian [NMDK99]. EuMC [Ano95a]. European [Ano95a]. Evaluate [CDM98]. Evaluated [Z93]. Evaluating [Z93]. Evaluations [Z93]. examples [CX21].

**Exascale** [YB12]. Excitation [GIS98]. execution [BDS07, LY14, YF98]. exhibition [Ano95a]. Existence [YSM05]. Expansion [FDvW21, Le 97, OC05, Pan95, PSS96, AHLP93, OC03, WL96, WXQL08, WCZ+20, WK18]. Expansions [Boy92b, CJ05, McD97, RGKM12, AR91].
GB11, Lem98, MD98, SH07]. explicit [JP89, Pud16]. exponential [TWYC06].
Expressions [Pan95, CS82]. extended [KS11]. Extending [CDJ07, DC07].
Extension [AYO20, GY08, TYON12].
eXtensions [TYON12]. exterior [AP03]. Extraction [YB01, JC04, NW89]. extreme
[INS +20, WSH +12]. extreme-scale [INS +20, WSH +12].
facility [RTZ +96]. FAMUSAMM [EGHT97]. Far [LSCM96, HW11, KKB +21].
Far-Field [LSCM96, HW11]. Fast [And92, BT95, BSSJ92, BL97, BN98, BCR01, BPT07, BK15, BPT +14, BF78, BCP08, BKM09, BVW96, BV96b, BS00, BL98, BL05, BFO99, Boy92a, BHR04, BHGR04, BHGR05, CDM98, CDGS03, CDGS05, CL12, CC15, CMSM97, CC98a, CS98b, CW14, CBN20, CJL +97, CC10, CC12, CCFG23, CPD17, CKB11, Dac06, Dar97, D98, Dem95, Dem96a, Dem96b, DD95, DR95, DGR96, EB94, EB96, EMRV92, ESM98, EG13, FOCB96, Gas97, Gav11, GSC01, GP93, Gre94, GHRW98, G98, GORV21, Gue97, GA24, GD06, GD07a, GD08, GAD13, GA96a, GA96b, GS98b, HOST95, HAS02, HC10, HA17, HEGH14, JMC97, JMC98, JMB99, KL +06, KMC09, KK75, KCF +05, L94, L95, L96, BSH94, L95, WWS95, XWG94, WY05, WY07b, WXQ95, WZC +17, WZC19, WZC21a, WZC21b, WMOZ22, WSW +95, XWY +08, XM98, YR99, Yn09, Yin09, Yin15, YNS +09, YAO20, YRB16, YBO1, ZY05, AHP93, AR91, AGR88a, AGR88b, AP99, AP00, AP03, Ami00, ATMK03, AYO20, AII +21, AT +12, AC17, BDMN03a, BDMN03b, BS09, BG79, BS19, BWS +95, BV96a, BSS97, BCL +92, BP03, BSSF96a, BSSF96b, BK96, CD07, CX21, CC04, CC05, Car09, CGR88, CWHG97, CDF10, CWK08, CCKL99, CRR99, CHL06, CCG +06b, CRG01, CPP93, CWD08, CRW93]. fast [CB20, CFR08, CB09, Dac09, Dac10, DMC20, Dar02, DM07, DM12, Dar00a, Dar00b, DH04a, DH04b, DC07, DR96, ESRS01, ES04, Eng11, EG08, EG09a, EG09b, Erg11, EG01, FGM11, FLZB97a, FLZB97b, FP05, FD09, Fuj98, GDDC08, GBM06, GF06b, GF06a, GIS98, GY08, GR02, GG16, GROZ04, GKD09, GE13, GR87, GR88b, GG89, GG90, GS91, GH02, GCH +18, GD05, GD09, GZ01, Ham11, HMKP09, HS08, Hav03, HLY5, HD10, HW10, HW11, HU97, HR98, HG91, HHL +21, HLN24, HJZ09, HLL +18, IYK16, KKL23, Kan15, KM00, KSS10, KS11, KKB +21, Kon93, KLM +09, KS98a, KS98b, KS04, KP05a, KP05b, KP08, KAN95, KAN96, Lab98, LOSZ07b, LCL +12, LBGS16, LB91, LB92a, LB92b, L98, LZL04, LCQF18, LGQZ21, LGG +13, LX22, LX23, LC14, Liu08, LHYS24, LY14]. fast [LCZ07, LCM07, LCHM10, LCHM13, LWM +02, Mak99, MG07, MG09, MR07, MRH94, M820, NT09, NN12, NH97, OR89, OS05, OSW06a, OA08, OCK +03, OYK +14, OMC08, OLL03, OLL04, OFH +08, OP07, ON09a, PJ96, PS94, PS95, PS95, PA14, Pa21, Rah96, RRR03, RS20, RS90, RRRRL21, RRRL22, RSBS19, RTZ +96, RO04, RTA +08, RS97, RS06, RCWY07, SG +04, Sar03, Sat10, SL97a, SL97b, ST06, SWW99, SM97, SHM98, SH17, STK94, Sin95, SKPP95, SP97, Sta95b, SB96, ST02, SK04, Sud04, SYL14, TSIM16, TCD17, TCD20, T103b, T104, TCW08, TC09, TG08, TD09, VOD08, WK18, WYJO06, WL96, WT05, WY07a, WLL +07, WFC08, WZC +20, WLB22, WH94.
WJGHG96a, WHG96a, WJGHG96b, WHG96b, WVK21, WSWL95, XWT09, YB21, YRGS13, hYtWbWL08, YR98, YB97, YBZL03, YBZ04, fast [Yin06, YBK+11, YRN12, YB12, YRN13, iYNK02, YAO18, YSM05, ZCG00, ZT07, ZHPS10, ZHPS11, ZB14, ZX19, ZCL+98, ZKl+07, ZGD+16, ZB95, AAB+17, Boy92b, CD13, CB14, CKE08, CFR10, DDL13, EMT99, FL13, GR97, GS98a, Lea92, LCP93, RGKM12, SL91, SLCL98a, SLCL98b, YTK14].

Fast-multipole [Yin06, YBK+11, YBNY12, YB12, YBNY13, iYNK02, YAO18, YSM05, ZCG00, ZT07, ZHPS10, ZHPS11, ZB14, ZX19, ZCL+98, ZKl+07, ZGD+16, ZB95, AAB+17, Boy92b, CD13, CB14, CKE08, CFR10, DDL13, EMT99, FL13, GR97, GS98a, Lea92, LCP93, RGKM12, SL91, SLCL98a, SLCL98b, YTK14].

Fast-Multipole-Accelerated [BSSJ23].

FCCM [PA02].

FE [SGD+04]. February [B+95]. FEM [MB05]. ferrofluids [HHM19]. FFT [TPKP12]. FFTM [HLL08, LHL08, OLL04]. fiber [WY07a].

fiber-reinforced [WY07a]. Field [LSCM96, PA02, ABDO4, BGHR04, BHGR05, HW11, KKLZ23, KKB+21, MD98, OKS09, WFC08, Xue98]. Field-Programmable [PA02]. Fields [CK95b, Gre87, SHMC97, SMC97, SB98, YR99, CK99a, CG97, DC07, ESM98, GG16, Gre88, GR88a, GM94, GH98, HR98, OLLL03, Pel98, RKRR21, ST06, SM97, VOD08].

Fifth [Ano92, IEE96b, MC92, IEE98]. 

fitting [BP03, YR98]. fine [Bar86].

fine-grain [Bar86]. Finite [FST05, Lj09b, Lj09a, Bel06, Ich02, LS05, LCZ07, SGG+04, Sat10, VW02].

Finite-Element [Lj09b]. finite-sized [Sat10]. First [OKF14, AHP93].

First-Principles [OKF14]. FISC [SLCL98a, SLCL98b]. Fitted [AC94].

fitting [BS19, CK20, LBGS16, MSS20, TWYC06].

Flexibly [YS18]. floating [LKM02]. floating-point [LKM02]. Flow [Pri94, ECL02, Gre90a, GKM96, GK04, NMDK99, Tau03a]. Flows [GCG+99, WSW+95, BCH93, Kro99, Kro01, Kro02].

Fluid [SWW94, TDBEE11, Bat03, OMH+94, VGZB09, WSL95]. fluids [Ang17, BPK85, LRT+99, ZB14]. FLY [BAD01, BCAD06]. FM [BN07]. FM-BEM [BN07]. FMA [LO96b]. FMBEM [CWK08]. FMD [LWM+02].

FMM/BEM [Sel22]. Fock [KAN96, WJGHG96a, CK20, KAN95].


Forces [BP88, CDM98, NT96, Pie93, WZC+17, BH03, CKS91, DM90, LDB96]. Forest [MPZ21]. Form [CJ05, AP99, BCPO8, SH07]. Formation [FM96, FM95, SWJ+05]. forms [KSC99, Rah96, Rok98]. Formula [CL12]. formulae [NN12].

Formulation [AAL+01, JBL02, CB14, CWK08, CCKL09, CFR08, CFR10, DM07, GD07b, Liu08, OSW06a, Sel22, DM12]. Formulations [Ano94b, GKS94, MG11, EG09a, GKS98].

Fortran [GDK89]. Foundations [IEE92a]. four [BCR01]. four-dimensional [BCR01].

Fourier [Boy92b, EMT99, Boy92a, CD13, DR95, EB94, EB96, HLL08, HW10, LHL08, OLLL03, OLL04, Sar03, ZHPS11].

Fourier-Based [CD13].

Fourier-series-based [ZHS11]. FPGAs [LKM02]. Fractal [PD15]. Fractional [WHG96a]. fracture [XWT+08, ZBG15].

fracturing [RSBS19]. framework [TPKP12]. Francisco [B+95]. Fredholm [AHLP93, LX22]. free [BSL11, BKM09, Car06].

Frequencies [GHRW98, DH04b, ZC00]. Frequency [Nil04, BK96, DH04a, KMC09, QCG15, TSM16, ZC00]. frontiers [And08]. Fully [VTG91, RSBS19]. function [BLA05, BKM09, GDDC08, GD07a, GODZ10, LX17].

Functional [DRS96, BS19, KAN95, KAN96, LBGS16, MSS20, WJGHG96a, WJGHG96b].
Functions [Boy92b, BL97, BN98, BCR01, Buhl03, CBN02, KMC09, LCZ07, Tau03b, Yin06].

Future [EMT99].

GADGET [Spr05]. GADGET-2 [Spr05]. galactic [MFK00]. galaxies [SWJ +05]. Galaxy [FM96, FM95]. Galerkin [AHLP93, AP03, DMC20, HK805, OSW05, XWT09]. Gap [AAB +17]. Gauss [GS98a, GS91]. Gaussian [BSSF96a, BSSF96b, KS98a, Le 97, Ros06, Sal96]. Gegenbauer [CC05]. General [LCD14, McD97, BSL11, FG06, LX22]. Generalization [Boy92b]. Generalized [ADO11, CBN02, GR02, KAN95, KAN96, ST06, SK04, WJGHG96a, YR98]. generating [CB20]. Generation [HL15, Sal96]. geometric [CDF10].


guided-mode [Sat10]. Guidelines [BV96b, BV96a]. guns [NH97]. GvFMM [BSSF96a, BSSF96b].

H2Pack [HXC21]. half [BSL09, CB14, GSC01, GG16]. half-space [BSL09, CB14, GG16]. Halos [ZQS94].

Hamiltonian [CDF10]. Hanover [Mak93]. Hardware [HZH +18, ATMK03]. Harmonic [CAJ90, GD07b, GODZ10]. harmonics [PJY96, ST02, WL96, YR98]. HARP [KMT94]. HARP-1 [KMT94]. Hartree [KAN96, WJGHG96a, CK20, KAN95].


Helmholtz [AP03, BKM09, CD13, CC15, CHLO06, CCG +06a, CCG +06b, CC10, CC12, DDL13, Dar02, GHRW98, GD03, GD09, GD13, GS98b, NN12, NII04, OLL04, ON08a, QCG15, RS97, Rok98, Sta95b, Sta95a, TCD17, WVO2, WZC19, WCZ +20].

Hermite [KMT94, NMH06].

Heterogeneous [ADB94, HGD11, INS +20, LCL +12].
Hierarchical
[Alu94, AGPS98, BH86, BJWS96, BH88, Deh02, Dem95, Dem96a, Dem96b, HS95, HJ96, SHG95, SHT+95, EG09b, HNY+99, HSA91, JP89, MG05, PG94, Sin92, VCM00, Wam99, WS92, Xue98, YGSR01].
hierarchical-element [VCM00].
High
[ACM97, BGI+99, BK96, CFR08, CFR10, FHM99, GBMN06, HL15, Hol12, HZH+18, HXC21, IEE94b, IEE96b, IEE98, LCK11, Nil04, TWYC06, WWF02, DC07, GH08, GY08, IYK16].
High-Density
[WWF02].
High-frequency
[BK96].
High-order
[TWYC06, DC07, GH08].
High-Performance
[FHM99, IEE94b, HXC21, IYK16].
Higher
[PNB94, RRR05, HHL+21, Pta21].
Higher-order
[Pta21].
Highly
[BS97, KKB+21, OME+92, YBNY13, ZX19].
Hilton
[IEE90].
HODLR
[GA24].
homogeneous
[CL91, YRGS13].
Hut
[AAL+01, Ano94b, BJWS96, BGLM05, GKS94, GKS98, INS+20, MPZ21, SHT+95, WSH+12, ZBS11, ZBS15].
Hutnik
[Hutnik].
Hydraulic
[RBS19].
Hydrolac
[HBO02].
hydraulic
[GCH+18].
Hydraulics
[RBS19].
Hypersystemic
[DHM03].
Hypercubicle
[BME93, BEM94, BME90, DK93].
Hypercubes
[SS89].
I/O
[Mak93].
ICCAM
[BGPW00].
ICCAM-98
[BGPW00].
ICS
[KK88].
IEEE
[IEE96b, IEE02, PA02, ACM97, Kar95].
Igniting
[ACM03].
II
[CC05, PG95, WSB+97].
Illinois
[SLCL98a, SLCL98b].
imaging
[DC07].
imaging
[ANO97b].
impact
[GIS98].
Implementation
[And92, HJ96, INS+20, Liu94, MPPA96, NPR93, OP07, YB01, AHLPR93, Bes00, BJWS96, Bha97, CCG+96a, Dar06b, GR88b, Hav03, KP05b, KP08, LO96b, Mak93, OCK+03, RS06, Sin95, WHG94].
Implementations
[BS97, WLMP99, BHE+94, Buh03, TL14].
Implementing
[KN95, SL91, MRH14, SL97a].
Implications
[SN92, SHG95, DRS96].
implicit
[CC13], imposing
[YS18].
Improve
[HLL+18].
Improved
[MPPA96, YR99, HR98, PRT92, PA14].
Improvement
[Ich02].
Improving
[CDCD97, GSS98a, GSS00, MPZ21, KK16].
incident
[CCKL09].
inclusion
[HNO06].
Incomplete
[MG07].
Independent
[Alu94, AP94, AGPS98, Ano94c, SB98, LC23,MR07,RKRRL22,YS18, YBZL03, YBZ04, Yin06, ZHS11].
India
[IEE98].
indirect
[GAD13, Ham11, LHL08].
Induction
[Pie93].
industrial
[And08, GLS06, Sy103].
Inexact
[LOSZ07a, LOSZ07b, WL22].
Inextensible
[VGZB09].
Infinite
[KS04, MI08].
Inhomogeneous
[SHMC97, SMC97, CL91, SM97, SHM98].
Innovation
[ACM03].
Insight
[IEE02].
Institute
[BR93, HM86].
instruction
[TYON12, TYNO12].
Integral
[BSSJ23, CL12, GKM96, GK04, Kr099, L096b, L096a, MG11, SC95, ZC00, AP03, ABD04, AD05, Atk97, BDMN03a, BDMN03b, Bes00, Car06, Car07, CCZ97, CCKL09, DM07, EG09a, Fj098, Gas97, GBMN06, GOS99, LZL04, LX22, LC93, LC94, NT09, OSM06a, ON09a, RZ09, RO04, Rok85, Rok90, Ros06, Tak14, TW03, Tau04, VGZB09, WLL+07, WFC08, Yin09, iYNK02, ZX19, ZGD+16].
Integral-Equation
[MG11, EG09a].
Integrals
[BL05, Gus98, ZZ93, BL98].
Integration
[DGR96, Oku96, WZ+17, HLN24, NMH06].
integrations
[CDF10].
Integrator
integrators [Per99, SP99, KM00, KMT94].
Intel [FQG92]. Interacting [BP88, BP93].
interaction [FLZB97a, FLZB97b, Sha06].
[Per99, SP99, KM00, KMT94].

Interactions
BFO99, DD95, GGM01, LS93, ATMK03, A010, BAL91, BPK85, CFH89, CKB11, DKG92a, DKG92b, DKG92c, EGH97, Ess95, GH02, HJZ09, NT94, PJY95, SKT93, SKT93, ZHPS10. interatomic [CKS91].

Interacting [BP88, BP93].

Interactions
GF06b, GF06a, HLL+18, Kan15, YAO18, ZD05. Interactions
BFO99, DD95, GGM01, LS93, ATMK03, A010, BAL91, BPK85, CFH89, CKB11, DKG92a, DKG92b, DKG92c, EGHT97, Ess95, GH02, HJZ09, NT94, PJY95, SKT93, SKT93, ZHPS10. interatomic [CKS91].

InterCom [BSvdG+94]. interconnecting
LS05, LOSZ07a, LOSZ07b, OSW06b.

Intercontinental [ZGI+10]. Interfaces
HB93, Kro02. interfacial [Kro01].

Interpolation [Boy92a, CCFG23, DGR96, KLZ+06, BLA05, GD07a, KKLZ23, LX23, Sar03, Tak14, WVK21].

Interpolation-Based [CCFG23, KKLZ23, Tak14]. Interprocessor
BSvdG+94. Introduction [DS00, GW98].

Inverse
CDGS03, CDGS05, CPID17, GA24, Beb06, BN07, FPG05, HC10, LNZ04, MG09, TCD17, TCD20. Inverting [GGM01].

Investigations [hYtWbWL08]. inviscid [Kro02]. Invited [HOST95]. involving
AB95, EG09a, Erg11, Lin95. ion [RTZ+96], ionic [BPK85, CL91, DC07].

irGPU.proton.Net [Kan15]. Irregular [Boy92a, Kan15, YF98]. isotropic
GKM96, GH98. issue [MC92]. issues
Mak93. Italy [Ano95a, MBA97]. Iteration
YRB16, GD07a. iterations [WLB22].

Iterative
GSS98b, AD05, FG96, GDDC08, HC10, Mil08).

J [BEM94, Dac10]. Jacobi [CC04]. Jose
[ACM97]. Jr [ACM99]. July
[IEE96a, IEE96c, IEE97, RSS96]. June
[HM86, IEE94a, IEE95, Mak93].

Karhunen [ST06]. Kernel
CWA14, HXC21, YB21, CC15, LX22, LX23, MR07, RKIRL22, WCLD21, YS18, YBZL03, YBZ04, Yn06, ZHPS11. kernel-independent
LX23, MR07, YBZL03, YBZ04, ZHPS11.

Kernels
[CCFG23, LCD14, GR02, PSN04, ZK19]. kind
[AHLP93, LX22, Tan04]. kinematics
[RZ09]. King [ACM99]. KNN [MPZ21].
knots [PSN04]. Knoxville [IEE94b]. Kohn
[BSSF96b]. Kohn
[BSSF96b]. Krylov [Car07, GD06a, JH08].

KWI [DTG96].

Lagrange [WVK21]. Lagrangian
[NMDK99]. Lake [Hol12]. Landau
[Lem98, Lem04]. language [MRH14].

Laplace [GGM93, GR97, LHL08, WZC21a].

Laplacian [GGM01]. Large
[BADG00, BSV96, BV96b, CDGS03, CDGS05, FLZB97a, FLZB97b, GF06b, GF06a, HOST95, IFM90, OFK14, SRPD06, SLC97, WLMP99, YW07a, ZQSW04, ATR+12, BAAD97, BWS95, BV96a, Car90, DYP93, EG08, Erg11, EG13, GDDC08, GLS06, GKD89, HMM19, JdR+18, KP08, LCQF18, LGQZ21, LBI+97, LCQF18, LWX15+02, PN95, PG96b, TC09, WYW05, WY05, XYW+08].

Large-Scale
[BADG00, OFK14, SRPD06, GF06b, GF06a, ATR+12, EG08, Erg11, EG13, HMM19, LCQF18, LCQZ21, LCQF18, PWX15+02, PN95, PG96b, TC09, WYW05, WY05, XYW+08].

Letters
[MBS+00]. Level [BK15, CJ05, AP03, DKG92a, HLN24, LCQF18].

library [BSvdG+94, CKB11, TYNO12]. limited [BDS07]. Line [YR99]. Linear
[CPD17, Goe99, Pie93, Pud16, WJGHG96b, WJGHG96b].
BH03, BGGC06, KLM+09, OSW05, SSF96.
lenses [JHG08], link [GDK89]. Linux
[WGL98]. Liquid [MPPA96]. Liquids
[AT87, CKS91], lithography [YB97]. Load
[SHT+95, Ten98, BAAD+97, FG96, MG05,
PGdS+15]. Loading [HL15]. Local
[RGKM12, CFR08, MCB07, RKRL21,
YS18]. Locality [SHT+95]. locally
[GH98, GORV21]. locally-corrected
[GORV21]. Loève [ST06]. logarithmic
[JP99]. Logical [Bor86]. Loki [WSB+97].
London [DKG92a]. Long
[Pie93, AO10, BAL91, BPK85, Ess95].
Long-Range [Pie93, Ess95], lossy [GSC01].
Low [GHRW98, DH04a, QCG15, TSIM16,
TPK12]. low-communication [TPK12].
low-frequency [DH04a, TSIM16]. LSS
[BCADO6]. Luther [ACM99].

M [PG96b]. M2L [KKB+21, TSIM16].
machine [HHK09, BME90, WS91, ZJ91].
Machines
[PA02, BCOY93, KP05b, LBC91, Mak93].
Macromolecular [LCE+06, Ske89].
macromolecules
[BH03, FLZB97a, FLZB97b], macroscopic
[LDB96]. Madras [IEE08]. Magnetic
[Gus98]. magneto [VOD08].
magneto-static [VOD08].
magneto-theoretical [LRJ+99].
magnetostatic [BHGR05]. malignant
[ES04]. Many [HP95, PG96a, Pie93, App85,
EIM+92, EFT+93, HFKM98, HYS21,
INS+20, LHY24, OME+92, SCM+90].
Many-Body
[HP95, Pie93, PG96a, App85, EIM+92,
EFT+93, HFKM98, OME+92, SCM+90].
many-core [HYS21, INS+20, LHY24].
map [GGM93]. MAPLE [McD97, Pie93].
Mapping [BT03, LB92a]. mappings
[OR89]. March
[An095b, An096, An097a, Fu97, HTA+97].
Martin [ACM99]. Maryland [IEE96a].
Massachusetts [K+96]. Massive [LHY24].
Massively [BP88, IFM09, JBL02, KP05b,
LO96a, LCP93, MFKN03, LCM+12, LBI+97,
MHI07, SRK+12, TMES94, WS+12].
Massively-Parallel [MFKN03, MHI07].
matched [GRO04, GKD09]. materials
[GM94, NKV94, Pta21, K+96]. Matérn
[CWA14]. Mathematical
[BCM02, CHJN03, Dar97]. Mathematics
[BGPW00, HDG+15, Ano90, RSS96,
dCGQ90]. Matrices
[Bor92, HXC21, Pan92, CG04, Dao6, XTH09]. Matrix
[HXC21, PNB94, SP01, CX21, Car06, FG96,
WCL21, XWT09]. matrix-free [Car06].
matrix-vector [XWT09]. Matter
[ZQSW94, FRE+98]. Maxwell
[DH04b, YH98, GBN06, GD07b, Hav03,
ON08b, ON09a, ON09b, ZC00]. May
[AG88, IEE04]. MD [IEE02, DK93].
means [MG05]. mechanic [SWW99].
mechanical [SGD+04, WS05, YW07a].
mechanical-electrostatic [SGD+04].
mechanics
[BCM02, BCP03, bYtWbWL10]. Media
[GA96a, GA96b, WZC19, GRO04,
WCZ+20, WZC21a, WZC21b]. medium
[ZCL+98]. MEG [KCF+05]. MEG/EEG
[KCF+05]. Memory
[MB16, YB01, BCOY93, DK93, KP05b,
LBC91, LMCP92, MCM99, RC97, Ske89].
MEMS [SGD+04]. Mesh
[BOX00, DYP93, DKPH04, KM00]. meshes
[HKS05, ZBG15]. meshless
[BLA05, YNS+09]. Message [KP08].
Message-passing [KP08]. metamatamaterials
[OMC08]. Meter [WWF02]. Method
[Alu94, AAL+10, An92, An94, BSSJ23,
BT03, BK15, BPT+14, BW96, BV96b,
BL05, BHS8, CL12, CC15, CS98b, CCFG23,
CPD17, CKB11, EMVR92, FD+W21, GP93,
GKS94, Gue97, GA24, GA96a, GA96b,
GS98b, HOST95, HAS02, HXC21, KLF+06,
LCD14, LSCM96, L96b, L96a, M96,
MB16, McK96, NT96, Ni04, PD15, RRR05,
RW94, Sch94, Sel22, SG97, SMC97, SHHG93,
SC94, SC95, Sta95a, SP01, WC94a, WZC+17,

...
Method Efficient [NT96]. Methods [Aar85, Alu94, AG88, BS93, BS97, Bör23, BR93, Dem95, Dem96a, Dem96b, FÖG+92, GHRW98, GW98, HEHG14, HJ96, LRW95, MBA97, SRPD06, SHG95, SHT+95, TDBEE11, Vtg91, WSW+95, YF05, A+97, BLA05, BCH93, BL97, BG97, BN98, BCR01, Bes00, BDS07, Car07, CNB02, CJL+97, CWD08, CK00, Eng11, Gas97, GBMN06, GY08, GCG+99, Goe99, GE13, GKM96, Gk04, GK03, GROV21, GD80, HS95, HGD11, IY16, Kro99, Kro02, KP05a, KP08, LS05, LOSZ07a, LOSZ07b, LOG12, Lin95, LX17, MC02, NN12, OSW06b, Of07, Oku96, PJY96, PG96a, RS20, RKRRL22, RS94, ST06, SK05, Sin92, SB96, TD09, YGS01, aYZ97, YNS+09, YBNY12, ZC91, MC92]. Microlithography [Fu97]. Microlocal [Ful97]. Microlocal [BDMN03a, BDMN03b, Dar02, GBMN06]. Micromagnetic [VOD08]. Microprocessors [NMH06, MSV92]. Microscopic [HB93]. Microstrip [Mi96, Mi95, ZCL+98]. Microwaves [Aaro95, ZC00]. militaires [Ano97b]. military [Ano97b]. Miller [Sel22]. million [DKG92a, DKG92c]. million-atom [DKG92c]. MIMD [FOG+92, LB92a]. mine [ESRS01]. Minimal [BF78]. Minimization [OC05]. minimize [AIS+21]. Minneapolis [HTA+97, IEE92b]. Minnesota [IEE92b]. MLFMA [SLC96]. MN [HTA+97]. mode [Sat10]. model [CAJ09, ES04, FG96, Ham11, IY16, KP08, LGQZ21, TD09]. Modeling [BCM02, NMDK99, NKV94, ZKL+07]. Models [AC94, HB93, PN95, SGG+04]. Modern [MPZ21, NMH06, SF18]. Modification [SB98]. Modified [Bar90, BADG00, CHL06, LCQF18, LGQZ21].
module [DK93]. Molecular
[AC94, BGGT90, BAL91, BHGS90, BP88, CDCD97, Gus98, HGS90, LBC91, LBI*97, LMCP92, MPPA96, OKF14, WLMP99, WS91, ATMK03, AiIS+21, BSL11, BS19, BWS*95, BSS97, BCL+92, BHE*94, BHER94, BCOY93, BCOY94, BP93, CVHMS94, DK93, EGHT97, GDK98, GKI207, KM00, LM02, LBI+97, LMBGS16, LWM02, NKV94, OYK+14, OP07, PGB05, PA14, SF18, SWW99, Win95, ZB95].

molecular-dynamics [BCL*92, BP93].
Molecule [Pie93]. molecules [Kan15].
Moment [Gus98, McD97, ZZ93, BN98, CS82].
moment-based [BN98].
Moments [PNB94, Gib08, HHKP09, Kon93].
momentum [GY08, WHG96b].
monostatic [RCWY07].
Monotonic [Bor86].
Monte [ESRS01].
Monterey [Ano95b, Ano96, Ano97a].
Montreal [IEE97]. motion [DMM03, Kro01].
Mountain [MC92]. mover [CC13]. MPI [IEE96c, AiIS+21, BCAD06, LO96b, Per99, SP99].
MPI-2 [BCAD06]. MPSim [LBI+97]. MR [BEM94].
Multi [AP03, Ang17, BAD01, HLN24, Liu08, RS20, WSH+12]. multi-disciplinary [WSH+12].
multi-domain [Lin08]. multi-grid [RS20].
Multi-level [AP03, HLN24].
multi-platform [BAD01]. Multi-scale [Ang17].
Multibody [BG1*99, JBL02, LOG12].
Multicomputers [YPB01]. Multicore [HEGH14, ZBS15]. Multidimensional
[CK95b, BCP08, BL98].
multigrid [Gas97, IHHM05, MC92, FO08].
Multilevel [CSCMxx, GS98b, MG11, SLCC96, SLCC97, TCW08, TC09, A+97, ATR+12, BDMM03b, DM12, EG08, EG09a, EG09b, Erg11, EG13, GDDC08, GKD09, HS08, HYS21, HC10, LGLQ04, LHYS24, LC94, MG07, MG09, RCWY07, Sar03, WJYO06, YRGS13].
Multiple [BS93, BSS97, FLZB97a, FLZB97b, KM00, Kro02]. multiplication
[WCLD21, XWT09]. multiply [GGM93].
multipoint [PRT92]. Multipolar [LS93].
Multipole [AAB+17, And92, BSSJ23, BT03, BK15, BPT+14, Ber95, BVW96, BV96b, BS00, BL05, BFO99, Boy92b, CDM98, CDSG03, CDSG50, CL12, CD13, CC15, CSMCxx, CKE08, CS98b, CC10, CC12, CCFG23, CJ05, CFR10, CPD17, CKB11, DDSL13, DY98, EB96, EMRRV29, FDvW21, FL13, GP93, GSS98a, GSS00, GR97, GHRW98, GW98, Gue97, GA24, GD03, GA96a, GA96b, Gus98, GS98b, HOST95, HAS02, HA17, HEGH14, JMC97, JMB98, Kon93, KLZ+06, KK95, Le 97, Lea92, Lem98, LCD14, Lin95, LSCM96, LJ96b, LJ96a, LO96a, LRC93, LRW95, MI96, MBS*00, MG11, MB16, McD97, MK96, MPPA96, NT96, Ni04, NPR93, OC05, Pan95, PNBR4, PD15, RRR05, RGKM12, RW94, SBRP06, SPS96, SL91, SL97b, Sch94, Sei22, SG97, SHMC97, SMC97, STHHG93, SHT+95].

Multipole [SC94, SC95, SLC96, SLC97, Sta95a, SP01, WC94a, WC94b, WLMP99, WZC+17, WZC19, WMOZ22, YR99, Yin15, YTK14, YRB16, YB01, ZJ91, ZZ93, AGL93, AGR88a, AGR88b, AP99, AP00, Ami00, ATMK03, AYO20, AiIS+21, ATR+12, AC17, BDMM03a, BDMM03b, BSL09, BG97, BS19, BWS*95, BV96a, BSS97, BCL+92, BHE*94, BHER94, BL98, BH03, BHHG04, BOHC04, BS096a, BSSF96b, BK96, CDJ07, CX21, CC04, CC05, Car09, CGR88, CAS95, CWHG97, CDF10, CCZ97, CKW08, CCKL09, CGG99, CCG*06b, CRG01, CPP93, CS82, CWD08, CRW93, CBR20, CRF08, CB09, CK20, Duc06, Dw09, Da10, DMC20, Dar02, DM07, DM12, Dar97, Dar00a, Dar00b, DH04a, DO4b, DC07, DRS96, DKG92a, DKG92e, ERS01, ES04, EB94, Eng11, EG08, EG90a, EG09b, Erg11, EG13, EG01, FOGB96]. multipole
[FLZB97a, FLZB97b, FPG05, FD09, Fu98,
GDDC08, Gas97, GBMN06, GF06b, GF06a, Gav11, GSC01, GIS98, GY08, GR02, GG16, GROZ04, GKD09, GE13, GB11, GR88b, GS89, GG90, GH02, GORV21, GCH+18, GD05, GD06, GD08, GODZ10, GAD13, Ham11, HHKP09, HS08, Har03, HYS21, HC10, HW10, HW11, HF92, HU97, HR98, HGD11, KKLZ23, Kan15, KM00, KSS10, KS98a, KS98b, KS04, KP05a, KP05b, KP08, KAN95, KN95, KAN96, KCF05, Lab98, LM02, LDB96, LOSZ07b, LCL+12, LBGS16, LB91, LB92a, LB92b, L98, LZL04, LOG12, Lem04, LCQF18, LGQZ21, LGG+13, LX22, LC14, Liu08, Liu09, LX17, LHYS24, LY14, LCZ07, LCM07, LCHM10, LCHM13, LWM+02, MB05, MR07, MRH14, MMB06, MSS20, NW89, NT09, NT94, NN12, NH97, OSW05, OSW06a, OF07, OF08, OKS09, OCK+03, OYK+14, QC03, OMC08, OFH+08, OP07, ON09a, PRT92, PN95, PJY96, PPS94, PSS95, PS95, PA14, PTa21, QGC15, R96, RS20, RţZ90, RRRL21, RRRL22, RBS19, RTZ+96, RO04, RIA+08, RS97, RS06, RCWY07, SC+04, SF18, Sa03, Sa10, SL97a, ST06, SWW99, SM07, SHM98, SKT94, SN97, SKP95, SP97, STa95b, SB96, SK04, SU04, SZT14, SYL03, Tak14, TSIM16, TC17, TCD20, Tan03b, Tan04, TXL19, TCW08, TC09, TG08, TD09, VOD08, WJYO06, WL96, WYW05, WY05, WY07b, WY07a, WLL+07, WXQ08, WZ+20, WZC21a, WZC21b, WLB22, WHG94, WJHG96a, WHG96a, WJHG96b, WHG96b, WVK21, XYW+08, XJM08, YS18, YB21, YRG13, hYtWbWL08, YR98, YB97.

multipole

[MB05, MR07, MRH14, MMB06, MSS20, NW89, NT09, NT94, NN12, NH97, OSW05, OSW06a, OF07, OF08, OKS09, OCK+03, OYK+14, QC03, OMC08, OFH+08, OP07, ON09a, PRT92, PN95, PJY96, PPS94, PSS95, PS95, PA14, PTa21, QGC15, R96, RS20, RţZ90, RRRL21, RRRL22, RBS19, RTZ+96, RO04, RIA+08, RS97, RS06, RCWY07, SC+04, SF18, Sa03, Sa10, SL97a, ST06, SWW99, SM07, SHM98, SKT94, SN97, SKP95, SP97, STa95b, SB96, SK04, SU04, SZT14, SYL03, Tak14, TSIM16, TC17, TCD20, Tan03b, Tan04, TXL19, TCW08, TC09, TG08, TD09, VOD08, WJYO06, WL96, WYW05, WY05, WY07b, WY07a, WLL+07, WXQ08, WZ+20, WZC21a, WZC21b, WLB22, WHG94, WJHG96a, WHG96a, WJHG96b, WHG96b, WVK21, XYW+08, XJM08, YS18, YB21, YRG13, hYtWbWL08, YR98, YB97].

multiwavelet [FBHJ04].


multipole-accelerated [BHE+94, BHER94, ZD05].

Multipole-Based [GSS98a, GSS00, YB01, LDB96].

multipole-to-local [CFR08, YS18].

Multipoles [And92, AC94, GSS98b, HLL08, HLD08, Mak99, OLL03, OLL04].

Multiprocessor [SHG95, LMCPP92, Sin92, Ske89].

Multiprocessors [BB87, HS95].

multiquadrics [CBN02].

Multiresolution [NKV94].

Multiscale [ERT12, TW03].

Multithreaded [ZBS15].

Multiwavelet [FBHJ04].

CG97, CHJN03, Dar00b, GCG^+99, Gre90b, GM94, GH98, HLN24, KSC99, Kro01, OR89, PRT92, RSS96, TYN012, Wam99, ERT12.


parabolic [JH08]. paradigms [MMC99]. Parallel [AAL^+01, Ano94b, ADB94, ADBGP99, B^+95, BADG00, BPT^+14, Bha97, BS97, BP88, CDCD97, GKS94, GCH^+18, HAS02, HTA^+97, HP95, HJ96, IFM09, IHM05, JBL02, JKCGJ08, Liu94, LO96a, LO96b, LCP93, MFKN03, Mak04, Mat95, MBS15, NPR93, OKF14, Per99, Pri94, SWW94, SP99, Sin95, SHHG93, Ten98, TDBEE11, WS93, WMOZ22, WSW^+95, Xu95, YB01, ZJ91, Bar86, BADP96, BAA^+97, BAD01, BCAD06, BJWS96, BCL^+92, BDS07, BCOY94, Car07, CRG01, CWD08, CKB11, Dub96, DKPH04, Erg11, EG13, GLS06, GKS98, GG90, GG90, Hav03, HGS90, K^+96, KK95, KP05b, LCL^+12, LB92b, L998, LBI^+97, LC14, Mak93, MHI07, MG05, NKV94, OCK^+03, RC97, SRK^+12, Sta95b, TMES94, WLL^+07, WCLD21, WS95b, WS95a, SWL95, WSH^+95, YF96, YBZL03, YBNY13, Mak93, Rod89, TL14, TDBEE11].


Particle [BOX00, DYP93, Gre87, MFK03, Pri04, VTC91, AGR88a, CGR88, CC13, CB09, CKB11, DKPH04, ECL02, FMI^+93, GY08, GR87, Gre88, KM00, KK16, Kro99, KP05a, LGQ21, LR^+99, PJY95, WY05, WS95b, YGRS01]. particle-in-cell [CC13]. Particle-Mesh [BOX00, DKPH04]. particle-particle [PJY95].

Particle-reinforced [WY05]. Particles [BP88, HE88, BP93, CPP93, DK92a, GDK89, Ich02, JDR^+18, Kon93, LDB96, YRGS13]. partition [AY02]. Partitioning [BB87, Ten98, EG09b, MG05]. passing [KP08]. PBBFMM3D [WCLD21]. PDEs [A^+97]. PEACH2 [HL15]. PEC
TWYC06, WJYO06, WY07b, WSWL95, XWY+08, XJM08, iYNK02, ZY05.

Proceedings
[ACM96, ACM97, AG88, ERT12, Hol12, HM86, IEE02, Kar95, LCK11, Rod89, Ano92, Ano95a, IEE92a, IEE98, KK88, PA02, Wel91, B+95, BGFW90, HB93, HTA+97, IEE90, IEE92b, IEE93, IEE94b, IEE94c, IEE96b].


PROGRAPE [HFKM98]. PROGRAPE-1 [HFKM98]. Progress [Ano95b, Ano96, Ano97a]. Prolate [KLZ+06]. Propagation [Ano97b, IEE94a, IEE95, IEE96a, IEE97, WC94a, WC94b, CHJN03, GLS06].

propagator [ZB95]. properties [WY05, WY07a]. Protein [NT96, Kan15, KSS10, KS11, NT94]. protein-protein [KSS10]. proteins [ZB95].

protonatable [Kan15]. Provable [Ten98]. Proxy [HXC21]. pseudo [CKS91, OFH+08]. pseudo-pairwise [CKS91]. pseudo-spectral [OFH+08]. pseudoparticle [Mak99]. Pseudospectral [Boy92b, KLZ+06]. Purpose [Ano94a, BGGT90, CKE08, FM96, FHM99, KFMT00, MTE94, MT98, MFKN03, EIM+92, EFT+93, FMI+93, FM95, HFKM98, KMT94, MIES90, MT95, OMH+94, OME+92, SCM+90, TME94].

Quadrature [WK18]. quadratures [GORV21]. Quantum [SPS96, KLM+09, SSF96]. quartic [WHG96b]. quasars [SWJ+05]. Queen [IEE97].


Revisiting [KS04]. Rigid [BT95, JBL02, CA09, HNO06, ZBG15]. rigid-inclusion [HNO06]. rigorous
[SKPP95]. Ring [BHGS90]. Rockefeller [IEE90]. Rokhlin [HM95, HS08, SB98].
Rome [MBA97]. Root [GGM01]. Rotating [WHG96b]. Rotation [GD03, Dac06].
Rotne [GCH'18, LGG'13]. Rough [JMC97, JMBC98, ERS801, JBMC98].
Round [DH86]. Round-off [DH86].
Runtime [AAB+17].

SAI [MG09]. Salt [Hol12]. sampling [LX17]. San [ACM97, B'95, Kar95]. Santa [Feb97].
Savart [Ros06]. SC'11 [LCK11].
Scalability [RS97]. Scalable [Ano94b, BHE'94, BHER94, GKS94, GKS98, HAS02, HDL11, IEE94b, MSV92, OCK'93, OKF14, YB12]. scalar [GD07b, KSC99]. Scale [BADG00, OKF14, SRPD06, WLMP99, ZQSW94]. Ang17, ATR'12, EG08, Erg11, EG13, FLZB97a, FLZB97b, GF06b, GF06a, HMM19, INS'20, KP08, LCFQ18, LQZ221, LCZ07, LWM'02, PN95, WY05, WY07a, WSH'12, WXY'08].
Scaling [CDCD97, FRE'08, YBYN12].
Goe99, KLM'09, SDF96, WJHG96b].
Scattered [HOST95].
Scattering [BVW96, EMRV92, GA96a, GA96b, HAS02, JMC97, JMBC98, L06b, L06a, SHMC97, SMC97, SL07, ZCG00, AP99, AP00, AD05, BN07, BGGC06, CC04, CC05, Car09, CWM08, DHO4a, ERS801, EG08, EG09a, Fu98, G08, G89, GD05, HC10, HW10, JBMC98, Lab98, LHYS24, LC94, MG07, Rah96, RTZ'96, Rok90, SM97, SM98, TCM08, TC09, WJYO06]. scheduling [YF08]. scheme [NMDK99, NHM06, WLL'07].
Schrödinger [ZKL'07]. Schur [MG11].
Schwarz [BT03]. Sci [BEM94]. Science [FHM99, IEE92a]. sciences [SM05].
Scientific [B'95, HTA'97, MT98, MSV92, CGL03, LKM02, MHI07, PD89, Rod89].
Screened [BF099, GH02, HZ09, ZHPS10].
Seattle [IEE94a, LCK11]. Second [IEE96c, AHL93, BSSF96b, KS11, LX22, Tau04].
Seminar [RS96]. semiseparable [CG04]. sensitivity [DH86]. Sensor [Ano97b].
separated [Eng11]. September [Ano95a].
Sequential [WSW+95]. series [CC04, CC05, ZHPS11]. set [TYON12, TYNO12].
Sets [CK95b, PD15, Eng11]. Seventh [B'95].
Sham [BSSF96b]. shape [LM02]. shaped [YRGS13]. shared [HS95, RC97, Ske89].
shared-memory [Ske89]. sharing [BADP96]. shells [CA09]. short [BG97, BP93]. short-range [BP93]. shunt [SGD'04].
SIAM [B'95, BEM94, HTA'97, RSS96, Rod89].
Sides [BT03]. signature [Ano97b].
Siloxane [MPPA96]. Siloxane-Based [MPPA96]. SIMD [TYON12, TYNO12].
simple [AB95, PJY95]. Simulated [MPZ21]. Simulating [ZBG15, ZGI'10, V21G09, ZB95].
Simulation [AT87, And99, BADG00, CJK91, FM96, HE88, KFM99, LCE'06, MI96, Ten98, WPM'02, AGR88a, App85, BCM02, BAA'97, BCL'92, DRS96, FLZB97a, FLZB97b, FMI'93, FM95, GF06b, GZK07, HN10, HYS21, HGS90, HMM19, KMT94, L02, LWM'02, M95, MKF00, MKFD02, MD12, OUK'91, OMC08, PG94, SWW99, Spr05, TYON12, TYNO12, WY05, Win95, YB07, YNS'09, YBEN13]. Simulations [Aar85, AAL'01, Ano94b, ADBGP99, Bag02, BHGS90, BHH88, GKS94, HP95, IFM09, KFMT00, LRJ'99, MT98, MFKN03, MPPA96, OKF14, SRPD06, SWJ'05, WLMP99, WN14, YF05, AGR88a, ATMK03, AB95, BAL91, BDS07, BCOY93, BCOY94, CL91, CCR88, CWD08, CB09, DKG92a,
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EIM+92, EFT+93, EGHT97, ESRS01, FOCB96, FRE+08, GF06a, GKS98, GR87, GDR89, GCH+18, HFKM98, HNY+09, KM00, K+96, Kuo99, KP08, LBC91, LKM02, MT95, MG05, MCM+02, PA14, Sal96, Sha06, STK93, STK94, TMES94, VCM00, Wam99, WSH+12, Xue98.
simulator [BSL11]. Sinc [Boy92a]. Single [CJ05, GP08]. Singular [FBHJ04, QCG15, RTA+08]. singularities [Pel98]. sized [Sat10]. sizes [LCZ07]. Skeletons [SW94]. Slater [Gus98, ZZ93]. Slater-Type [Gus98, ZZ93]. slightly [ZD05]. smooth [RKSSL21]. SNE [MPZ21]. Society [IEE95, IEE96a, IEE97]. Software [Kan15, TDBEE11, SF18, TYNO12]. solid [Bat03, PJY96, W96, hYtWbWL08]. solids [WYW05]. Solution [ATR+12, GA96a, LJ96b, MS97, SC94, SC95, AHP93, AP03, AD05, Atk97, BH03, BHGR04, BHGR05, CJL+97, EG08, EG09a, FLZB97a, FLZB97b, GDDC08, Gas97, GLS90, Gre90b, HW10, PN95, Rok85, Rok90, Sel22, WFC08, WSWL95, YSM05, ZC00]. Solutions [Erg11, HC10, KS11]. solvation [FGM11]. Solved [MG11]. solved [LC08]. some [Sha06]. sound [CAJ09]. Source [SB98, CKB11]. Space [BT95, WMOZ22, YF98, BSL90, BKM90, CR14, GSC01, GG16, HM95, HS95, KKL23, SRK+12]. space-charge [KKL23]. Space-Time [WMOZ22, SRK+12]. Space/time [YF98]. Space/time-efficient [YF98]. Spaces [BF78]. Spanning [BF78]. Sparse [GOS99, LLD04, Rok98, Tau03a, LOSZ07a, MG09, RŠŽ09, TW03]. sparse-approximate-inverse [MG09]. Spatial [BTA95, BLA05, CVHS94, ZT07]. Special [Ano94a, BGGT90, CKE08, FM96, FHM99, KFMT00, MTES94, MT98, MFKN03, EIM+92, EFT+93, FM1+92, FM95, HFKM98, KMT94, MIES90, MT95, OMR+94, OME+92, SCM+90, TMES94, MC92]. Special-Purpose [Ano94a, CKE08, FM96, FHM99, KFMT00, MTES94, MT98, MFKN03, FM95, HFKM98, KMT94, MIES90, MT95, OMR+94, OME+92, SCM+90, TMES94]. spectra [ES04]. Spectral [RCWY07, OFH+08, PN95, TXL19]. Speeding [CK20, AO10]. sphere [BP03, CDJ07, DC07, Lin95]. spheres [GD05]. spherical [GODZ10, KSC99, PYJ96, ST02, YR98]. Spline [CS98b, DK92b]. Splines [CS98a, BL97, BCR01, BPT07]. Square [GGM01]. Stability [Nil04, Sud04]. stabilization [CX21]. stable [CX21, DH04b]. standard [BCP08]. static [VOD08]. Station [ERT12]. statistical [Kan15]. Steepest [JMC97, JMB98, ESRS01]. steepest-descent [ESRS01]. Stellar [HM86]. Step [BS93, FLZB97a, FLZB97b, KM00, RCWY07]. stepping [BSS97]. stochastic [FST05, Sal96]. Stokes [GKM96, GKO4, Sel22, Tau03a, TG08, WLL+07]. Stokesian [Ich02]. Storage [Hol12, LCK11]. strategies [CX21, WLB22]. Strategy [BB87, BCOY93, EG09b, HLN24]. stratified [ZC+98]. Stress [BS19, GG16]. Strips [GA96a]. strong [Kan15]. Structural [BP4K85]. Structure [BADG00, NT96, ZQSW94, AYO20, GF06b, GF06a, Goe99, Kat89, KS98a, NT94]. Structures [And99, CSMPxx, GGM01, MI96, RW94, WPM+02, Car09, CWK08, EG13, LCZ07, WS92, ZC+98, ZY05].
studies [RTZ+96]. Study [BGLM05, HM86, Pri94, Dar97]. studying [Kro01]. sub [LCZ07]. sub-entire-domain [LCZ07]. Subdivision [BT95]. Summation [CWA14, LS93, Ami00, BAL91, IHHM05, SF18, ZB14]. Summer [RSS96]. Sums [DNS90, BG94, DYP93, KS04, RO04, SL97b]. Sunnyvale [Wel91]. Supercomputers [FQG+92, HM86, BAD01]. Supercomputing [ACM96, Ano92, IEE90, IEE92b, IEE93, IEE94c, Kar95, Ano92, KK88]. Surface [MG11, CCZ97, ESR501, ZBG15]. Surfaces [CSMCxx, HAS02, JMC97, JMBM98, GH08, JBM98, RKRR21]. Surfaces-Wire [CSMCxx]. suspended [VGBZ09]. SW26010 [HYS21, LHYS24]. switch [SGD+04]. Switching [HL15]. Symbolic [Pie93, CB20]. symmetric [CG04, DMC20, OSW06a]. Symposium [Ano97b, HB93, IEE92a, IEE95, IEE96a, IEE96b, IEE97, PA02, K+96, Mak93]. Syracuse [IEE96b]. System [BGI+99, RGKM12, BAAD+97, LGQQ21, TMES94, ZB95, HTG02]. Systems [AAB+17, CPD17, GP93, Gre87, HEGH14, MT98, VTC91, YF05, AB05, BS19, BWS+95, GGGM00, CL91, CDF10, CFH89, DYP93, DKG92c, EIM+92, EFT+93, Gre88, Ich92, KS98a, KS98b, KN95, LM02, LBG16, LB92a, LBI+97, LCM07, LCM10, LCHM13, PGB05, PG96b, TYON12, YB12, YAO20, ZB95]. Systolic [BHGS90, DHM03].

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