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## Title word cross-reference

(−1, 1) [MY65]. (0, 1) [GS72a]. $(b, k)$ [AC84]. $(E, k_x, k_y)$ [ZVW+11]. $-\infty < N < +\infty$ [Kog57, Kog58b]. $0.11\mu$ [BDN+02]. $0 < N < 1$ [Kog58a]. $1 - \mu m$ [GSC80, JHH+81]. 14 [FRS+18]. 2 [HS60, MDJ+70]. 22 [FCE+15]. $25°K$ [MDJ+70]. $2^k$ [AEG+02]. $2^{k-1}$ [AEG+02]. 3 [CS03, DWA+08, EFR+05, EK08, HS60, KYY+08, PLS20, RG09, SAT+08, SJMBK08, ZVW+11]. 32 [LBB+13]. 360° [RCP+16]. 51/4 [FMPS93]. + [HC69, Les71]. 0 [Wei65]. 2 [ABB+08]. 1 [CSH+89]. $1-x$ [LMPP69, MB75, Mat70, Vur70]. 12 [MKP73]. 2 [ABK89, BH89, Bra72b, Bru78, CKG+99, CL64, CSE66, CDM89, CFH64, CCD57, CSH+89, DYHS78, EB99, FA70, GSG+90, GBC65, HC70, KG80, KLBP64, KL80, Kus70, MRH89, MJS70, OG80, RF78, SJ70, SARG80, Tu90, Vur70, WB70, YDHS78, ZBL+72, vHv+89]. $2-x$ [ACM+89, BEH+89, EHK+89]. 3 [CSE66, CDM89, CCD57, CSH+89, GSG+90, HD69, KBS+99, LD74, Mat70, MKP73, WTP64]. 4 [ACM+89, BEH+89, EHK+89, FA70, Kus70, Vur70, WB70, WTP64]. 5 [BH89, KLBP64, MRH89, MKP73, ZBL+72, vHv+89]. 6 [YAJ90]. 7 [CDM89, CSH+89]. $7-\delta$ [BH89, GSG+90, MRH89, vHv+89]. $c$ [BCSE89, FNRF89, FL89, HHB+89, KC89, Kat89, Kel89, KIF+89, Meh89, Mor89]. $p$ [FL89]. th [Fuj92]. $x$ [ACM+89, BEH+89, EHK+89, LMPP69, MB75, Mat70, SG77, Vur70]. $A$ [LO72]. $b$ [Bos70b]. $\beta$ [Phi78]. $e^N$ [Kog57]. $f_t$ [Phi78]. $g$ [SBR64]. $\gamma$ [NBF+00].

$i = i_0[\exp \alpha(v - Ri) - 1]$ [Mil67]. $\kappa$ [GNF06]. $L$ [AO97, AO01]. $l_p^k$ [CLW79]. $l_q^k$ [CLW79]. $M$ [Kog59]. $\mu$ [HWC88, PZK+03, SHWK+90, SWC+95, TMF+95]. $N$ [FRE+08, CDS73, CDS00, FP69, FA70, KO65a, KO65b, MC68, RGL75, Spe69, VCP80, Kog59]. $p$ [KO65a, KO65b, KO66, MG63b, MC68, VCP80, Vur70]. $\pi$ [HC69]. $Q$ [SLLP64]. $T_c$ [GSG+90]. $\times$ [Sch91, SHDK95]. $z$ [Dan66].

**-adjacent** [AC84, Bos70b]. **-alloy** [TCCH98]. **-based** [CKG+99, YAJ90]. **-body** [FRE+08]. **-Channel** [RGL75, CDS73, CDS00]. **-D** [ZVW+11]. **-factor** [SBR64]. **-Film-Based** [Blu79a]. **-GaAs** [Spe69]. **-GeTe** [CSE66]. **-inch** [FMPS93]. **-n** [KO66, MG63b]. **-nm** [FRS+18, FCE+15, LBB+13]. **-Si** [RF78]. **-SnTe** [CSE66]. **-stable** [LO72]. **-supported** [HKvG+11]. **-Switching** [SLLP64]. **-transform** [Dan66]. **-Type** [FP69, FA70, Vur70].

**/Cd** [Vur70]. **/Cr** [Vur70]. **/CuO** [BEH+89]. **/In** [LMPP69]. **/O** [ZBL+72, Bra72b]. **/Sb** [LMPP69]. **/Se** [FA70, Vur70].

**0.1-** [SHWK+90, SWC+95]. **0.12-** [PZK+03]. **0.25-** [HWC88]. **0.5-** [HWC88]. **0.7-Microsecond** [RRSW61]. **000-Word** [FP57].

**1** [BGK+80, BCK13, Lan96, PV93]. **1.X** [SWC+95]. **1.X-volt** [SWC+95]. **1/N** [BGK+80]. **10.4-in.-diagonal** [KFYU92]. **10.5-in.-diagonal** [CAW+98]. **100** [ABB+08]. **100-nm** [WNV+02]. **1000** [RS59b]. **1000-Mc** [RS59b]. **1024-byte** [DMR+81]. **10B** [WF83]. **110-Nanosecond** [WWLF67]. **12-ns** [MMR89]. **120-Nanosecond** [PSS67]. **128Kb** [CTT91]. **14-nm** [BWB+18, SRH+18, WBS+18]. **144** [ACG+87]. **145** [FN71]. **15-** [Bra72b]. **157-nm** [BRB+01, Ito01]. **16** [GP06a, OCB+90]. **16-bit** [Cor82]. **16-Mb** [GP06a]. **16-Mbps** [OCB+90]. **17** [DCB77]. **18** [Sta75]. **19** [Ber76a, Lan96, Wie76]. **193-** [Ito01]. **193-nm** [AWHK97]. **196** [BBC+12b, GMS+12, KWH+12]. **1975** [AAH68, Bar68, Hen68]. **1980** [Wil93]. **1992** [Wil93].

**2** [AFFS98, AF99, AHH+91, BNW99, CAE+76, EKS+04, GYK99, MRG99, Ono93, RT99, Tan08, WRG99]. **2.0** [Oha10]. **2.5-Micrometer** [Ghe80]. **20** [RHC73]. **20-MHz** [RHC73]. **2000** [Wil85]. **200Mb** [GLOS92]. **200Mb/s** [GLOS92]. **21st** [TMF+95]. **2400-bit** [GP81]. **2400-bit/s** [GP81]. **248-** [Ito01]. **256K** [TGB+80]. **256K-bit** [TGB+80]. **25th** [Car81]. **2D** [BHV85, Kri82, Pic87]. **2Dp** [GHP+85].

**3** [DGL+97, PV93]. **3-1** [PV93]. **3.3** [HBB99]. **3.3-V** [HBB99]. **3.6-** [BBH+95]. **30** [ACG+87]. **3000** [Rut59]. **3000-Mc** [Rut59]. **305** [LH57, LH00]. **3081** [GS82b, PPS82, RSNG82, TS82]. **3090** [AC86, GRSW86, RV89, SSW91, SdS89]. **32** [Gla97]. **32-stage** [Sch91]. **3380** [How84]. **3420** [ICO71]. **3480** [WCB+86]. **360** [ABB64, ABB00a, BDH+19, BGM+67, Cal70, CMPR64, FL67, Pad81, Sam64]. **3687** [DSW82]. **370** [ACG+86, Bar78, Chi86, CDG83, Cre81, Gum83, Pad83, Sta90]. **3800** [BS84a, FLS78, FLR77, MTS84, Mil84]. **3803** [ICO71]. **3803/3420** [ICO71]. **390** [CS99, DGL+97, ECD+99, Gre97, HBL+99, JL99, KBM+99, KLM+91, KL97, Mau97, RHM+99, SSM97, SK99, SCC+97, SY92, SMK+99, TMB+99, Van97, WL97, Web00, YS99]. **3D** [FLCB85, KN91b, Sch96a].

**4** [BHP83, FKOP90]. **4-Mb** [FKOP90]. **4.2K** [EBd+86]. **4.5** [TMT+20]. **400** [BLM+92, Ste01]. **405LP** [NCB03].

**4096-color** [KFYU92]. **41** [Ano97a]. **4250** [GT87]. **44** [Ano00a, Ano00j]. **45** [Ano01a, Ano01o]. **45-nm** [IFB+11]. **4765** [ABC+12]. **4769** [BCD+20]. **4D** [Dic91].

**5.25-** [BBT85]. **50-Megacycle** [WRLA57]. **500** [CP13]. **500-picosecond** [RHC73]. **5000-Circuit** [Dan81].

**60-nsec** [ABPS66]. **6000** [Aus90, CMR+90, FAJ+94, HM90, Mar90, MHR90, War90, WD94]. **603e** [JO96]. **64-bit** [GHL+04]. **64K** [LST80]. **64Kb** [SHDK95]. **65-nm** [BFG+06, FAD+07]. **670-nm** [KACS95]. **690** [BKRF02]. **6G** [HA71].

**7** [HHM70]. **77K** [Mar64c].

**8-inch** [BBT85]. **80** [AHH+91]. **800-Bit-Per-Inch** [BS70]. **805g** [Lan96]. **8B** [WF83]. **8B/10B** [WF83].

**90-nm** [FAD+07]. **9000** [ADG+92a, Att92, BBMP92, BRB92, CTS+92, Cov92, DGG+92, GZM92, HOWP92]. **91** [AST67a, AEGP67]. **9121** [CW91, GGRW91, Haj91, NHH91, Sar91b, TSC91].

**A10** [BCJ+96]. **ABC** [KL94]. **Aberrations** [Arm65, Bru97]. **ABIC** [CM98, Mar98]. **ablation** [DAB+97, SPP97]. **Abort** [Soh76]. **Above** [Sie70]. **Abrasive** [Ros78]. **Abrupt** [CC76a]. **Absorbers** [Key63]. **Absorbing** [PCDW78, Dav69, Her66]. **Absorption** [Bro62, GL62, WB70, BH89, DP68]. **abstract** [Bei92]. **Abstracts** [Ano57a, Ano57b, Ano93a, Luh58a]. **AC** [AS78, HO75b, Lan74, LS78, OPR+78, O'H78, RP78, SS78, Won90]. **AC-Coupled** [HO75b]. **academic** [ITS+15]. **accelerate** [Oha10]. **Accelerated** [Gil79, ZMM+96, CBD+09, LSS+20, PK18]. **Accelerating** [PMS+08, RG09, SMP+04]. **acceleration** [CJH+15, CNL+19, EGN+19, Gsc16, KKS02, KMA+20, NFS+17, PLK09, SKS+20, SSI+18]. **Accelerator** [SBJS15, CCF+10, GKT17, JAC+19, SKP+15]. **accelerators** [AKG+19, BAB+13, EWT+07, Gsc09, PBK+09]. **Accelerometer** [Lew80]. **Accelerometry** [HL77]. **acceptance** [Lie20]. **Acceptor** [Sou64]. **Acceptors** [FPS66, PF66, Tit63]. **Access** [ABE+02, Ano66j, Bla65, CERS76, FC79, GLP76, Her65, Hoa61, LH57, LST80, LN79, ND57, Pet57, Ris84, SS76, Str83, WT77, BMS+17, CDD+10, CTT91, Coo90, DMR+81, FR01, Hat72, Hoa00, LKY80, MDB+02, MBC+96, ND00, RBB+08, ND00, LH00]. **access-time** [Coo90]. **Accessibility** [KMH82]. **Accessing** [CM80]. **Accommodation** [BS85]. **accomplishments** [SCM+82]. **accountability** [AAJ14, DYK10]. **Accounting** [Dui59, LH57, LH00, ND57, ND00]. **Accumulating** [Kuh88]. **Accumulation** [LMD70]. **Accuracy** [RK74, Sit87]. **accurate** [LO72]. **Accurately** [BD96, Cli90, SW90]. **Acetylene** [Dem78, GMP90]. **achieved** [HRF+17]. **achieving** [BWT+14]. **Acid** [BBD63, HHA93]. **Acknowledgment** [RS79]. **ACORN** [HY84]. **Acoustic** [MN67a, MM64, MW70, PAZ72, PK61, Tie61, HKA+13, Tur69]. **Acoustic-Mode** [PK61, Tie61]. **Acoustical** [PH65]. **Acoustoelectric** [MSW69, RK69, Spe69, ZZ69, Bra69, Lew73]. **ACP** [AGAP63, CP63, MT64]. **Acquisition** [DGB78, BKM+69, CCFSZ12, Kon69, Nic92, Rei69, SG71, WN92, CMP87]. **across** [HRF+17]. **Acting** [SWD74]. **Action** [DC73b, AWK20, TMW+17]. **Activated** [PRY65, SST69]. **Activation** [SD71, RC17]. **Active** [Dod63, HJ88, Har65, Hud63, LCL+98, MWN63, WWA+98, AIH+98, BAB+13, BCCK92, CAW+98, MC09, NAB+15].

**Active-matrix** [LCL+98, AIH+98, CAW+98]. **activities** [APRS16, SSK+16]. **Activity** [RCH+86, LRNS17]. **Actual** [MW79]. **actually** [Per04]. **actuation** [RBB+11]. **Actuator** [Hea76, MJ64, BM68, FMPS93, ZH89]. **Adapter** [HTH+09, ZST+07, BAB+18, OCB+90]. **adapters** [HSL+05, SAB+07]. **Adapting** [Osb93, DBC+06]. **adaption** [MWL+14]. **Adaptive** [EÖH10, FWR+11, FB78, HW81, O'M85, Pat85, ATL+88, BS06, BSHM01, CLP+13a, LQRS04, Nob95a, ODL+09, PMLA88, Sho04, Ung72, HJK+01]. **add** [AEG+02]. **Addendum** [Ano66k, MHI98, SW98]. **Adder** [HA58, Pet58, LKY80, Lin81, Wei91]. **Adders** [LT70, Wei79]. **Addition** [Rut57, Hor98]. **additives** [VBDA05]. **Address** [BCH84, Fra83, HP63, SR63]. **Address-Independent** [Fra83]. **Addressable** [MLGD84, WW71]. **Addresses** [FT80]. **Addressing** [FC63, Pet57, SAA+18, APOI92, van73b]. **Adequate** [Sop59]. **Adhesion** [Bro94, EC71, Mit94, CF72, Dür94, EM94, RKL88b, SRD94, Spo94, Tho94, LV94]. **adhesive** [KS01]. **Adjacent** [Bos70a, AC84, Bos70b]. **adjustment** [Kar73]. **Admittance** [Hud63]. **adoption** [GWB+17, RM09]. **adsorbed** [MHW95]. **Adsorption** [Bru78, SSFF11]. **Advanced** [AAB+05, ATW97, BAH82, DMG+17, ESS+20, GBS+87, GNF06, HWC88, HKR+97, KMO+14, KGCS85, SRO93, SSN+15, TAE+07, GBB+05a, HRC+08, KPT+02, KRT98, LLF+92, MAG+01, OS99, Sou96]. **advancements** [ABB+12a, ABG+09]. **Advances** [Ano19g, BGL07, CCC+15, RQBW08, STCR84, Tis90, DM01, KFSZ92, KAB+12, SP17]. **Advancing** [BAB+18, BGL+92, CAK+15, PCW+17]. **advantage** [HST06]. **adversarial** [SHCV19]. **adverse** [SLZL18]. **advertisement** [RAMD19]. **Aerial** [BDS+97]. **Aerodynamic** [Len74]. **Aerosols** [HC78]. **Affecting** [GOJN77]. **AFM** [VDD+00]. **Africa** [ZW17]. **after** [Lan66]. **Ag** [Vur70]. **Ag-Pd** [Kah71]. **against** [Cop94]. **age** [SN15, Tal20]. **agent** [BW16, GB93]. **agent-based** [BW16]. **agents** [Hor98, NBM+19]. **Aggregating** [Oha10]. **Aggregation** [BBG60, Cla03, KOP14]. **Agile** [EMM+18, WBT+10, AAB+14, GMR10]. **agility** [OEN+16]. **Aging** [Gil79, CHH+01]. **AHAFS** [JDBP10]. **Ahead** [LT70]. **AI** [Ano19h, Ano19j, ABH+19, BBMR19, BDH+19, CNL+19, IJV19, NBM+19, SR19, WSJ+19]. **Aid** [KC66a, DH69]. **Aided** [KO70, Rue79, SLG78, Dec90, FPST14, FCH70, Ho73, KLRS96, Sch96a]. **aiding** [DRSM15]. **Aids** [HS81b]. **AIM** [KJS09]. **AIM-HI** [KJS09]. **AIMS** [BDS+97]. **Air** [BMC86, FL74, FK62, Ku63, MW62, NHH91, PH79, SHC+72, CXZ+17, Coo90, Fro71, GGRW91, Haj91, KLM+91, PH81]. **Air-Bearing** [FL74, Coo90]. **Air-Cooled** [NHH91, GGRW91, Haj91, KLM+91]. **Airborne** [Ben59, AKKJ72, NT72]. **airline** [LB07]. **AIX** [Aus90, CMR+90, Hei94]. **Al** [Dou62, BdM+78, CSE66, CFH64, HRS+95, TCCH98]. **Al-Al** [CSE66]. **Al-alloy** [HRS+95]. **Al-Cu** [BdM+78]. **ALDC** [SK98]. **Alfvén** [WS64]. **AlGaAs** [HVK+90]. **Algebra** [Mar64a, AGZ94c, Gus97, Gus03]. **Algebraic** [Pip81, RW59]. **Algebraically** [Str68]. **Algorithm** [Ahu79, Bea74, CMP87, Cve87a, Don69, Hai85, Jel69, Lew83, Luk74, MFT77, O'M85, SN87, Tod78a, Tom67, AGZ94b, AGJA06, Bar82, BP74, CDC96, CFP20, Cra98, DF15, Dan82, DFNNS17, DBNK+17, FW83, Gus76a, Gus76b, HRWZ87, HT69, JMLW94, KdAC+15, NFS+17, Nob95a, Ray69, Sav90, Tue68].

**Algorithmic** [Cha77, AGZ94c, BDH+19, Cra98, RDL19]. **Algorithms** [AMG+87, AFCB94, DKN87, Far87, FLW78, FHPR01, KR87, KM77, RK75, Ver80, Wit85, AGZ94a, AGZ94c, BK74, Bra94, DH03, GS72b, GS72a, Gup97, Gus97, Gus03, KB74, LQRS04, RS94, SG94b, TR77]. **Aliasing** [DWW90]. **Aligned** [TDM+87]. **Alignment** [BCH84, And10, LCL+98]. **Alkaline** [WA79]. **Alkane** [VM79]. **all-reduce** [CFS+19]. **all-sky** [SJZ+15]. **Allocation** [CFL73, van72, van73a, ADG+05, BCE+07, DHMP94, GHH+17, GSAB93, KdAC+15, vdP72, Yan07, van73b]. **Alloy** [BdM+78, Fie65, GL62, NM65, RL70, VGC79, AT00, BKM80a, BJMO80, HRS+95, LMPP69, TCCH98]. **alloyed** [SD71]. **Alloys** [BS64, CJT62, Col62, HBL62, HK64, HB74, How82, Jon60, KS66, LR65a, Lud78]. **AlN** [RHC73]. **Alone** [Don80]. **along** [LT95]. **Alpha** [HRC+08, GRH+08]. **alpha-particle** [GRH+08]. **Alpha-particle-induced** [HRC+08]. **altered** [Irv89]. **alternate** [VWE02]. **alternating** [Wid67]. **Alternative** [AKNR10]. **alumina** [KLM+91]. **aluminium** [SD71]. **Aluminum** [ADH70, AIH+98, DYHS78, Jon70, YDHS78, AdH00b, Lar80, SL66]. **Aluminum-based** [AIH+98]. **Aluminum-Implanted** [DYHS78, YDHS78]. **ALUs** [PV93, Sch80]. **always** [SIKdL16]. **always-on** [SIKdL16]. **Ambient** [BMC86, Leh64, RC09]. **Amdahl** [CPD+09]. **Amendment** [Ku63]. **Amino** [BBD63]. **Among** [DG84, Vil82, DSS+92, YCJ+17]. **Amorphous** [BK76, CCG73, CH76, Fri69, OHSP76, Sch75, VGC79, KOT99]. **amounts** [BBC+08]. **Amplification** [Bre60, Pri65, RK69, Smi57, ZZ69, Ito97, Ito00, Lan60, Tur69]. **amplified** [HHSW01, Ito01]. **Amplifier** [Gra80, TC63]. **amplifiers** [JGD+08]. **amplitude** [BS71a]. **AMR** [Ibe03, ILH03]. **Analog** [ARV64, Wal58, CNL+19, HNS+03, HB73]. **Analog-to-Digital** [Wal58]. **Analogon** [BDH83]. **analyses** [BBMP92, Gro59, PMS+17]. **Analysis** [AW82, AKB+17, AH79, AGAP63, BBC+09, Bos97, BK61, BCGS81, Cal81, Cas60, CFL73, CHW75a, CHW75b, Cha62, Cha74, Cha75b, CW85, Chi86, CDW75, CW77, CMS85, CPL+74, Cve87a, FE75, Gar57, Gar64, Gau77a, GLS74, GLP76, GS87, GA84, GL87, Gru79, Gus76a, Gus76b, HS81a, HP66, HW81, HS61, HSC82, Ho66, HS82, HO75b, HS71, How84, Hua79, Ken61a, KO65a, KO69b, KO70, KGT88, Kur87, KM74, Laf80, Lan74, Lee77b, LS76b, Man85, Mat85, McA83, MW79, NB61b, Ohb84, PL83, PH65, Pim76, RP70, Rue79, SC75, SFD77, Sop59, SM66, Sta87, SM63, SG64, Tak87, Tan74, TKG89, Thu60, Tit61, TAR84, VSF65, Wat60a, Wee79, WCW82, WC75, WA79, Yas85, Zar57, AAA+17, ABM88, Bal91, BFRT13, Bir01, BGL66, BBS+03, Bro72, Bur72, BCGS00, CGM+15b]. **analysis** [Cha73a, CGLL93, Cop00a, Cor93, Dan66, DBB+02, Dic91, ESA02, ESS+20, Fer70, GMNE63, Gre60, HMOS81, HMO81, HKA+13, HRF+17, Ho73, KFB+97, KM68, KWT+11, KBF+92, KS01, LPM+12, LFF90, LSW13, LD72, Lom77, MYKK+17, MHI01, Mat03, MWX+17, MDMN10, Mon82b, MNWH20, MFL+12, NML+20, Okt71, PSP06, PAZ72, Pig88, Sch96a, Sed67, SBG+71, SLZL18, SSB+12, Sta75, TWX+10, TKV00, TTI98, Tue76, VPD88, WLH+17, WTT+14, WC69, YBF+14, You90, ZBL+72]. **analytic** [Bar78, Mat03]. **Analytical** [LD72, MHI01, SLHM67, Tro00b, VMS+14, Bat00]. **Analytics** [AGH+16, BR17, EDGL+13, KAF+16, AHN+03, ADF12, BCC+12, BSY+15, BGL07, BEJ+14, CDL+14, CJH+15, CHM+16, CP13, DB20, DGH+14, DJL+16, DNZ+19, GGK+13, GWB+17, GSC12, GAJ+16, HZG+16, KBJ+18, Kan15, KRTN+12, LPA+15, MHR+15, Pon17,

RRMD17, RCP15, SJW+16, SKP+15, Sim19, Sof13, SS15, SMX+14, SIKdL16, WSJ+19, Yar12, ZSY+13, BBE+13]. **analytics-based** [KRTN+12]. **analyze** [SSK+16]. **analyzer** [Ano71, MMUS88]. **analyzers** [DWW90]. **Analyzing** [HAG+13, KSH+08]. **anchored** [NNGV19]. **anchors** [BCC+19]. **Andreev** [vHv+89]. **Andrew** [RBB+11]. **Android** [SBG+13]. **Anelastic** [NB61a, NB61b]. **Angle** [CSS83, Lan63, PBF60, PW68]. **Angle-of-Incidence** [PBF60]. **Angular** [Hun59, Sun06]. **Animation** [BS91, FLCB85, WNBP91]. **Anisotropic** [Pri60, NSOO98, PM72]. **anisotropies** [Yan71]. **Anisotropy** [Boy60, OHSP76, PBF60, You90]. **Annealing** [Blu79a, CCP85, CFH64, DKN87, GC68]. **annihilation** [Pet89]. **Anniversary** [Car81]. **Anodic** [Dat93]. **anodization** [Hes99]. **Anodized** [PCDW78]. **anomalies** [LSW13]. **Anomalous** [AC63, CP86, LeB62]. **Anonymizing** [GDLS14]. **ANSI** [NFI+08]. **answer** [TOKN18]. **Answering** [Pla76, BCD+17]. **answers** [Fre04, GLK+12, MKW+12]. **antenna** [LGF+03]. **antennas** [DHK00]. **anticipator** [HM90]. **Anticoincidence** [Spr63]. **Antimony** [DV64, HK64]. **antispam** [WZC+10]. **any** [DDMS92]. **Aperture** [van77, SRCW97]. **API** [WML+16]. **APIs** [WML+16]. **APL** [AT78, Chi86, CJ91, DO86, FI73, Lat73, Ort84, Sur69]. **APL/370** [Chi86]. **APL2** [Alf89, Bro85]. **APLGOL** [Kel73]. **Apparatus** [BP75, Tay57]. **appliance** [VCM+20]. **appliances** [JWZ+09]. **Application** [Ast67b, Bar75, BMC86, BMD+20, BSJ+13, BKU88, BHWW77, CM80, CD85, DC82, Dou62, FLCB85, GA68, GHK67, HP63, HJ88, HKM+86, How82, KT70, Kob71, KM70, KM00, KT84, Kov59, KBF+92, LS76a, Le 62, LMT84, MW80a, Mar64b, MS67, MS87, Moi91, MPD86, PBC+06, Pip79, PZK+03, Rot66b, SM78, SLG78, SF93, Tro80, TTI98, AKKJ72, AAB+10, ABM+01, BBPS91, BDS+97, CP72, CLP+13b, CPT+08, CN94, EMM+18, EPP10, FKL+08, GI88, HBB99, LFR05, LR79, LS72, LSS+20, MLWC20, MDJV08, MC87, Mon82b, NCB03, RRMD17, RR69, SBG+13, SHC+72, SCW10, TCCH98, BLM+92, MY65, MM75b]. **Application-focused** [BMD+20]. **Application-level** [BSJ+13]. **Application-Specific** [HKM+86]. **Applications** [ABC+85, Aic84, BV78, BAH82, CA84, CH84, Com83, Cro79, Dat98a, Hau96, HF78, Hop61, Kau81, NB61b, OO81, Sch75, SCYK78, WKB+86, WR83, ZG65, vv86b, vAR82, AW82, ABB+13, ABB+03, ARM+01, AKG+19, ACM01, ATW+08, BCC+16, BBH82, CS84, CCG73, CN18, CIJ+10, CBBS90, CKL+13, CJK+13, CRM02, DT08, EWS+13, GR92, GBBM90, GSC12, HVK+90, HHR99, IFB+11, KM93, KFH+06, KLS+05, KKT+95, LPA+15, MCAW95, MN97, Mos61, Oha10, Osb93, RFC+07, SBG+13, Sch96b, SWC+95, SPR+95, SFH+16, SR19, SHDK95, TWX+10, TFL+98, WYF+03, WSJ+19, WYS92, YAH+96, ZSY+13, ŽFE06]. **Applied** [Coh87, EHHP67, Jur78, Nor58, PW67, SH57a, Sar91b]. **Applying** [CPD+09, EG00, GCFW07, OTC14]. **Approach** [BBC+64, BF77, CAE+76, CHS82, Gor65, HJ88, Ho75a, KMO64, Len58, RS85, ABG+95, AYA14, AR87, BKN10, BMS+17, BTWY92, BL15, CHG04, CCE+20, DEG+01, Fer70, HCO74, KRTN+12, Koe18, KSSC+13, KRS+17, Luh57, NML+20, NMV+09, PL20, RCP15, Rub90, SKSP06, SJZ+15, TWM+14, VJA07, VPV+19, VNT16]. **approaches** [DJK14, Fra89, MBB+01, SNP06, TSC91]. **approximants** [Ris72]. **Approximate** [CPvR00, CHW75a, NG17, SC75, Sau81, Sch62b, Di 88, HSL+10, Lei61]. **Approximating** [And73, Kep75, Mir69].

**Approximation** [RK74, AGJA06, MM94, Riv87, Sit87, Wee72]. **AQL** [ADST78a, ADST78b]. **Aqueous** [CHBH85, LG88]. **Arabic** [AFCB94]. **arbitrary** [MY65]. **architected** [KMA+20]. **Architectural** [BS95, Sou96, BS06, KL70b]. **Architecture** [ABC+99b, AK82, ABB64, ABB00a, BLM+92, BBH+81, CdLS92, Com83, CDG83, Cve87a, DLW86, ES92, FGM+83, Gum83, Gyg08, HF94, JB07, LSZ+10, MMR89, Ono93, Pad83, SW83, Tay84, UMK+85, VDG19, WF87, Wri83, YS99, ARG00, BDN+02, CNV+15, CGM+15b, CPT+08, CBD+09, EBD+95, FPST14, FXB+10, GBC+05, Gsc16, HHH86, JS14, KdAC+15, LNT08, MSB+04, MME+97, NAB+15, OG90, PVDF95, RD12, RBL+09, SHL07, VTC09, CRDI07, HFH94, HJK+01, IMSV10, JMP96, PERW02, SY92]. **Architecture/390** [SY92]. **Architectures** [BGLM09, FH84, BGS13, BIK+05, CCF+10, Cla03, Nai02, OTC14, SDS+18]. **Archive** [BBC+08]. **archives** [CBK+98, ZW17]. **Arcing** [HMR82]. **arcs** [Hof60]. **Arcsin** [Kog58a]. **Arctan** [Kog58b]. **Area** [DO74, FHL+82, Gau77b, HS85, HS81a, CH06, HMK01, MNWH20, OCB+90, ST89, Sta89b, Sta89c]. **areal** [ABB+08]. **Argon** [SJ70]. **Argonne** [CKL+13]. **arise** [Rus04]. **Arising** [Sch63, BK61]. **Arithmetic** [MLT83, Mur57, RL79, Tom67, WRLA57, ABC+99b, Lan84a, Lan84b, MP88a, PMLA88, Ris76, TLM83, Wai05, WET+10]. **Arm** [Hea76]. **ARMA** [HA00]. **armed** [BBMR19]. **Aromatic** [BMW83, Cas71]. **Array** [AKK+67, CL74, Dan81, FHL+82, GLL80, JT66, Jon75, MW79, PSS67, RT75, SW98, VPS88, Wei79, Woo75, BGL+92, CRM02, FM75, Fre96, HL72, MLMP+12, MKJM93, SST+98, TSC91]. **Arrays** [EL80, LBH+75, MW70, Ort84, Raa76, FJSS89, GM73, HDBR08, HL72, JPTW92, KOT99, Mar71, Mor73, PC07, Spr71, WW71, Won90]. **Arsenic** [BA62, DJ70, JD67, SR71, CG71, GOVC71]. **Arsenic-Doped** [BA62]. **Arsenide** [And60, vM66]. **Art** [CH84, BGL+92, MM91]. **Arthur** [WM92]. **Artificial** [Dav58, Gri92, CM19, DNZ+19, MLM+19]. **AS/400** [Ste01, BLM+92]. **ASIC** [BDN+02, BTP+90, BPS+96, BL98, DL02, EGH+96, HO96, IFB+11, PBK96]. **ASIC/SoC** [DL02]. **ASICs** [BBD+02, GGKK96, SGS+96, SKB+96]. **ASLT** [LV67, Llo67, SST67]. **Aspects** [Ame80, Ano59n, BBMP92, CK79, GFHW82, HHJW84, HO75b, Kol67, Len74, PPS82, SB64, Wat60b, Yas87, HMOS81, HHSW01]. **assembled** [GSAB93, Man90]. **assemblies** [CGLL93, GLCW93]. **Assembly** [Doo83, LW77, RBC78, WLPL+80, BRB+07, ESA02, SCH+09]. **Assessing** [Mar12]. **assessment** [BISN+12, BJ06a, HE10, PAH+18]. **assessments** [KVP+20]. **Asset** [GAJ+16, HZG+16, PTRC16]. **Assigned** [Ano66n, Ano66m, Ano66o, Ano66p, Ano66q, Ano66r]. **Assignment** [Bea74, Don69, NRA+07]. **Assignments** [MT77]. **Assistance** [FZ88]. **assisted** [CNS+99, GM69, GMP90, Hes99, JKG69]. **assists** [ZDB+18]. **Associative** [Gab69, JM64, KPST61, MP61]. **assumptions** [BJW72]. **assurance** [MCH+82]. **Asymmetric** [IMC+10, KLHW16]. **Asymptotic** [Lew73]. **asynchronous** [HAMC+04]. **ATM** [Gla97]. **atmosphere** [QS67]. **atmospheric** [Shi72]. **Atom** [Gom86, KO65a, KM66, FRE+08, KMK68, KO69a]. **Atomic** [Bat00, BBS78, Cle65b, Dür94, Fin86, Hun59, LFC95, Mic78, Pan78, Agn02, Sto91]. **atomic-level** [Agn02]. **Atomic-scale** [Dür94]. **Atoms** [Cle65a, Lan86, Cle00, MHW95]. **Attached** [Cro79, DK79, ODA+08]. **Attachment** [RBWH93, CMW92, NSOO98]. **Attack**

[KS66, ASR07]. **attacks** [Cop94]. **attaining** [MDR+07]. **Attenuation** [Dav79, DSSS64, EGS60, Mor62, PL81, Swa59, SS59b, Far82, Lew73]. **Attitude** [CI76, GHK67]. **Attraction** [PH81]. **attribute** [Arb86]. **attributes** [GA68, PERW02]. **attrition** [Coo18]. **Audio** [WLKS98]. **Auditory** [Dav58]. **Auger** [CW78]. **Augmented** [GFS71, GSAP17]. **Augmenting** [AAJ14]. **AuIn** [KL80]. **Austin** [Ros03]. **authentication** [CLP+13a, OYHSB14, WSE+16]. **Author** [Ano92a, Ano93b, Ano94a, Ano94b, Ano95a, Ano97a, Ano98a, Ano99a, Ano00a, Ano01a, Ano02a, Ano03a, Ano05a, Ano06a, Ano07a, Ano08a]. **Authors** [Ano57c, Ano57d, Ano57e, Ano57f, Ano57g, Ano57h, Ano57i, Ano57v, Ano57u, Ano58a, Ano58b, Ano58c, Ano58d, Ano59a, Ano59b, Ano59c, Ano59d, Ano60a, Ano60b, Ano60c, Ano60d, Ano60e, Ano61a, Ano61b, Ano61c, Ano61d, Ano62a, Ano62b, Ano62c, Ano63a, Ano63b, Ano63c, Ano63d, Ano64a, Ano64b, Ano64c, Ano64d, Ano64e, Ano65a, Ano65b, Ano65c, Ano65d, Ano65e, Ano66a, Ano66b, Ano66c, Ano66d, Ano66e, Ano66f, Ano66s, Ano66t, Ano66u, Ano66v, Ano66w, Ano66x, Ano67g, Ano67a, Ano67b, Ano67c, Ano67d, Ano67e, Ano67f, Ano67w, Ano67x, Ano67y, Ano67z, Ano67v, Ano67-27, Ano64k, Ano64l, Ano64m, Ano64n, Ano65k, Ano65l, Ano65m, Ano65n, Ano65o, Ano86b, Ano90c, Ano92e, Ano92f, Ano92g, Ano93e, Ano94r, Ano94s, Ano94m, Ano94n, Ano94o, Ano94p]. **authors** [Ano94q, Ano95i, Ano95g, Ano95h, Ano95j, Ano95k, Ano96g, Ano96h, Ano96i, Ano96j, Ano96k, Ano97f, Ano97g, Ano97h, Ano97i, Ano98g, Ano98h, Ano98i, Ano98j, Ano98k, Ano99f, Ano99g, Ano99h, Ano00i, Ano00f, Ano00g, Ano00h, Ano01i, Ano01j, Ano01l, Ano01m, Ano01k, Ber76a, Wie76]. **autoconfiguration** [BBC+12a]. **Autocorrelation** [BR82]. **Automata** [RS59a, Ros66, Rot66a, She59a, DWW90, EM65, HMP90, SG94b]. **Automated** [CTD+16, GAC85, GHLW84, GLM+96, GBJ+08, HL83, LS75b, Pri94, TS82, WLPL+80, WZ78, DF15, HD73, HRS07, KL63]. **Automatic** [ABCR65, AAA+17, BBD63, CFW82, Che72, Dah63, DMWW77, DMP59, FKGF12, GFS71, Hei76, HL77, Kar73, LW77, Luh58a, Maz70, Sar91a, Sar97, SBG+13, SFH65, Tar63, TYSS19, Urs75, War63, CL86, ET69, Gus97, HRWZ87, KWB+15, MC87, RSL+70, Sed67, ST72, SKSP06]. **automatically** [CJ91]. **Automation** [APS86, Ano71, CGG+64, CCG+81, GLL80, Gra69, HBT+16, MW82, SG71, SB86, Tay84, DeM91, GGKK96, Gra71, HNS+03, HHM70, HYA03, NNGV19]. **Automorphisms** [Hal60]. **Autonomic** [MC09, Kis03, WSCK17]. **Autopass** [LW77]. **autoradiographic** [LPPT86]. **Availability** [GL87, HCTS81, KMH82, AAF+09, CAK+15, DP13, FCS+04, OHK+07, Pig88, VWE02]. **available** [ACFS16]. **Avalanche** [BS69, KO65b, KO66]. **avalanching** [Vin81]. **Average** [Her65, Don69, SS86]. **average-value** [Don69]. **averaging** [LO72]. **aware** [KdAC+15, VTC09]. **awareness** [BPG+16, RVT+13, YCJ+17]. **Axially** [Key61b]. **Axioms** [Mor73]. **Axis** [Kan78, MSW69]. **Axisymmetric** [BT78, BBT83]. **Axp** [Pat85]. **Az-Type** [PL79]. **AZ1350J** [DS77]. **azimuth** [CBV08].

**B** [Bos70a, YTF+11]. **B-Adjacent** [Bos70a]. **B.E.** [NMH+07]. **B2B** [VVHL16]. **B2C** [HRZ14]. **Ba** [BPL+89, CSH+89, KBS+99, GSG+90]. **Back** [Ano14a, Ano15a, Wym57, Ano14b, Sie63, TMW+17]. **back-propagation** [TMW+17]. **backend** [Koe18]. **Background** [McN94]. **backlighting** [TMS98]. **backpropagation** [NFS+17]. **Backscatter** [Far82]. **backscattering** [ZBL+72].

**backtracking** [SS86]. **backup** [Ste01]. **baking** [HHSW01]. **balanced** [DGL+97, Ris73, WF83]. **Balancing** [ZS03, CHG04]. **Ball** [CGLL93, Cor93, LCB93, Mah93, RBWH93, GLCW93]. **Ballistic** [HF90, Lud00, RMR94]. **Bamba** [WLKS98]. **Band** [Adl70, CFG64, CCE+88, HK64, McC64, Rem67, WB70, Haa70, LMPP69, Nob95b, ZH89, ZVW+11]. **banded** [RSS91]. **bandits** [BBMR19]. **Bandlimited** [Sta67]. **Bands** [PB69, FA70]. **Bandwidth** [Ism00]. **banking** [SMX+14]. **Barium** [Cam57, DH57]. **Barrier** [BKM80a, CP86, AA71, GBW+09, JP94, DS70, Mid70a, Wol70]. **Barriers** [But88a, CSE66, OSP+98]. **Base** [DC73a, Eas75, GLP76, GS74, Hal76, HKM+86, LS76a, LS76b, LN79, MM75a, McG81, Sow76, VM79, WW75, AT00, Ber76a, DCB77, FGP+85, Wie76]. **Baseband** [KGF77]. **Based** [AGLM85, Blu79a, Eas78, EP86, HL77, HS81b, Lom80, Pet76, RP66, Shi85, Str83, ACM01, AIH+98, AKE+92, AEH+04, AHH+14, BEE+02, BW16, BC18, BHH03, BBG+14, BCC+01, CKG+99, CJ83, EGN+19, ESS+20, FRPG01, GP81, HRZ14, HP01, Ibe03, JS14, JZ91, KPB+12, KRTN+12, KMB+08, KBA07, KBK+97, KAB+05, LSS14, MDH+12, MYKK+17, MS05, MBF+07, Mey00b, MTB+90, MS07, NFI+08, NMV+09, Ngu99, Nob95b, OR92, PSA+08, PW72, RCP15, SNP06, SAA+18, SvNH13, SKS+20, SG94b, SJZ+15, SMX+14, TOKN18, Tib93, TMS+01, WZC+10, WLH+17, WP11, WML+16, WNV+02, YGR14, YAJ90]. **Basel** [RCH+86]. **Bases** [ADST78a, MR76a, ADST78b, FBHJ04]. **Basic** [FHVZ80, BK61, GR90, PMLA88]. **basin** [EWBR09]. **Basis** [Ins77, Lom76, HdTR06]. **Batch** [BBC+64]. **battery** [Ste01]. **Bayesian** [PK18]. **BBr** [LD74]. **bcc** [HBL62]. **BCS** [Ode64, Swi62]. **be** [Gri04, MS89, BBS78]. **Beam** [BJS80, Bro88, DMWW77, Dav80, ELMR77, GOJN77, HWC88, Hor62, KP59, KP80, Lin67, Lun79, MW80a, MPS77, MP67, NM62, PS80, PW78, Bag94, BGK+82, DP68, Far98, FKOP90, GI88, GWRS90, GHP+93, KBF+92, LR79, LCL+98, MTH71, MAG+01, PGN88, RKL88b, WPH69, WW71, Gil84]. **Beamforming** [Raa76]. **beamlines** [SRO93]. **Beams** [Le 62, WSBL90, ZSZ96]. **Bearing** [Bau63, FL74, Lan63, Coo90]. **Bearings** [SWD74, SM63, TT74, VG74, BCT89, BHHO59, Dec90, Gro59, Mic59]. **Beauty** [FvGGM90]. **Becoming** [DSZ+12]. **Bed** [Sti79]. **Behavior** [Cha62, Col62, Eas78, Fer75, GR58, Goo62, LM85, Lev64, Mid65, SM63, WA79, ASR07, BSY+15, Bau72, BP74, BP88, BGL66, BEJ+14, CP97, CF72, CR15, FP73, Ito01, KAF+16, Mor89, PL20, SMVK90, Vie86, Vur70, WZC+10, YBF+14, You90]. **behavior-based** [WZC+10]. **behavioral** [HHC+18, OIM+13]. **Belief** [EP86]. **Below** [Sie70]. **Belt** [ELZ79]. **benchmark** [CP97, GGH+13, KGBB09]. **Bending** [BP84, LC83]. **benefits** [BR09b, Now02]. **Bentonite** [SH63]. **BEOL** [GON+06]. **Berlekamp** [Gus76a, Gus76b]. **Best** [Cve87b]. **better** [EG00, Jaq03, KL94]. **Between** [CLW79, KLC84, Lew83, Mic78, AAM+07, BBT60, BCT89, Bro94, Bru78, DP13, EC71, KSH+08, Les71, Lew75, Lew12, Mei62, MKJM93, Nef90, Pes71]. **Beyond** [Ano06b, HHH04, Pad81, RD12, Won02, BFG+06, BLDM97, CS03, FKOP90, GR90, HND+06, TMF+95, WGF+06, WNV+02]. **bi** [AW82, BS64, Sui75, ZBL+72]. **Bi-** [Sui75]. **bi-level** [AW82]. **Bias** [ASV76, Dun57b, DMN+59, Ker64, MU77, BDH+19, CM19, Fuj92, SR19]. **biased** [Yas07]. **BiCMOS** [DAC+03, FMP+03, HNS+03, Nin02]. **Bicubic** [DB76]. **biflow** [Ari69]. **Big** [GRS13, Nun09, BFRT13, Fre04, MCG+15, OTC14, SMX+14, VPV+19, YMR14,

CDL+14, GGH+13, HAG+13, HCG+13, JSS13, Mal13, RCP15]. **bilevel** [ATL+88]. **Bimorph** [MPD86]. **Bin** [KM77]. **Binary** [AMG+87, Gri90, HA58, LT70, Rut57, Smu57, Wyn64, BL69, Dan82, Lin81, PMLA88]. **Binary-Image-Manipulation** [AMG+87]. **Binary-Weighted** [Smu57]. **binodal** [TMB+99]. **bioinformatics** [EBH+16]. **biological** [ABM+01, Bir01, DBNK+17, HdTR06, NMTP14, SPS+06, ZHP+18]. **Biology** [BMC86, ACM01, BJ06a, EB06, PMW06]. **biometric** [RCP15]. **biometric-based** [RCP15]. **biomimetic** [DBNK+17]. **biosystems** [PSP06]. **bipartite** [Rus04]. **Bipolar** [CW85, Dan81, FHL+82, Gau77b, KGCS85, ML82, MM82, Phi78, Pri58a, SGC+87, ŽFE06, BEM+92, CCJH81, Fre96, GPL+92, TWF90]. **Birefringence** [SH63]. **Birthday** [FvGGM90]. **bis** [GA88]. **bis-maleimide** [GA88]. **Bismuth** [FK60, HK64, Heb64, JJ64, Sch64, SBR64, TH64, Vui64, WS64, YWWK64]. **bismuthates** [BCSE89]. **Bistability** [HJ88]. **Bistable** [BFT79, LF64, Mos61]. **Bistable-Unstable** [BFT79]. **Bit** [ARV64, BS70, BCJ+96, Cor82, GHL+04, MRG99, WRG99, TGB+80]. **bit/s** [GP81]. **Bits** [RK66]. **BJT** [HMO81]. **BladeCenter** [Bal05, VLB+09, BBB+05, CAC+05, DBC+05, FCP+05, HCK+05, HPZ+05, HSL+05, HSCG05, PHCM05, PAB+05, VAB+05]. **blades** [HSL+05, NMH+07]. **Blasbalg** [Ano66j]. **Blazed** [BC65]. **Bleaching** [Lor70]. **blended** [MBK+15]. **blending** [MOG+19]. **blends** [KMGD19]. **Bloch** [Azb88]. **Block** [Fra79, LP75, Smi77, WF83, ARG00, FGC92, TKG89, TMS+01]. **Block-Oriented** [LP75]. **block-paging** [TKG89]. **Blockchain** [Ano19i, CDS+19, DNZ+19, NNGV19, MDN+18, VDG19]. **blocking** [Gus97, GJ00]. **blocks** [GR90, NMH+07]. **Blodgett** [RSSS82]. **blood** [LPPT86]. **Blue** [ABB+13, BSJ+13, BBK+08, BCK13, CCD+13, CP13, CKL+13, CNC+08, CHT+13, DT08, DLJ+08, EO13, EWS+13, FKL+08, KHZ+08, OWG+13, PMS+08, RIB+13, SCG+13, ABC+05, AAC+05, ADG+05, BGH+05, BHD+05, CBB+05, CBC+05, EFR+05, FRE+08, GBC+05, GZE+05, GBB+05a, HBB+05, IBP+05, LKFU05, MSW+05, MAA+05, OBB+05, SPP+05, WAB+05]. **BlueConnect** [CFS+19]. **Bluemix** [GRB+16, KMM+16]. **BlueStar** [NMV+09]. **Board** [BAH82, BCRW82, CC76b, ABM88]. **Boards** [BDWZ83, LDL84, MS60b, BBMP92, Cha88, GA88, Pau89, Whi93, WGC93]. **body** [BKB76, BMPS91, FRE+08, RE71]. **bogs** [Now02]. **Bohr** [Mer04]. **boiling** [Okt71]. **Boltzmann** [BSHM01, OD17, Pri66]. **bond** [HRWZ87]. **Bonded** [CN79, Tan74]. **Bonding** [HL83, Bag94, Dus71, HSH+88]. **Book** [Str62, CHMW07, WGS04]. **Boolean** [DCB77, DC73a, FTY83, FJSS89, (Ga57, Mar64a, OH74, RW59, Rot60a, Rot60b, RK62, SBH82]. **BooleDozer** [SKB+96]. **Boost** [SLP+20]. **Booster** [GHK67]. **boot** [WMK20]. **bootstrapping** [SS00]. **Boron** [JD67, WS75]. **Bounce** [Hen83]. **Bound** [Gri60]. **Boundaries** [KWB88, LC80, AG72, CDM89]. **Boundary** [BTP+90, Far87, Lee77a, Mei62, Pim76, RVV88, RS67, SSG69, TT74, BS71b, CP72, JS89, RS66]. **Boundary-Layer** [RVV88]. **Boundary-scan** [BTP+90]. **boundary-value** [BS71b, CP72]. **Bounded** [Fra80a, Fra82, PH81]. **Bounds** [DH73, FL75, LF77, Ris73, Don69, MM94]. **Bragg** [MJJ69]. **Braids** [BS06]. **Brain** [DLJ+08, MYKK+17, RC17]. **brain-machine** [MYKK+17]. **Brain-scale** [DLJ+08]. **branch** [HHR99]. **branch-prediction** [HHR99]. **branched** [KSH+08]. **branches** [LT95]. **Branin** [Bre72]. **Break** [Bog79]. **Break-Up** [Bog79]. **Breakdown**

[KO65b, KO66, SARG80, SAR81]. **Breaker** [Ano58e]. **Breaking** [GBW+09]. **brick** [FGH+06]. **Bricks** [WGF+06]. **bridge** [SNA02]. **Bridging** [RDL19]. **Brief** [Sta85a, GMR10]. **brigade** [HCL72]. **Brightness** [ON60]. **Brightness-Voltage** [ON60]. **Brillouin** [Spe69]. **Bring** [CLP+13b, JKB+13, DFF+15, HBB+05]. **bring-up** [DFF+15, HBB+05]. **Bring-Your-Own-Device** [CLP+13b]. **Bringing** [OYHSB14]. **Broadband** [BDHH+09, CRDI07, CS03, JB07, LJV+07, PBBL07, RWW07, RG09, SHL07]. **Brownian** [RVV88]. **Brute** [DB01]. **BSRA** [VDG19]. **Bubble** [ASV76, BL62, CERS76, CLW80, CC76a, Sch75, WY76, BK76, BBP72, BW81b, CCG73, Lin76]. **Bubbles** [CH76, JHH+81, MW62, Okt71]. **Buchholz** [Str62]. **bucket** [HCL72]. **budget** [KSB07]. **budgeting** [LB07]. **budgets** [PKXK07]. **Buffer** [CW77, FLW78, SL76, Tue76, VLT+12]. **bug** [SKSP06]. **build** [AKRS04, BCK+05]. **build-up** [BCK+05]. **Builder** [HKM+86]. **Building** [ABD+16, IS20, Jur78, KFH+06, KMM+16, KAA+18, NMH+07, ACFS16, BCC+01, FGC92, HSS+10, NMV+09, TMS+01]. **building-block-based** [TMS+01]. **Built** [FPS66, KS90, CNV+15, HMP90, RB90]. **Built-in** [FPS66, KS90, HMP90, RB90]. **Bulk** [Cha74, Pai69, Sta75, GC68]. **bumping** [GBB+05b]. **buoyant** [Fro71]. **Burning** [GFHW82, VM79]. **Burst** [CT65, Wyn64, Gor63]. **burst-error** [Gor63]. **Bursts** [MG63a, Meg60]. **Bus** [GPE99, HS81a, SLC+97, RKW99]. **bus-driven** [SLC+97]. **Business** [ADF12, FvGGM90, Luh58b, Pul07, RM10, SH57a, CKE+10, DDDKW12, Den80, DCC+17, DKR12, HSS+10, MD12b, SKP+15, TCP+16, Vay12, WAB+09, ZBG+10]. **BYOD** [JKB+13, CJK+13, SSK+16]. **Byte** [Pat86, DMR+81]. **C** [Ber76a, Wie76, CFK+91, FL89]. **C4** [DWA+08]. **Ca** [BPL+89, Mat70]. **cable** [DDA+93]. **cables** [DAS+94]. **Cache** [FHVZ80, VMH+83, BGAJ94, BM96, BBC+12b, CT06, DGL+97, FLMKS06, MBJ+97, MWS09, MMR89, Mat89, MHI01, SG94a, SSD+15, Thi88, TMB+99, VH81, WMB+15]. **cache-miss** [Thi88]. **caching** [SMC+14]. **CAD** [CS84]. **Cadmium** [Mas62]. **cage** [HDW+07, SBC+12, WBH+04]. **Calcium** [SS61]. **Calculation** [Bei74, Fro84, KRC68, LS78, Mar64b, Ove70, MM75b, RE71, Shi73]. **Calculations** [Hut74, KO66, KM66, Phi78, RS85, SM63, Fre96, Led71, Rue72]. **Calculus** [Rot66a]. **calibration** [Vie86]. **Call** [KM20, LPMDG14]. **calls** [Lom77]. **Calorimetric** [Map62]. **camera** [LPA+15, MHW95]. **campus** [RBB+11]. **campus-wide** [RBB+11]. **Can** [Goo58, Gri04]. **cancellation** [Nob95a]. **Cancer** [Pic87, OMA+96]. **candidate** [BKS+08, CCFB+12, MKW+12]. **Cantilever** [BP84, SST69]. **Capabilities** [CBBS90, AAB+05]. **capability** [CCC+15, CM19, FDS+13]. **capable** [RHC73]. **Capacitance** [AO60, CB85, FT77, Mar64b, GAOD71, KMK68, KO69a]. **capacities** [Sho04]. **Capacitor** [DK67, FMP61, Has62, Has66, HOWP92, KBS+99]. **Capacity** [ABG+09, MT77, LSS14, Sho04]. **CaPd** [WTP64]. **CAPI** [SBJS15]. **capsule** [SR71]. **capture** [KBF+04]. **Capturing** [AC92]. **Car** [BBK+08]. **Carbide** [Rut64]. **Carbon** [CSY79, HG83, LY83, SCH+09, GMP90, Gri99, KLE71]. **Carbon-13** [LY83]. **Carbon-Loaded** [HG83]. **Card** [BM84, FMP61, Has62, Has66, HPZ+05]. **cardiac** [NNN+06]. **Cards** [Has62, RBWH93]. **care** [EEM15, PL20, SSB+12, TOKN18]. **Carlo** [Ken61a, LFF90, MNR86, MS96]. **carpal** [BC00]. **carpool** [FW83]. **Carrier** [FT64, Hai85, KO65b, ATW+08, LDSA02].

**carriers** [KAB+05]. **Carry** [Car60]. **Carrying** [Kuh88]. **Cartridge** [WCB+86]. **Case** [Keh65, KGF77, MDH+12, DCC+17, HMO81, Hof60, LB07, MOG+19, SKK14, SvNH13, VPV+19, WLH+17]. **Case-based** [MDH+12]. **Cases** [Rob67]. **Casey** [DCB77]. **catalysts** [OHWR88]. **Catalytic** [DS65]. **Cathode** [HMR82, TH11]. **Cathodes** [CBCM79]. **Cathodic** [AGLM85]. **Cation** [SK69]. **Cauchy** [Ger73, Sug59]. **Causal** [EPP10]. **cause** [Pon17]. **Caused** [Boe69]. **caustic** [KJP11]. **CC** [KFB+97]. **CC-NUMA** [KFB+97]. **CCITT** [WZ78]. **ccNUMA** [BCC+01]. **CCS** [SS87a]. **Cd** [Vur70, Tit63]. **CdCr** [FA70, Kus70, WB70]. **CdIn** [WB70]. **CDMF** [JMLW94]. **CdS** [Boe69, MSW69]. **CECSIM** [vBBE+02]. **Cell** [BV78, Gar57, LS78, RWC80, TSH92, BCCK92, DMR+81, EB06, HRG80, JS72, KBK+97, Lee77b, BDHH+09, CRDI07, JB07, KDH+05, LJV+07, NMH+07, PBBL07, RWW07, RG09, SHL07]. **Cell/B.E.** [NMH+07]. **Cells** [GMW80, LJ92, NBF+00]. **CellSs** [PBBL07]. **Cellular** [HMP90, Pic87, SG94b]. **Cement** [MS67]. **Center** [DRB+20, Pul07, BCG+09, CPD+09, KDG15, KTD20, LPMDG14, MI10, SCI05, SBB+09, TFJ+96, WH94]. **centered** [BMS+17]. **centers** [BNSG09, BSRM09, HvKI+09, NMV+09, SI09, VRA+09]. **Central** [Cho75, Col59, SC75, PBC+04, TBB+09]. **Central-Force** [Col59]. **centralized** [Yar12]. **centric** [BCE+07, DF15, HLZ+09, Sha12, ZBG+10]. **Century** [HCTS81, JS81, HBP+81, TMF+95]. **Ceramic** [BB82, Gou89, MKW+05, YCB05]. **ceramic/copper** [TKK+92]. **ceramic/copper/polyimide** [KFSZ92]. **Ceramics** [BW83, Vie86]. **CERN** [BO69]. **Certain** [MG63a]. **certificate** [MBF+13]. **Chain** [AKK+67, Fla65, GLS67, Lye77, MR76a, SSW65, DKR12, GCFW07, NQ20, NNGV19, SKK14]. **Chain-Complete** [MR76a]. **Chains** [RK75, Sch67, SP14]. **chalcogenide** [Haa70]. **Chalcogenides** [Dim70, Kas70, Von70]. **challenge** [Coo18, WA15]. **Challenges** [MDB+02, MLM+19, SCI05, AG06, BCK+05, CPCC18, DFaDNS98, GNF06, JAC+19, Lai08, LPA+15, SLA+15, SAA+18, SFG+06, SPP97, WHK+09]. **Chamber** [Cha73b, MN67a]. **Championships** [BHP17]. **Chang** [Sta75]. **Change** [Sou64, CTD+16, DDDKW12, DSZ+12, KMB+08, RBB+08]. **Changes** [CC76a, Lew83]. **Channel** [Cal81, Cio86, CDG83, DHC20, God74, Mil83, RGL75, AAC+06, BAB+18, CDS73, CDS00, FGC92, Fra80b, Irv01, KT70, LKY80, SFG+06, Sho04, WYTO04]. **Channels** [CR76, Fra79, Fra80a, Fra82, KGF77, KT73, MLT83, Sha58b, Fra89, GE02, Rus04, SJW+16, TLM83]. **Chaotic** [Hen83]. **Character** [Dic60, WR83, YG81]. **Character-Recognition** [Dic60]. **Characteristics** [BKM80b, Cre58, GLS67, JH80, KMCY82, LS78, OPR+78, Pea69, Roe66, TDM+87, UL70, WS75, WW71, BB09, Bru76, CDS73, CDS00, EWS+13, HRW69, ILH03, Kah71, KDG15, KDT18, MMR89, PH81]. **Characterization** [AT00, Ano05c, AGAP63, AEE77, Bar73, BBCV80, Esa62, GA88, GC81, MMM+05, OHWR88, OS99, SS78, SY73, Twa85, YDHS78, ATW06, ATW+08, ABM88, BSJ+13, CPTW98, DDA+93, DKS+95, GLG+99, Hof60, KB06, LBT99, Luc99, WGC93]. **Characters** [Cas70, CEHL78, GHKO57, Yha75, DDMS92, HM71]. **Charge** [CH74, DYHS78, Gra80, Kau81, LMD70, Mag73, MS60a, Sch62a, SS78, Sch96b, TY64, Fre96, HC69, HCL72, HRG80, Lee77b, Pat73, TGB+80, Var89, WYS92]. **Charge-Coupled** [CH74, HCL72, TGB+80, WYS92].

**Charge-metering** [Sch96b]. **Charge-Transfer** [Gra80, Kau81, Var89]. **Charged** [Fre79]. **charges** [RRB+01]. **Charging** [FBW77, DG93, DXZS13]. **charging-point** [DXZS13]. **Chargistor** [Yu61]. **Charybdis** [HHH04]. **chassis** [BBB+05]. **Chebyshev** [FXL01, MR72]. **Chebyshev-expanded** [FXL01]. **Check** [Ahu79, BBI94, Irv01]. **Checkers** [Sam59, Sam67, Sam00]. **Checking** [Pet58, PR59a]. **checks** [Irv89]. **Chef** [VPV+19]. **Chemical** [BBKW86, Chu82, Cle81, CK79, HHSW01, Ito97, Ito00, KEJ87, Leh64, Lun79, WKB+86, Bea90, Coo18, CNC+95, CNS+99, GMP90, GPL+92, Luc99, Mey90, Mey00a, Ngu99, YAJ90]. **chemical-mechanical** [GPL+92]. **Chemical-Vapor-Deposited** [KEJ87]. **chemically** [HHSW01, Ito01]. **Chemisorbed** [Dem78, Lan86]. **Chemisorption** [BBS78, Win78]. **Chemistry** [CFG64, CD85, Hir77, KT84, KJSG+88, Spr61, FL69, HMK01, Oka69, VBDA05, YAJ90]. **Chess** [NSS58]. **Chess-Playing** [NSS58]. **Chief** [Mey03, Pea09]. **China** [CXZ+17]. **Chinese** [NBF+00, Yha75, YG81]. **Chip** [ABB+99, BM84, BGR82, Ber85, CW83, DKN87, DB82, How82, IBC64, JH80, Kua95, ML82, Ost84, SW98, Ver80, Woo75, AEZ84, AUD+98, ATL+88, BBD+02, BA69, BAB+13, BHD+05, BCCK92, CDC96, Cla03, CU98, DWA+08, DTH92, DBB+02, DKS+95, DTTK95, ESHM95, EK08, FWR+11, FDS+13, GP06a, GMS05, GWRS90, HBB+05, HHSR96, Hei90, HAMC+04, IBP+05, KAB+05, LFR05, MYKK+17, MMR89, Mat89, Mil69, Mil00, MTB+90, Nai02, NFS+17, NCB03, OCB+90, OBB+05, SAT+08, SST+98, SP90, TMF+08, IBM13a, VWPB90, VLT+12, WAB+05, WYF+03]. **chip-stacking** [SAT+08]. **Chip-To-Chip** [JH80]. **Chip/Card** [BM84]. **Chips** [BFL66, Cle83, LHW81, SMD80, BEM+92, CBB+04, CAC+95, KBK+97, LD72, Okt69, SWF+09, SHR+09, SNA02, VTMB+90]. **chipset** [KBG+09]. **Chlorin** [VM79]. **Chlorine** [Lev64]. **Chloro** [SL66]. **Chloro-aluminum** [SL66]. **chlorobenzene** [CH82, HMM82]. **choices** [SON+91]. **Cholesky** [GJ00]. **cholesterol** [MD12a]. **cholesteryl** [VBM71]. **chopped** [WSBL90]. **Chromium** [BBKW86, KS66]. **Chromium-Iron** [KS66]. **chromodynamics** [VBC+08]. **Cil** [Ghe80]. **circles** [Nef90]. **Circuit** [Ame80, BDWZ83, BDMW81, BGK+80, BFL66, BAH82, BBH+67, BHWZ63, CW85, Dan81, Esa62, FT80, Gun66a, HHSR96, HS61, Kar74, KCOW08, LDL84, Man85, Rot74, Rue79, SST67, Ser82, STCR84, SWC+97, Sta83, Sta84a, Sta85b, Sta87, Str59, Wal57, Wal58, ADH+00a, ABM88, BJM+06, BBMP92, BGL66, Cha88, CNC+95, DHK+92, DTTK95, FRS+18, FN71, GA88, JZ91, Kah71, OR92, Pai72, Pau89, RFB+03, RBWH93, Rue72, Sta89a, TW69, TKV00, WKP+02, WBW+15, WBD+11, Whi93, ZFD+15]. **circuitization** [ABM88]. **circuitry** [LFR05, VLKW14]. **Circuits** [AGAP63, AFR62, BSS82, BM63, BRR79, CP63, DW58, Eic65, GT80, GKK+80, GSC80, HJ88, JH80, KL80, KW83, MW80a, MT64, Sta84b, Vil82, AHW+99, BJM+06, BGO03, CBBS90, CNS+99, CCW+02, CFP+07, DN97, DHK00, ESW+95, FMS+92, FKOP90, FMP+03, HRC+08, Hei90, HMP90, Koc59, KBC+03, KSL95, Lin76, MPHC90, Mos61, NHKI03, Ngu99, PZK+03, Sch96b, Sri96, Sta89b, Sta89c, TLS+06, Vor71, Wie90, WSBL90]. **Circular** [BB60, CS65a, Raa76, RR87, Arb86, SN98]. **circulation** [Fro71, QS67]. **Circumferentially** [BGT74]. **Cities** [HPW11, HMP+11, OIM+13, WP11, HEH+10]. **city** [HS11, JWW+11, SHC+72]. **Clarification** [ACG+87, Swa57]. **Class**

[Ahu80, Chi60a, Dub83, Hsi70, LM80, Rog66, TBB+09, WHK+09, Wyn64, Yu61, Bil72, BWB+82, BKS+08, FW08, Lei61, SM16, ST72, ST89, SBC+12, Sur15, VLT+12]. **Classes** [Cho75, MFT77, Gor63]. **classical** [Sho04]. **classification** [ACC+15, DBK82, GK64, HJW+16, NT72, PTRC16, SBD+10]. **classifier** [RLP14]. **classifiers** [BCD+17]. **clause** [vv86a]. **clauses** [dTGHC92]. **Clean** [IM57, Jon65]. **cleaning** [HBC+99]. **Clearance** [Bau63]. **Cleaved** [FF86]. **Clebsch** [Rob67]. **client** [KLMV19]. **climate** [DT08, TPTH20]. **Clinker** [MS67]. **Clock** [FS88, BH95, CDM92, HAMC+04, MWW+07]. **Clocking** [HO75b, Okl03, Sea57]. **clocks** [DSS+92]. **Closed** [Mar60a, MS67, RK75, BSSZ76, KRC68, Lam77a, Mat03, Moo72]. **Closed-Cycle** [Mar60a]. **closed-form** [KRC68]. **closed-loop** [BSSZ76]. **Closing** [BCH+16]. **cloth** [Oht95]. **Cloud** [CJJ+16, GRB+16, HG14, YGR14, ABD+16, AA18, BWT+14, BCC+16, BCG+09, BCH+16, BGM+16, BMM+20, BBB+20, BB09, BBG+14, CTD+16, HBT+16, ISV16, JDBP10, KMM+16, LSZ+10, MWL+14, NRD+09, NAN+18, OEN+16, RBL+09, SHV13, SM16, SIKdL16, WML+16, Yar12]. **Cloud-based** [YGR14]. **clouds** [ACFS16, MSV14]. **clue** [LPM+12]. **Cluster** [BBS78, BSD+20, Dam66, GPE99, RKW99, IS20, JSS13]. **Clustering** [BF77, BM63, Bon64, O'M85, SSW91, Sta86, DB01]. **Clusters** [Eas78, Sta84b, Sta87, MBJ+97, Sta89b, Sta89c]. **Clutch** [Fit57]. **CMOS** [ADG+95, Ano06b, Sta90, Agn02, BFG+06, BS95, BMT+90, CAC+95, CTT91, DTH92, DTTK95, DAC+03, ECD+99, ESW+95, Fle95, Fra02, FHSD06, Gre97, HND+06, HZB+06, HNS+03, HRC+08, Isa00, IFB+11, KB06, KCA+95, KACS95, KSL95, LSF84, LRMT95, LCHL95, MMR89, Mat85, Now02, PZK+03, SSM97, SG95, Sec95, SWC+95, SPR+95, SWC+97, SMK+99, Sta02, TDM+87, TMF+95, Tau02, WL97, WMH+97, WNV+02, YS99]. **CMS** [BGW91]. **Co** [AKG+19, BCK13, Lye77, KKS02, SMP+04, IBM13c, Bra72b, Bru78, OHSP76]. **Co-design** [AKG+19, BCK13, IBM13c]. **co-simulation** [SMP+04]. **co-verification** [KKS02]. **Coal** [Sti79]. **Coated** [CHBH85]. **Coating** [Was77]. **Coatings** [Ros78, LG88]. **Cochlear** [Ins77]. **CODA** [FPST14]. **Code** [Bea74, BMS80, Chi86, KLS66, KM20, Mar80, Mel60a, PH74, Pat85, WF83, Gla97, Gyg08, KL97, Mye72, PLS20, TAE+07]. **Coded** [Voi65, GYK99]. **Coder** [GCPVG85, PMLA88, SM98, MP88a, MP88b, PM88]. **Codes** [Ano93f, BD62, Bla79, CR76, CH84, Cro70, Fra82, Gri60, HO75b, Hsi70, HBC70, LM80, Mar61, MLT83, MG63a, Pat70, PR59a, Rog66, SS59a, Ull65, Wyn64, Gor63, How89, LKY80, Mac60, Meg60, Mel60b]. **Coding** [Fra70, Fra79, Fra80a, Fra89, HP63, Kob70, MD65, Pip79, RL79, Win62, BK74, Dan82, Fra80b, KT70, KB74, Lan84a, Lan84b, MP88a, Pat89, Ris76, TLM83]. **coefficient** [Rat68]. **Coefficients** [Beb62, DG84, MR72]. **coercion** [MKW+12]. **Coercive** [BB60, Pes71]. **CoFe** [JWSP06]. **CoFe/MgO** [JWSP06]. **cognition** [AWK20]. **Cognitive** [BR17, BCS+18, KLMV19, Pic18, ABD+18, DCC+17, KAA+18, KHK+18, NAN+18, RCP+16, SN15, WSCK17, MBK+15]. **Coherence** [CGR88, KH88, DY89, NNMJ01]. **Coherency** [Fan64]. **Coherent** [But88a, Gef88, Loy79, RS69, SB62, SBJS15]. **coil** [BM68]. **Coincidence** [ZG65]. **collaborative** [PMS+17, RK15, WYF+03]. **Collapse** [How82, Gol69, Mil69, Mil00, NL69, Okt69]. **collapsing** [PV93]. **collection** [DSRC98, WC69]. **Collector** [Ken61b, MW79, Rut57, ZCK71]. **Collision** [HS81a]. **Collision-Free** [HS81a]. **Colloidal**

[CHBH85, MSG+01]. **Color** [Ano59n, BJS80, Far83, FLCB85, Kan78, KFYU92, LMT84, San83b, KLMV19, LL98]. **Column** [CERS76, Hsi70]. **Combination** [WC69, BL15]. **Combinational** [Eic65]. **combinations** [SLZL18]. **Combinatorial** [Kuh60, Luk75, Tuc60a, Vil82, Agr01, Bur72]. **Combinatory** [Bur72]. **Combined** [HP84a]. **Comment** [Aas70, Ber76a, DCB77, Lan96, Sta75, Tid62, Wie76]. **Comments** [Fre70, Rad62]. **Commerce** [DLN14, BDMN14, DGH+14, HRZ14, KKL+14, YGR14, YMR14]. **Commercial** [BFH10, FAJ+94, BEKK00, HHR99, Irv91, KEL+00, NAN+18, JMLW94]. **commitment** [BBSW97]. **commitment-revision** [BBSW97]. **commodity** [BCC+01]. **Common** [DB82, Bus71, CBV08, HKLM97, HB73, LH03]. **common-core** [Bus71]. **common-mode** [HB73]. **Communication** [Ahu80, Ano58f, Cha75b, CR76, Chi60b, CW77, GRT74, MT77, MFT77, SC20, SL67, Wie58, ZST+07, dG58, AGZ94b, AEH+04, DAS+94, ESW+95, FMP+03, GBRJ05, Irv93, Irv01, Pig88, SJW+16, Tho70, TJHK03]. **Communications** [And65, Ano66j, Ast58, Bla65, Cha75a, JS81, Str83, WZ78, Wes78, JGD+08, MZS+03, PK03, Ung72]. **communities** [MDMN10]. **community** [KEKP20, LH03, SXW+13]. **Commutator** [Dun57b, Wal58]. **Compact** [Mar80, Bra94, MN90, WSK+93]. **Companion** [MBK+15]. **comparative** [MDH+12, SXYP12]. **comparators** [BW81b]. **Compare** [KMC+11]. **Comparison** [Ano66j, Bla65, Boh73, BBT85, Bru78, Mat03, MW79, SBT87, SBH82, Fra89, GHN04, MD12a]. **Comparisons** [SLHM67]. **compatible** [DTTK95]. **Compatibles** [Mar64a]. **Compensating** [Ins77]. **Compensation** [Mee67, Phi78, KSK98]. **compensators** [GB71]. **competition** [AUW+09, Sav69]. **Competitive** [SAPT01]. **competitiveness** [KRS+17]. **Compilation** [Mar80]. **Compile** [Laf80]. **Compile-Time** [Laf80]. **Compiler** [BMS80, Chi86, Ris84, AKE+92, Bla94, GHL+04, SK86, TMT+20]. **compiler-based** [AKE+92]. **compilers** [Sar97]. **Compiling** [ACF+80, Arb86, DO86, Mye72]. **complementary** [DMR+81, PMW06]. **Complete** [Dub72, MR76a, Moo60, Hof60, Koz81b, Koz81a]. **Complex** [Cle81, CS65b, Far91, KCH+09, Nus76a, Nus76b, PPS82, Sch84, TS82, BGW+04, BMD+20, BFG+99, Gri04, Hol78, Kep75, Mas97, PBC+04, PAH+18, RWB+10, Rue72, SA98, SPS+06, SA00, Tib93, TBB+09, VMS+14, Wai05]. **complex-arithmetic** [Wai05]. **Complexity** [CLW80, HP84a, HS11, NSS58, Sav70, Kri82, Pip81, Pip87, SS86, ZBBB17]. **compliance** [BNN+09, Coo90, EPP10, MS07]. **Component** [BBT60, GSAB93, BBSW97]. **component-supply** [BBSW97]. **Components** [Hud63, Kan78, SM78, DBK82]. **Composing** [Yha75]. **Composite** [GS75, Kan78, Ros78, Bra94]. **Composites** [MLSS84, MVK85]. **Composition** [MS67, MOG+19, WTS+11]. **Compound** [FZ88, MS67, TWF90, VBE94]. **Compounds** [BMW83, BTH62, CK79, CGHK77, KSF90]. **comprehensive** [BCH+16, vBBE+02]. **compressed** [FHPR01, FR01]. **compressed-memory** [FHPR01]. **Compression** [LP75, TLR85, AGJA06, ATL+88, BK74, BL98, CDC96, Cra98, Kam98, KB74, Mar98, MRG99, SLJ+15, ZDB+18]. **comprising** [AKRS04, CBB+04]. **Computation** [Ben73, Ben88, BJ67, Che72, DHM75, Dub83, Duk90, Eli58, FL75, Ho75a, Kog57, Kog58b, Kog58a, Kog59, LF77, Lev66, Mar90, MY67a, MY68, NQ78, BHH19, Ben00, CW58, CN94, FKL+08, Gla97, Mer04, NLP17]. **Computational** [Ano19g, Bla88, CK17b,

Cor18, Jam89, MOG+19, Moo72, NNN+06, PCW+17, RK75, ACM01, AUW+09, BH11, Her72, HMK01, KMGD19, TMS+01, VPV+19, Var19, VRA+09, WG19, HMOS81]. **computationally** [ASL+19]. **Computations** [BRR79, Cle65a, NB61a, Sak79, Cle00, FAFL91, Pip87]. **Compute** [ABB+91, IBM13a, BHD+05, EBH+16, HBB+05, OBB+05]. **Computer** [Ana80, Ast67b, BDWZ83, BS81, Ben59, BAH82, BL69, Buc62, BHWZ63, Cha73a, Cha74, Cha75b, CDW75, Cho75, Cle81, Col69b, CC76b, CD85, CA01, Dah63, Dav82, Dec90, DLW86, Don81, FPST14, FCH70, Fla81, FE75, GL87, GMW80, HS85, HHF69, HLS81, HSC82, HCTS81, Jam81, JKG69, KKS+73, KL63, KO70, Kog57, Kog58b, Kog58a, Kog59, Kol67, Kra81, KP80, LG78, Laf80, Len58, LW77, LS69, LV62, MFT77, Pet76, Rot66b, Rue79, Sch81, SSL73, SLG78, Sch96a, SB86, Str62, SW67, Sve78, SG64, TW62, Tod78b, Tue68, WF87, Wes90, Wri83, AGZ94b, Ano70a, Ano71, AHJ+57, ABM+01, Bau72, BK61, BHH03, BS91, DH69, EGH+86, FL69, GR92, GM69, HVK+90, Ho73, Irv93, KLRS96, Koe18, Led71, Mat98, Mol69, MS89, Nai02, NDM+04]. **computer** [Oka69, PW72, QS67, RSS91, Rub90, Sta75, TFJ+96, Tho70, WC69, ZCM+96, GFS71]. **Computer-Aided** [Rue79, SLG78, Dec90, FPST14, FCH70, Sch96a, Ho73, KLRS96]. **Computer-assisted** [JKG69, GM69]. **Computer-automated** [KL63]. **computer-based** [PW72]. **Computer-Controlled** [BDWZ83, KKS+73, HHF69]. **Computer-generated** [BL69, MS89]. **Computer-Operated** [SW67, Col69b]. **Computer-Output** [Sve78]. **computer-to-computer** [Tho70]. **computerized** [LPPT86]. **Computers** [BBH+81, GBS+87, Her75, Skl76, BSHM01, BO69, BCC+05, Har71, LGF+03, SSW91, TR77]. **Computing** [AS74, CGH+17, HM87, MR14, Nus77, ABD+18, AHH+91, BBPS91, BB09, BJ06a, CRAG18, CBD+09, DP13, EGN+19, FGG+13, Fro71, FLB+19, IMC+10, JDBP10, KSA+04, KHK+18, LDJ+10, Lan61, Lan00a, MC09, NRD+09, PWW13, RAG11, Rit13, RBL+09, RLP14, SHV13, SN15, VLB+09]. **Concentrating** [Hov78]. **Concentration** [Col62, Bar86]. **Concept** [Gha75a, Joz04, KBF+04, RK15]. **concepts** [DHK00, Kum92, SCC+15]. **Conceptual** [CA84, FLDC86, Sow76, SW86, VPD88, KMGD19, MOG+19]. **Concerning** [Coo62, KW62]. **concurrency** [EBB+20]. **Concurrent** [LT70, Lie20, MVI+07, AR87, CHMW07, Kum98, PVAK02]. **Concurrently** [CNSS12]. **condensation** [ESA02]. **Condition** [Rob67, MY65, Mir61]. **Conditional** [SJ89]. **conditioning** [LGBV17]. **Conditions** [Lan66, LL83, SSG69, AG72, Sug59]. **Conducting** [Ang01, BMW83, CSS83, SC81]. **Conduction** [BB82, But88b, CHS82, DA77, FK60, Lan88, Leh64, OK82, PW83, Pri58b, Pri60, San83a, Sch64, SARG80, SC88, Whi93, BRB92, HOWP92, KLM+91, Lan57, Lan96, Lan00b, LMPP69]. **Conduction-Cooled** [OK82]. **conductive** [NSOO98]. **Conductivity** [Bay69, CJT62, CFH64, ET70, ODR70, Was88, CNC+08, Kah71, MNS69, Nes98, Pai69, SNM69]. **conductivity-temperature** [Kah71]. **Conductor** [Adl64, Mei62]. **Conductors** [WWMS79, BFH+93]. **Conference** [Ano58f, Ano70a]. **Conferencing** [BBD+98]. **Configurable** [AKRS04]. **configuration** [BHK+02, PVAK02]. **configurations** [HRW69]. **confined** [ETWO08, MKJM93]. **conformable** [Lin76]. **conformable-contact** [Lin76]. **Conformational** [Cle81]. **conformity** [ABH+19]. **Conjugate** [RV89, CW72]. **Conjugate-gradient** [RV89]. **Conjunctive**

[(Ga57]. **Connect** [LCB93, GLCW93, CGLL93, Cor93, Mah93, RBWH93]. **Connected** [MS87, SN87, FGH+06, KMO+14]. **Connection** [DKR12, FGC92, GLOS92, How82, NSOO98, VH81, CdLS92, ES92, Tag09]. **Connections** [FHL+82, Kur57, BRB92]. **connectivity** [WYTO04]. **consensus** [MN70]. **Considerations** [AKK+67, BS84b, CT82, Coo62, Cor84, GS82b, LST80, Pad83, RP78, RGL75, CGLL93, GH96, HBB99, JL99, KL70b, LL93, MDG+06, Pat72, SK98, SY92, SV92, VMM+94, YS99, ZY72]. **Considered** [Pim76]. **Consistency** [Map62]. **Consisting** [Lan85]. **console** [VWE02]. **Constant** [Esa62, GMT57a, GMT57b, Tit61, MRG99]. **constant-** [MRG99]. **Constant-Input-Flow** [Tit61]. **Constant-Temperature** [GMT57a, GMT57b]. **Constants** [Col59, CS65b]. **constitutional** [AT00]. **Constrained** [Bud67, MLT83, CFP+07, Fra89, Fra02, Jan69, TLM83]. **Constraint** [Coo84, NRA+07, Wol72]. **constraints** [Coo90, Lam77b, RMM03, VLKW14]. **Construct** [Paz75]. **constructing** [ADG+92b]. **Construction** [CW86, Fra82, KMC+11]. **constructs** [BS06]. **Consumer** [SMSC14]. **Contact** [CEHL78, DG93, GRS87, IM57, JWL82, RWC80, TDM+87, BNSG09, Lin76]. **Contactless** [VCP80]. **Contacts** [Ove70, SGC+87, BS71a, BCT89, KSH+08]. **Container** [RBL+18]. **Containers** [ABD+16, BBK+16]. **Containing** [BBKW86, FPS66, Keh65, PF66, Bra68]. **contaminant** [Whi93]. **contaminants** [AKKJ72]. **Content** [IM60, MW62, MHI98, SJ70, AN98, BWB+20, CNP+15, HJW+16, MAD+98]. **Contents** [Ano57j, Ano57w, Ano57x, Ano57y, Ano57z, Ano58g, Ano58h, Ano58i, Ano58r, Ano58s, Ano58t, Ano58u, Ano59e, Ano60f, Ano60g, Ano60h, Ano61e, Ano62d, Ano63e, Ano66g, Ano66h, Ano66i, Ano67h, Ano67i, Ano67j, Ano67k, Ano67l, Ano67m, Ano12l, Ano12i, Ano12j, Ano12k, Ano13d, Ano14l, Ano15l, Ano16e, Ano16g, Ano16h, Ano17d, Ano17e, Ano17f, Ano18e, Ano18f, Ano18g, Ano18h, Ano19k, Ano19l, Ano19m, Ano19n, Ano20i, Ano20g, Ano20h, Ano13c, Ano14k, Ano14m, Ano14n, Ano15i, Ano15j, Ano15k, Ano16f]. **Context** [TLR85, EEM15, KdAC+15, MC87, TWM+14]. **context-aware** [KdAC+15]. **context-sensitive** [MC87]. **Contextual** [BR17]. **Contiguous** [JHH+81]. **Continental** [SKK14]. **continuation** [BS71b]. **continued** [Agn02]. **continuing** [Gre97]. **Continuity** [Tof88, WAB+09]. **Continuous** [Ano06b, AAC+06, BGS64, PR65, CDSW06, EGH+86, Gre59, MHW95, NBF+00]. **continuum** [ABM+01]. **contour** [GMNE63, Kep75]. **contract** [BBSW97, TYSS19]. **Contrast** [Dav79, Kov59, RDD+98, DP13, KJP11]. **Contribution** [Key61a, MR14]. **Contributions** [BS81, Sam81, Sor79, Sor00, Gar00]. **Control** [Ast67b, BS84a, Ben59, Bla59, Bla79, BT67, Bud67, CL64, CAE+76, CW77, Cle83, CI76, Dav77, DB76, FLS78, Fre67, Gil84, GHK67, GMT57a, GMT57b, HBB+05, HKM+86, KST58, LHW81, Len58, Log70, LMD70, May85, MS67, RR83, Rob67, San83a, SH57a, SSL73, TL70, War63, Yas85, Yas87, ADS72, AAB+16, BEK+02, BSSZ76, BW72, BTWY92, BM68, BM96, Cal70, CAC+95, CDD+10, CH82, Cov92, FS82, IMC+10, KL97, KL94, Lew78a, NNMJ01, Oka69, Pat89, RM09, SG94a, SBB+09, SCW10, Stu70, Tho70, WGS04]. **Control-Word** [Bla59]. **Controlled** [BDWZ83, Boe69, How82, KKS+73, LW77, Mil69, Mil00, NW64, Dur70, Gol69, Gre60, HHF69, Nic92, NL69, Okt69, TYSS19].

**Controller** [ZST+07, CW91, Pig88, RSNG82]. **Controllers** [DB82, Kis03, SLC09, Sou96]. **Controlling** [Car77]. **Controls** [Ano67t, BCD+85, VOW+12]. **Conventional** [Ano66j, Bla65, Won02]. **Convergence** [BJS80, Cha87, CW72, JP94, Ung72, Wol72]. **convergent** [Bra72a]. **Converging** [Jam89]. **conversation** [Elg11]. **conversational** [KSSC+13, SP17]. **Conversion** [LSH76, RP67, SCYK78, Wal58, RFB+03]. **converter** [HB73]. **convertor** [BW81b]. **Convex** [AW76, Dim78, Dor60, JP94]. **Convolution** [AC86, Coo82, BSRG17, Kri82]. **convolutional** [SP17]. **convolutions** [Nus76a, NQ78]. **cool** [ESA02]. **Cooled** [NHH91, OK82, BBMP92, BRB92, DGG+92, GGRW91, Haj91, KLM+91]. **Cooling** [CHS82, CAC+05, DGG+92, GZM92, GKMP04, SN02, SAB+02, TTM+20, TBG+15]. **cooperation** [AUW+09]. **Cooperative** [JKB+13, KW62, Mor79]. **coordinate** [MN90]. **coordinated** [EEM15]. **Coordinates** [KKS+73, RSL+70]. **Coordination** [DSS+92, BMD+20]. **cope** [WN92]. **Copenhagen** [Mer04]. **copier** [BHRS72]. **Copolymers** [Smi77]. **Copper** [ADH70, AGLM85, JC63, KWJJ84, AdH00b, AUD+98, DKA+05, GB93, JK93, KFSZ92, RKL88a, RKL88b, SD71, TKK+92, VBDA05, YCB05]. **Coprocessor** [BCD+20, ECD+99, YS99, AV04, ABC+12]. **CORAL** [Han20, IS20, MLWC20, PLS20, RMM20]. **Core** [Bru78, FP57, RRSW61, WWLF67, AF99, Bus71, CNSS12, KMH+98, LVT+18, SLC09, SVE+15]. **Core-Level** [Bru78]. **cores** [ATC+15, BL98, SK98]. **corporate** [CCE+20, GMX14]. **Corporation** [Don00]. **Correct** [MG63a, Wyn64]. **Correctable** [How84]. **Correcting** [ABB+85, CR76, CH84, Gri60, SS59a, Mac60, Meg60]. **correcting/detecting** [AC84]. **Correction** [Bos70a, BS70, Dah63, ELMR77, GSC80, Mel60a, PL81, Par80, SFH65, Bos70b, Gor63, Mel60b, OCT68]. **Corrections** [PS80, PW68]. **Correctness** [Bir74, PV93]. **Correlated** [Lik88]. **Correlation** [Lew83, Sta87, Wat60a, Fil70, Pes71, RRMD17]. **Correlative** [TG91]. **Correspondence** [WF87]. **corresponding** [Swi62]. **Corrosion** [BFH+93, GC68]. **Cortical** [UC62, LRNS17]. **COSFIRE** [GSAP17]. **CoSi** [Tu90]. **Cosmic** [ZS96, ORT+96, Sri96, Tan96, ZMM+96, Zie96, Zie98]. **cosmic-ray-induced** [Sri96]. **Cosserat** [Bog79]. **Cost** [BGR82, HBC+99, SCYK78, AP69, FN95, GBB+05b, HSS+10, Irv93, KBA07, LRMT95, LCHL95, VMS+14, VNT16]. **Cost-effective** [HBC+99, KBA07]. **cost-sensitive** [VNT16]. **Cost/Performance** [BGR82]. **costs** [KLHW16]. **Counter** [Car60, Spr63, ZG65]. **countries** [AKNR10, SGESR10, YGR14]. **Country** [HS14]. **Coupled** [Cha62, CH74, CP63, Gra80, GC81, HO75b, MT64, AF68, HCL72, JS72, NLP17, Pat73, PBK+09, SV92, TCP+16, TGB+80, WYS92]. **coupled-systems** [SV92]. **Coupling** [Bla63, GE02, PSP06, Sur15, Swa60, Far98, HRW69, Jon98, SKE+18]. **Courant** [Lax67]. **Courant-Friedrichs-Lewy** [Lax67]. **Covalently** [DK79]. **Cover** [Ano11, Ano12b, Ano12d, Ano12a, Ano12c, Ano12e, Ano12f, Ano12g, Ano12h, Ano13a, Ano14c, Ano14d, Ano14e, Ano15b, Ano15c, Ano15d, Ano16a, Ano16b, Ano16c, Ano17a, Ano17b, Ano17c, Ano18a, Ano18b, Ano18c, Ano18d, Ano19b, Ano19a, Ano19c, Ano19d, Ano19e, Ano19f, Ano20c, Ano20a, Ano20b, Ano13b, Ano14a, Ano14b, Ano14f, Ano14g, Ano14h, Ano14i, Ano14j, Ano15a, Ano15e, Ano15f, Ano15g, Ano15h, Ano16d]. **Coverage** [BH82, EL83, LMD70]. **CPU** [EBB+20]. **CPU/GPU** [EBB+20]. **Cr**

[Vur70, MU77, WB70]. **Cr-Doped** [WB70]. **CR-SiO** [MU77]. **Crack** [CS65a]. **Cracking** [DS65]. **Cracks** [Keh65]. **Crank** [Fla65]. **Cray** [PBK96]. **CRC** [Gla97, Irv01]. **CRC-32** [Gla97]. **Creating** [KEKP20]. **Creation** [Luh58a, GGH+13, GMX14, KLMV19, RSS+15]. **Creative** [RAMD19, ASL+19, WG19]. **Creativity** [Ano19g, MOG+19, VPV+19, Var19]. **Creep** [BBT79]. **Creeping** [MW67]. **crew** [VJA07]. **crew-scheduling** [VJA07]. **crises** [PSD+17]. **CrisisTracker** [RVT+13]. **CRITAC** [TSNF88]. **Criteria** [Bra64, Poh86]. **Criterion** [Pis74, Bra68]. **Critical** [CDM89, Fre96, Sch89, Swe62, PTRC16]. **crop** [BKF+16, NT72]. **Cross** [Gra80, JS72, Pat85, Les71, MMJ69, TTI98]. **Cross-Coupled** [Gra80, JS72]. **Cross-Parity** [Pat85]. **cross-sectional** [TTI98]. **crossbars** [JAC+19]. **Crossed** [MW70]. **Crossover** [Gef88]. **crosspoints** [RTL69]. **Crosstalk** [PL83, LL98]. **Crowdsourced** [RVT+13]. **Crowdsourcing** [JQB+09]. **Crucibles** [CSY79]. **cruise** [CPvR00]. **Cryogenic** [Ros59, Bro72, Pat72]. **Cryotron** [Bre60]. **Crypto** [BCC+19]. **Cryptographic** [ADH+07, BCD+20, ECD+99, SY92, YS99, AV04, ABC+12]. **Cryptography** [Cop87, Cop00b, BAB+13, Smo04, VDO14]. **Crystal** [Boy60, BS64, CFG64, Dav77, DC82, Fre62, McG92, Mee67, SW98, WTP64, APOI92, AIH+98, BH89, CJ78a, CJ78b, GI88, How92, KFYU92, LL98, LCL+98, MRH89, NSOO98, RDD+98, SST+98, SS00, TSH92, TCCH98, WWA+98, Yan71]. **crystalline** [WTS+11]. **Crystallite** [Seg62, Smi60]. **Crystallographic** [AS87]. **crystallography** [HMK01, Tof04]. **Crystals** [Cam57, FK60, IM60, Key61b, Mar60a, SOC59, BA70, CDM89, Rat68, YHA71]. **CSP** [Woo87]. **CTS** [DMR+81]. **Cu** [BPL+89, CDM89, CSH+89, BH89, BdM+78, Dem78, HSM84, LR65a, MRH89, Var89, VDP94, vHv+89]. **Cu-O** [Var89]. **Cube** [Par60, NAB+15]. **Cubic** [Ins76, Dim78]. **cultural** [DSZ+12]. **Culture** [AWK20, NBF+00]. **Cumulative** [Ano93c, Swa61, EKR87]. **CuO** [ABK89, ACM+89, BEH+89, EHK+89]. **cup** [ZSZ96]. **cuprate** [Kit89]. **Curating** [KBJ+18]. **curation** [RVT+13]. **Curie** [DK67]. **curious** [VPV+19]. **Current** [Bar69, BGS64, Bre60, BKM80b, Ghe80, Gun64, JMM+96, Ken61b, KWB88, Kit89, Lan86, LV67, Mat85, MN67b, MG63b, Ove70, SSG69, Smu57, SH69, CDM89, Dha68, Duk90, EB91, GNF06, HC69, NFI+08, Sun06, TPTH20]. **current-perpendicular** [Sun06]. **Currents** [CGR88, CP86, DA77, Dui59, Lan88, MS60a, Lan57, Lan96, Lan00b]. **Cursive** [Tap82]. **Curve** [Nor58]. **Curves** [RR87, Swe62, YWWK64, AO97, ODA03]. **Custom** [ADH+00a, BBHS84, CS99, Cor82, EFG+05, MM82, SPR+95, Ver80, ABB+99, KSL95, WL97, BM84]. **Customer** [BNSG09, BEJ+14, ET69, JS14, KAF+16, KSSC+13, LPMDG14, SMX+14, YBF+14]. **Customer-focused** [BNSG09]. **Customization** [HY84, Elg11]. **Cusum** [Yas85]. **Cusum-Shewhart** [Yas85]. **cutoff** [SS86]. **cutting** [Her72, Sav90]. **CVS** [HY84]. **cw** [KACS95, HFDN63, Key71, Mar64c]. **Cyanine** [Lew78b, Mer78]. **Cyanine-TCNQ** [Lew78b, Mer78]. **Cyber** [Viv14]. **Cybersecurity** [Pal14]. **Cycle** [Mar60a, RBC78, BB09, GKMP04, MDR+07, Van97, VMG99]. **cycle-simulation** [VMG99]. **cycle-time** [MDR+07]. **cycles** [MHI01, Mat03]. **Cyclic** [LCH74, LM80, Mel60a, Ull65, Wyn64, BBI94, Gla97, Gor63, Irv89, Irv01]. **cyclic-redundancy** [Irv89]. **cycling** [RHC73]. **Cyclotron** [DV64]. **cylinder** [Jan69]. **Cylinders** [BBT83]. **Cylindrical**

[BGT74, Ken61b, KG63, Zab79, LC83]. **Czochralski** [LL83, MPCF82]. **Czochralski-grown** [MPCF82].

**D**
[DWA+08, EFR+05, EK08, KYY+08, PLS20, RG09, SAT+08, Sch67, SJMBK08, ZVW+11]. **D-Chains** [Sch67]. **dairy** [LZZ+16]. **Damage** [HD69, Fon99]. **damascene** [VBDA05, AUD+98]. **DAMOCLES** [LFF90]. **damper** [LR79]. **Dark** [DA77]. **DASD** [KLRS96]. **dashboards** [YMR14]. **Data** [ÅC64, And65, ADST78a, AHN+03, BJS80, Ber76b, BL98, CAE+76, Cha75a, Cla03, CPCC18, CMW92, CDH64, Cro79, DSW63, DG84, DC73a, DGB78, DAUS91, DMP59, Eas75, Eas86, EKMW64, Fal70, Far83, FLCB85, Far91, GLS74, GLP76, GS74, GHK67, God74, Gri69, Hal76, HLZ+09, HF78, Hop59, Hop61, HP84b, JS81, JMLW94, Kan78, Kob70, LS76a, Lew80, LS76b, Lom77, Lom80, LN79, Low78, LSH76, McG81, MHI98, Mul74, Mur57, NB61b, PTRC16, Sow76, SW74, Tas57, Wal58, WW75, WSJ+19, WY76, ARG00, AKRS04, ASR07, ADST78b, ATL+88, ABB+00b, BK74, BDMN14, BHH19, BCG+09, Ber76a, BGL07, Bev69, BFRT13, BKM+69, BC18, BMS+17, BL15, BBI94, BBC+08, Bro72, BSRM09, Car10, CGM+15b, CP13, CN18, CDC96, CN71, CPD+09, CFP20, CNSS12, Cor69, Cra98, DF15, DBK82]. **data** [DCB77, EB06, EÖH10, ESW+95, FGG+13, FHPR01, GZE+05, GDLS14, GAB+08, Gra71, GRS13, Gus03, HvKI+09, HTH+09, HRF+17, HKD06, IMC+10, Irv93, KBJ+18, KBP+12, Kan15, KCML13, KOP14, KB74, KBF+04, Kon69, KSSC+13, KDG15, KTD20, KSA+04, Kri82, KACS95, KRS+17, MTF+95, MYKK+17, MA96, McN94, MCG+15, Mel60b, MAD+98, MI10, NMV+09, NMTP14, OTC14, OOL+12, PMS+17, PK03, PR71, PMW06, Rei69, SG71, SCI05, SI09, SG94a, SBB+09, SNA02, SLJ+15, Sto91, SMX+14, TB00, TG91, TJHK03, VPV+19, VMAB18, VRA+09, Wie76, Yas07, YMR14, YR91, CDL+14, Cop94, GGH+13, HAG+13, HCG+13, JSS13, Mal13, RCP15]. **data-based** [SMX+14]. **data-center** [MI10]. **Data-centric** [HLZ+09, DF15]. **data-driven** [KRS+17]. **Data-intensive** [AHN+03]. **data-management** [FGG+13]. **Data-Recording** [SW74]. **Database** [Eas78, FLW78, Fag77, LDSY91, TPF+91, ZDB+18, vv86a]. **datacenter** [KDT18]. **Dataflow** [PMS+17]. **datasets** [GDB16, SHCV19]. **DataStores** [RCFN+08]. **Davidenko** [Bre72]. **Davidenko-Branin** [Bre72]. **day** [DSS+92]. **Days** [Gol87, Smo04]. **Db2** [CHJ+18]. **DC** [Ho75a, Sak79, WF83]. **DC-Balanced** [WF83]. **DCS** [Wei91]. **DDR3** [VLT+12]. **deadline** [CSW73]. **Deadlock** [Ahu79, Ahu80, ABF+10]. **debonding** [RKL88a]. **debt** [Mar12]. **Debugging** [DFF+15]. **Decay** [DB79, SG71]. **Decimal** [DDZ+07, Gri90, SKC09, WET+10]. **Decision** [KT73, Pet77, RS59a, AYA14, CDG+10, FKOW16, JWW+11, LB07, LPMDG14, MD12a, Mye72, PW72, RDL19]. **Decision-Feedback** [KT73]. **decision-maker** [MD12a]. **decision-making** [PW72, RDL19]. **decision-support** [JWW+11]. **decisions** [GMX14, ZBG+10]. **declarations** [ABH+19]. **declarative** [NMTP14]. **Decodable** [LM80, LKY80]. **Decoder** [Pat86, Sav70, Smu57, Bla84a, Bla84b, Nob95b]. **decoders** [LL99]. **Decoding** [Jel69, Mer88, Moo60, Ull65, Kob71]. **Decomposing** [BZ06a, CFS+19]. **Decomposition** [BRA84, DC73a, DCB77, PL79, PAH+18, HT69, KPB+12]. **decompression** [KMH+98]. **decoupling** [HOWP92]. **DED** [Hsi70]. **deduction** [AC92]. **Deductive** [Wat60b]. **deemed** [ASL+19]. **Deep** [BBD+17, CK17a, CNP+17, DB20, EGN+19,

KSA+04, MMB12, SH69, AKG+19, AC92, ARS+17, BHW+17, BSRG17, CFS+19, CFP20, GKT17, NG17, Lin76]. **deep-learner** [CFP20]. **Deep-Level** [SH69]. **Deep-UV** [Lin76]. **DeepQA** [GLK+12, KPB+12, KBP+12, WKF+12]. **defaults** [CHdTG92, dTGHC92]. **Defect** [DJ70, FF73, HB74, SARG80, Sta83, Sta85b, WA79, BMT+90, HS71, YCB05]. **Defect-Related** [SARG80]. **defective** [Hui90]. **Defects** [HBR85, HBR86, Sta84a]. **Defense** [HT16]. **Deficiencies** [SK69]. **defined** [AAB+14, AAS+14, AHH+14, BBG+14, DOJ+14, EM65, FHL+14, KRD+14, KFW+14, LBC+14, MSV14, SMC+14]. **Defining** [WSE+16]. **Definition** [CAE+76, Lom80]. **Definitions** [CT65]. **DEFLATE** [KMA+20, SKS+20]. **Deflection** [ELMR77, FBW77, Zwe65]. **Deflector** [KHKM64, Rab69]. **Deformation** [GLCW93, WS72]. **Degradation** [HW87, Lud00]. **Degree** [Hau67, MM94]. **Delamination** [AGLM85, Klo87]. **Delay** [BDMW81, Cal81, Fra80a, Fra82, BH95, BMT+90, CH06, FN95, KSK98, MTB+90, NLP17]. **delay-cost** [FN95]. **delay-test** [MTB+90]. **Delayed** [BSSZ76]. **delivered** [HSS+10]. **Delivering** [ODL+09, OEN+16, CCE+20, VSS+09]. **delivery** [BNN+09, JQB+09, KJS09, LRV+09, Tag09, VMS+14, Yar12]. **Delocalized** [HSH+88]. **DELPHI** [FRPG01]. **delta** [LKY80, HF91]. **delta-decodable** [LKY80]. **Demagnetization** [Kum65]. **Demand** [ABG+09, BT84, Fro84, LMT84, Elg11, WAC+16]. **Demodulation** [Hop59]. **demonstrator** [GP06a]. **demultiplexor** [AF99, RT99]. **Dendritic** [PCDW78, TMW+17]. **Dense** [GSC80, AGZ94c, FKK+03, Gus97]. **densities** [ABB+08]. **Density** [BDWZ83, BKM80b, BCRW82, CDS+86, Erd88, Gra80, Hoa61, LHW81, Ove70, PH74, Pat85, Sch85, Sko58, Sta85b, CCJH81, Hoa00, KTD20, MTF+95, Nai02, Ngu99, PSA+08, Pat73, PK88]. **Department** [Gol87, WH94, Oka69]. **Dependability** [ST89]. **Dependence** [Bru76, CH74, Dou62, Hun59, ODR70, Swe62, Tin62, Whi70, Sar91a, vHv+89]. **dependencies** [Fag77]. **Dependent** [Fra79, AKKJ72, Fro71, Mel60b, Nes98]. **depletion** [LBT99]. **deployment** [CDG+10]. **Depolarization** [KH75]. **deposit** [Jon72]. **Deposited** [Ahn66, KEJ87, O'H78, PDLM67, SJ70, AF68, Gri99, OSP+98]. **Deposition** [Ham78, KS79, KWJJ84, Bea90, CNC+95, CNS+99, Fon99, GMP90, JL90, Mey90, Mey00a, Ngu99, OHWR88, Ros99, SLYR72, YAJ90]. **depth** [CBV08, SS86]. **depth-first** [SS86]. **Derivation** [Mar64a, SS76]. **Derivatives** [Ins76]. **Derived** [ARV64, ESS+20, LS73]. **dermoscopy** [CNP+17]. **descent** [Lan66]. **Describing** [Her66, NB61a, NB61b, Can73]. **Description** [LST80, MO84, OHM+85]. **Design** [AKK+67, ABCR65, Abb66, Aic84, AAC+05, ABPS66, AF99, Ano20e, BM84, BBSW97, Bea90, BHP83, BFL66, BAH82, Bos97, Bro78, CD78, CT82, CDS+86, CMPR64, CA84, CGG+64, CCG+81, CBB+05, CP63, Cor82, Cor84, CDS73, CDS00, Dan81, Dav82, Dha68, EBH+16, EMM+18, Eic18, ESA02, EGH+96, FHVZ80, FLCB85, FN71, FGM+83, FHL+82, FPB+11, Ghe80, GAOD71, GH96, GR92, GHK67, GLL80, GHKO57, GS82b, HNS+03, HPWW81, Has66, HP66, HD73, HY84, Hea76, HO96, JSR+18, Jur78, KS90, KMO64, KC66a, KKT+95, KMA+20, Kos15, Kue60, LV67, LL93, Lip92b, LST80, Mac60, MDG+06, MO84, MFT77, ML82, MDR+07, MM82, MHI98, MAD+98, Mon82a, MHR90, Mul74, MT64, Nii95, Osw74, Pad83, Pat72, PK03, Poh86, PSS67, RK72, RR83, RGL75,

RWM+05, RP66]. **Design** [SA98, SRJ+20, SGS+96, ST75, Sch81, SHR+09, Sch80, SST67, SG95, SBP+03, SCC+97, SON+91, SBDT+09, SK98, SV91, Sta90, SCG+13, TK64, Tay84, IBM13a, Tro80, TFL+98, VMM+94, VCM+20, Ver80, VLB+09, WW75, Wil85, WCB+86, WWK+87, Yas85, ZL87, AGZ94a, ADH+00a, AEZ84, AFM+02, AKG+19, AKRS04, AHJ+57, BLM+92, BDN+02, BTP+90, BPS+96, BBD+02, BJM+06, Ber76a, BAB+07, BWB+18, BWB+20, BH11, BCK+05, BBMP92, BKRF02, BCK13, BBC+08, BHD+05, BMT+90, Cha88, CTS+92, CBC+18, CAD+09, Cor93, CW91, CCW+02, DBB+02, DKRS07, DHK+92, DeM91, Dec90, DGG+92, DEH+12, Dus71, FI73, FAFL91, FRS+18, GGKK96, GM69, GPL+92, HDW+07, Hen68, HCG+13, HBB99, JAC+19, KL63, KLRS96, KBM+99, KBK+97, KCOW08, Kum92, LR79, Man90, Mar12, MMR89, Mat98, NCB03, ODA03, PBC+06, PBK96, RMM20]. **design** [SNP06, Sec95, SPR+95, SWC+97, SY92, TSH92, Tau02, IBM13c, TBB+09, TBG+15, TFL82, TR77, WKP+02, WBW+15, Web00, WPL+12, Wei91, WBD+11, Wie76, WG19, WHK+09, WYF+03, WBS+18, WYS92, YS99, ZY72, ZBBB17, ZTC+13, ZFD+15, RWW07]. **designed** [NAN+18, WW71]. **Designer** [Wil97]. **Designer-level** [Wil97]. **designers** [DRSM15]. **Designing** [EEM15, SMSC14, SN15, VSS+09, GB71]. **Designs** [ADS72, BBHS84, LKL+81, Mon82a, CT06, GBRJ05, Kum98, SRCW97, SRH+18, WET+10]. **Desk** [Tod78b]. **Desk-Top** [Tod78b]. **Desktop** [BBGE+14]. **Destructive** [ABPS66]. **detailed** [HdTR06]. **detailing** [TBH+17]. **detect** [SJW+16]. **Detecting** [CR15, AC84, BDH+19, FRPG01]. **Detection** [ABF+10, BH82, Dam66, Dav80, Eic65, FF73, LT70, Mou86, PSH80, PM72, VMAB18, ZG65, CJH+15, DF15, EÖH10, Hei90, KCML13, OCT68, PL20, SBG+13, SKSP06, SXW+13, VNT16]. **Determination** [AO01, BBD63, BBT79, EWS+13, FXL01, GSVE83, HS81b, MN67a, MWN63, PC64, Sch84, Seg62, vS57, GFS71]. **Determine** [Spr61]. **Determining** [Ahu80, AW76, BBT60, Gec74, MD65, MS67, SH57b, SH57c]. **Dev** [Ano93c]. **Develop** [ACG+87, Ber76a, DCB77, Lan96, Sta75, Wie76]. **Developer** [RKL88a]. **Developer-induced** [RKL88a]. **Developers** [KM20]. **Developing** [LGF+03, AKNR10, HMK01, VSS+09, YGR14]. **Development** [Ano06c, AEE77, BSS82, Bal05, BDS+97, CCC+79, CC76b, DWGC85, Des02, Des04, Fit57, FL67, GP06a, GRS87, GW57a, GW57b, KAB+05, Nor58, PPS82, PERW02, PHCR81, SPP72, Tro80, Tu75, ATW06, ABL+84, ABR71, AAH68, AHM+07, BKN10, Bro85, DYK10, EMM+18, FPST14, GON+06, GMR10, GHL+04, GAOD71, Ito97, Ito00, LCHL95, LMW+01, LSS+20, MBB+20, PBC+06, RBB+02, RH90, SM71, WTT+14, Wil93, PS09]. **Developments** [Con60, May81, OO81, CBH+05, Lax67, VWPB90]. **Deviation** [JD66]. **deviations** [Swi62]. **Device** [Ano06b, AGAP63, BGK+80, CLP+13b, Dun57b, DMN+59, Esa62, GHP+85, Hoh78, HWC88, JKB+13, KMCY82, KGCS85, LB85, LCH74, PSS67, RGL75, RWC80, RHM63, SB64, Tro80, AAC+06, BKS+08, Bus71, CS84, FP73, HBB99, HHC+18, LHJ69, MHW95, RH90, Sch91, TS69, TGB+80, Vin81]. **device-independent** [CS84]. **Devices** [Ano06b, BT84, BCGS81, CH74, DO74, FC79, Gae79, Han57, Her65, Hor62, Hov78, JHH+81, KH88, KN81, LF64, ON60, OK82, Phi78, Yu61, BCGS00, CLP+13a, HND+06, HVK+90, HCL72, HST06, KKT09, LFF90, LLF+92, OYHSB14, Pat73, RRB+01, SAK70, Wie90, WYS92, ZG71]. **DevOps** [MWX+17]. **dextrous** [NS92]. **DFT**

[ACM01, RS85]. **DFT-based** [ACM01]. **DFU** [EWT+07]. **Diagnosis** [Bar83, EL83, FE75, Pet77, Rot66a, SLG78, Sta90]. **Diagnosis-Oriented** [FE75]. **Diagnostic** [CW83, Sch67, TS82, Osb93]. **diagnostics** [GBB+05a, PHCM05, SMK+99]. **diagonal** [CAW+98, KFYU92]. **Diagram** [MJJ69, MS87, SN87]. **Diagrams** [CA84]. **Dialogue** [Hei76]. **Dialogues** [LG78]. **Diameter** [Rio60]. **diameters** [HS60]. **Diamond** [Ros78, TK64]. **Diamond-Composite** [Ros78]. **Diamondlike** [GMP90, Gri99]. **diarrhea** [TBH+17]. **diazo** [CH82, HMM82]. **diazo-type** [CH82, HMM82]. **dichroism** [SN98]. **Dictionary** [Mer88, Tar63, KCML13]. **Dielectric** [Buc99a, CS65b, MVK85, OPR+78, O'H78, OG80, Sch62a, SAK70, UL70, ABC+99a, Buc99b, CNS+99, Gre68, GNF06, LV94, Ngu99]. **Dielectrics** [DK67, CNC+95, EB99, KBS+99, Luc99, OS99, WNV+02]. **Difference** [Ano67g, Ano67u, AG72, CFL67, GM72, Lax67, Wid67]. **Different** [Cho75, MFT77, CXZ+17]. **Differential** [Bay69, EB91, ET70, Her66, Le 62, PB69, AGJA06, Dan66, FW67, Ger73, HB73, KMK68, KO69a, LO72, Mos61, Pai69]. **difficulties** [Kit89]. **Diffraction** [BF63, GSVE83, Jon65, Jon70, Las63, MJJ69, HHB+89, Seg68]. **Diffused** [KMO64, KM68]. **Diffusion** [BL62, BS77, DJ70, Fis88, HKvG+11, JD66, Ken61a, KO65a, KM66, LD74, MM75a, MLSS84, RK74, Swa59, SS59b, Zar57, vS57, Can73, CG71, OSP+98, SR71, SHC+72]. **Digit** [Meg63b, Meg63a]. **Digit-by-Digit** [Meg63b, Meg63a]. **Digital** [ÅC64, AP82, ARV64, BH95, BJS80, Ben59, Ber76b, BBD+98, Coo82, DMP59, EHHP67, Fre67, GT87, HB73, HP84b, Hor62, Hor76, KLS66, KHKM64, KLE71, LL83, MG62, MBF+13, Mon82b, Nus76b, Par66, San83b, UMK+85, VSF65, Voi65, WSW83, Wal58, Wel61, van77, AFFS98, AHJ+57, CFW82, CIJ+10, CN71, CNH73, CLH+16, DH69, Gri69, Hip70, Kob71, KdAC+15, KBC+03, Mar98, MZS+03, NMH+07, OCT68, Peh69, SPR+95, Tal20, TR77, Ung72, GH96]. **Digital-Indexed** [KHKM64]. **Digital-to-analog** [HB73]. **Dijkstra** [FvGGM90]. **dilemma** [HHH04]. **Dilute** [CJT62, HB74, Jon60, Sou64]. **Dimension** [MM94, ODA03, Thi88]. **Dimension-independent** [MM94]. **Dimensional** [AW76, Blu79a, Bog79, BRR79, CW85, CHS82, Erd88, Far83, FF73, Gau77a, GHP+85, Gro76, KO69b, KO70, KW83, LC80, OHM+85, Pim76, Thu60, Wym57, Zwe65, ABG+95, BMPS91, BS91, Gam72, Her72, KM68, KAD+08, Mar71, MN03, MS89, Nef90, Sto91, TLS+06, Tu90, YR91]. **Dimensionality** [Azb88]. **Dimensions** [CGR88, AO01, Sho04, Yet89]. **Diode** [AO60, AFR62, CPZ63, Esa62, IBC64, MT64, Rut59, AA71, Mos61, Spr71]. **Diodes** [BLB+63, HA58, LDDB63, Mar60b, MWN63, NM62, Pea69, Rut64, Wei65, CA01, HC69, HP01]. **Dioxide** [BBKW86, Moh70, SBdF64, CKG+99, PW68, WNV+02]. **Dipoles** [SC88]. **Direct** [AR87, BA62, ELMR77, FC79, Fre67, Hun59, KWT+11, KP63, MHS62, Sit71, Wal58, Wel61, BSRM09, CASP91, LBT99, Rai69, RFB+03]. **direct-conversion** [RFB+03]. **Direct-Reading** [Wal58]. **directCell** [PBK+09]. **Directed** [Low78, Hei94, HW72]. **Direction** [Kum65, RR83, Wid67]. **Directional** [Bla63, CSY79, GRT74]. **Directionality** [BLB+63, LDDB63]. **Directions** [Hor00, AR98, BYY98, MDB+02, SP90]. **Director** [GLOS92, RKMY02, Ros03]. **Directory** [BCCK92]. **disabilities** [CGM+15a]. **Disaster** [Ano20d, PWW13, Tal20, AAF+09, AEG+20, BGS13, BWK20, CCE+20, DB20, GBJ+08,

MNWH20, PL20, RVT+13, SPB+17, SS20]. **disaster-recovery** [BGS13]. **disasters** [KM20, TPTH20]. **Discharge** [LS78, Pen79, RP78, SS78, BCCK92, SBG+71]. **Discharges** [KM70, KM00]. **discontinuities** [PM72]. **Discontinuity** [Che64]. **discontinuous** [MM75b]. **discounts** [SMSC14]. **discoveries** [PMS+08]. **Discovery** [Cor18, MIL+18, MDMN10, BBC+12a, CRAG18, CTD+16, Koe18, MDJV08, MBT19, PTRC16, PK18, SNP06, STW+08]. **Discrete** [Fra82, Lik88, MT77, BGK62, Gre59, NQ78]. **Discrimination** [Bla88, FXL01]. **discussions** [RK15]. **disease** [PAH+18, PCW+17]. **Diseases** [FE75, CXZ+17]. **Disjunctive** [(Ga57, Rai69]. **Disk** [Ada80, BT78, BFT79, BBT85, CM74, Coo90, DB82, Hea76, Hoa61, How84, JHH+81, Len74, MR79, Mul74, MT81, ND57, Osw74, SW74, Adl87, AFF96, BCT89, BE03, Dec90, FMPS93, HDBR08, HBP+81, Hoa00, HHA93, HS04, Jon72, McN94, ND00, Ono93, Pat89, Sch96a, SPR+95]. **Diskette** [DB82, Eng81]. **Dislocation** [BA62, IM60, JD66]. **Dislocation-Induced** [JD66]. **Dislocations** [DH61, MB75, MKP73, FMS+92]. **disorder** [Haa70, HHB+89]. **Disordered** [Pen88, Was88]. **Disorders** [Ins77]. **disparate** [BL15, SSY12]. **dispatch** [ET69]. **Dispatching** [And73]. **Dispersion** [KHBC66, YWWK64, PL73, Shi72, WL73]. **Dispersive** [Hua79]. **Displacement** [Che64, Sko58, ESS+20]. **displacements** [CMR72]. **Display** [AS78, DSW63, Far83, FLCB85, GBS+87, Lan74, LS78, MLGD84, McG92, OPR+78, San83b, AN98, ARM+01, CAW+98, DSRC98, How92, LCL+98, NSOO98]. **Displaying** [BBPS91]. **Displays** [BJS80, DC82, SW98, SS78, APOI92, AIH+98, KFYU92, LL98, RDD+98, SST+98, TSH92, TCCH98, WR00, WWA+98]. **disposal** [Fre72]. **dispositioning** [BKP82]. **Dissimilar** [BBT60]. **Dissipation** [KL70a, Las61]. **dissipationless** [BZ06b]. **Dissolution** [Ito01, TO77, Dat93]. **Distance** [DPR86, Mar61, Pat70, Mac60, Nef90]. **distances** [HW72]. **Distillation** [Bil70, Bil72]. **Distortion** [ELMR77, Fal70, SFH65]. **Distributed** [BHW+17, CMW92, MW82, RC17, ABE+02, AGZ94b, CN94, DP13, HG14, KCML13, MDJV08, MN97, NG17, VRA+09]. **distributed-memory** [AGZ94b]. **Distribution** [CL74, Don81, KO65a, NB61a, NB61b, Ree69, Sak79, Duk90, ESM16, Hos94, HS71, Jon72, MWW+07, Pai72, RWP16]. **Distributions** [FL59, Sta85b, Sta86, SST69, AKKJ72, BTWY92, KMK68, KO69a, Sta73]. **Disturbances** [Sat63]. **Divalent** [SS61]. **diverging** [PH81]. **Diversified** [Kuh88]. **diversity** [BM96]. **Divider** [KP59]. **Division** [CM80, HP84b, Meg62, Thr65, Age04, Age05, Age08, Che06, Che08, NRD+09, Ros03]. **Divisors** [Erd59]. **DNA** [Cle81, Pic87]. **DNS** [SJW+16]. **do** [ESS+20, Rus04]. **Document** [Cha87, CMP87, Cla79, KCML13, Mar98, YAH+96, ZY72, WCW82]. **Documenting** [Wri83]. **documents** [FKGF12]. **DOD** [SBT87]. **Domain** [BB60, Cam57, DKAC67, Fre79, GS70, Gor65, Gun66a, Gun66b, Gun69, Hut74, MMT60, Mid65, Mid66, PW67, Sch75, Slo66, Spe69, Aas70, BK76, CCG73, JC00, Pes71, Wor06, van89]. **Domain-Wall** [Slo66]. **Domains** [MS87, MSW69, SN87]. **Donor** [Kau81]. **Donors** [FPS66, PF66]. **Dopants** [AS78]. **Doped** [BA62, CL74, SH69, WB70, ABK89, SKEG+98, YTF+11]. **Doping** [ADH70, Sou64, AdH00b]. **dot** [ZH89]. **Double** [MM75a, Mel60a, Mid65, SB64,

WS75, LKFU05].
**Double-Boron-Implanted** [WS75].
**Doublers** [RP66]. **Doubling** [Mar59].
**down** [Man90, Now02]. **Drain** [GS80].
**DRAM** [ADG+95, BDN+02, Del08, EBD+95, FKOP90, FCE+15, IBP+05, IFB+11, KBS+99, MDB+02, SHDK95].
**drawer** [BHH+15, CAC+13]. **Drift** [vS57, MWX+17]. **Drilling** [Wre83]. **Drive** [CDS+86, Hel79, Kum65, PRY65, AFF96, BE03, Eng81, FMPS93, Led71, Ono93, SPR+95]. **Driven** [Hor62, Lin84, Mou86, Pre66, BW72, BGW91, GBK+19, KRS+17, MDJV08, Pon17, SLC+97, TSH92, TWM+14, TPTH20].
**driver** [ADH+00a, DTTK95, MVI+07, NSOO98].
**Drives** [BBT85, ILH03, Sch96a]. **Driving** [DYK10, KSK98]. **Drop** [BT84, FBW77, Fro84, Lee74, LMT84, Pim76, SBT87, Twa77]. **Drop-On-Demand** [BT84, Fro84, LMT84]. **Droplet** [PL77, KRC68, TZZ+11]. **Drug** [Cor18, MIL+18, CRAG18, Koe18, PMS+08, PK18, SNP06, SLZL18]. **drum** [LC83]. **Dry** [AGLM85, Hsi99, OR92]. **DS8880** [CHJ+18]. **DTP** [GZM92]. **Dual** [GZM92]. **Dual-tapered-piston** [GZM92]. **Duality** [Dor60, Joh87]. **Due** [ASV76, Lan88, BS71a, Lan57, Lan96, Lan00b]. **During** [CW77, Dav77, Gil79, KWJJ84, MJS70, PR65, Zab77, BCT89, DR93, GK60, SMVK90, TZZ+11]. **DUV** [ATW97, HMH97]. **Dy** [YTF+11]. **Dy-doped** [YTF+11]. **Dye** [SCHL66, SL66, SL67]. **Dyes** [Lew78b, Mer78, SLHM67]. **Dynamic** [ALL77, BW72, CHY92, DS70, ELZ79, Gha75a, HHM66, LST80, McA83, MWL+14, MN97, PH65, Rei66, SWD74, SM63, Tro80, WT77, Woo75, el 69, BJM+06, BGL07, BL15, GLOS92, Lar80, MDB+02, MWW+07, MS07, OD17]. **Dynamical** [Kra81, Lan85, CHG04]. **Dynamics** [BBT85, Dah67, Fro84, HA71, MW62, AHK+18, ACM01, ABM+01, BKB76, BCT89, BMPS91, BBK+08, Bru76, ESM16, EFG+05, FMPS93, Gyg08, KHZ+08, Las61, LR79, MN03, PZGL91, SPP+05, TWRW89, TZZ+11, WNBP91, ZEH+08, ZHP+18].

**E-Beam** [Gil84, PW78]. **e-commerce** [HRZ14]. **E.** [LFR05, VLKW14]. **EagleEye** [ZBG+10]. **Early** [ABB+13, BBH+81, DBB+02, GZE+05, Gol87, Mou86, Spi93, WSJ+19, BBS+03, EFR+05, ITS+15, Smo04, SPP+05].
**early-stage** [BBS+03]. **Earth** [WA79, Ber76b, KW76]. **earthquake** [NCM+01]. **easier** [MBF+13, PBBL07].
**easy** [SBF+97]. **Ebola** [BMF+16]. **EC12** [CAC+13]. **echo** [CN71]. **Echoes** [Hor57].
**ECL** [DMR+81]. **ecology** [PW72].
**Economic** [Agi74, El 74, KRS+17].
**ecospace** [LHS+17]. **ecosystem** [DKR12, GW18]. **Eddy** [Dui59]. **Edge** [BB60, LMD70, WB70]. **Edited** [Str62].
**Editor** [And60, Ano05b, BC60b, BBT60, BB60, BD62, Bre60, BA62, BLB+63, BN63, Car60, COC61, Con60, Cow87, CK63, Dam66, Die62, Dod63, Dum63, FMP61, FK62, FC63, Has62, IM60, Ken61a, Key61b, KW62, KKK61, KP63, Kru84, Ku63, Kue60, LDDB63, Le 62, Lei62, MW62, MVB62, Mar60b, Mat62b, MS60a, MP61, Mel60a, MWN63, MHS62, MG63b, NM62, ON60, Pal61, Par60, PK61, Rad62, Sch67, Seg62, Smi60, SB62, SS61, Tid62, Tit63, WKW60, Yu61, Ano01b, SPS+06]. **eDRAM** [MS05].
**Edsger** [FvGGM90]. **Educational** [BNS15, NNF15, CR15, VRA+09]. **EEG** [Boh73, MYKK+17]. **EEPROM** [Nii95].
**Effect** [AS78, Azb88, BTW62, BJMO80, CFH64, DS70, DH57, FLW78, FFH64, Gun66a, JJ64, KO69b, KO70, Ker64, Kus70, MW62, MFPJ71, MU77, Mat62b, Nai02, PS80, Phi78, Pri57a, Pri58a, TT75, TH64, Twa77, WWMS79, Wol70, ZZ69, CDS73,

CDS00, KM73, Lan60, LJ92, Tan08, vK62]. **Effective** [CDG+10, DYK10, KO65b, SBR64, DFNNS17, GMX14, Gup97, HBC+99, KBA07]. **Effectiveness** [RP70, TBH+17, BM96, MDH+12, SXYP12]. **Effects** [AOR62, BB60, BBF+05, BLB+63, Cle81, Col62, CC76a, Cre58, CGHK77, DS77, FK60, Gae79, GM62, GS70, HM89, KSW74, LDDB63, Leh64, MG68, MNP+69, Mei62, Mid70b, Par80, PL73, PFS+70, RK66, Ree59, SM62, Sta85b, Swa57, TH64, Vui64, YS64, ALH95, GC68, Gou89, GSAB93, GDR70, LBT99, Lud00, MRH89, MNS69, MMJ69, NBF+16, NBF+00, RBK+08, SNM69, TMF+08]. **Efficiencies** [HRF+17, Jam89]. **Efficiency** [Ano05c, DSRC98, DMN+59, Mar59, RP66, SJK70, BR09b, GKT17, HvKI+09, KDG15, KDT18, KTD20, MMM+05, MI10, MS89, WYF+03]. **Efficient** [AAB+14, GRS13, HL72, Jur78, KR87, Luk74, SFH65, SS87b, Tom67, BTP+90, vBBE+02, GMX14, JWSP06, MC87, NDM+04, NCB03]. **effluents** [Shi72]. **effort** [DBC+06]. **eFUSE** [RFC+07]. **eHealth** [AAJ14]. **eigenfunctions** [HM89]. **Eigenproblem** [Dub72]. **eigenvalues** [CW58, FW67, HM89]. **EL1** [Dav80]. **Elastic** [AW62, BP88, Che64, CS65a, CF72, Key61a, Kur87, Sat63, BEH+89, EHK+89, FL89, Jan69, LC83, Tap82]. **elastic-plastic** [CF72]. **Elastohydrodynamic** [VG74]. **Elastomeric** [Smi77]. **elder** [TOKN18]. **elder-care** [TOKN18]. **Elderly** [PL20]. **Electric** [DH57, MR76b, DXZS13, GAJ+16, HZG+16, KAD+16, SLK+16, TCP+16]. **Electrical** [BRB92, BJMO80, But88b, Cha88, Dav82, DDA+93, Gun66b, HM60, KP79, OPR+78, OMAW60, Rue79, SD85, SGC+87, Wee79, ALH95, BPG+16, BS71a, BBMP92, Bra68, CNC+08, DHK+92, DAS+94, HSL+10, Hei90, MKW+05, Mat70, RWP16]. **electrical-conductivity** [CNC+08]. **Electrically** [BMW83]. **electricity** [WAC+16]. **Electro** [SH63, Wie90]. **Electro-optic** [Wie90]. **Electro-Optical** [SH63]. **Electrochemical** [BMW83, Hor93, KM93, KRT98, SBdF64, Swa57, WDA05, vS98, Dat98a, Dat98b, RWM+05]. **Electrochemically** [DH83, SF93]. **Electrode** [CL64, RL70, DR93, DVM81, Sek93]. **electrode-electrolyte** [Sek93]. **Electrodeposition** [LR65a, DKA+05, Duk90, Duk93]. **Electrodes** [DK79, Jon72]. **electroerosion** [CP91, CAS+91, CASP91, Pen91]. **Electroless** [BLR84, BRA84, HSM84, JK93, KWJJ84, GB93, OHWR88]. **Electrolessly** [OSP+98]. **electroluminescence** [ARM+01]. **Electroluminescent** [ON60]. **electrolysis** [DR93]. **electrolyte** [Sek93]. **Electromagnetic** [Dum63, Bus71, Dav69, Pau89, PL73, Rub90]. **electromechanics** [NNN+06]. **Electromigration** [ADH70, HRS+95, SC88, Ver88, AdH00b, SD71]. **Electron** [Azb88, BGK+82, Bro88, CSE66, CW78, Col62, DO74, DMWW77, Dav80, DEG+01, ELMR77, GSVE83, GOJN77, GWRS90, GHP+93, HG83, HWC88, Hor62, Jon65, Jon70, Kra81, KP59, Kue60, KM74, KP80, Lin67, MTH71, MW80a, MJJ69, MPS77, MNP+69, MP67, NM62, Par80, PS80, Ree69, RS69, SSN+62, SG64, WPH69, YDHS78, All00, ALH95, CHL+11, DG93, FKOP90, FA70, HF90, KBF+92, Lud00, MAG+01, MHK+11, PGN88, Ros00, SKB+11, Tro00a, TTI98, VWJK11, WSBL90]. **Electron-Beam** [Bro88, DMWW77, Dav80, ELMR77, HWC88, Hor62, KP59, KP80, MW80a, MPS77, PS80, BGK+82, GWRS90, FKOP90, MAG+01, PGN88]. **Electron-Hole** [RS69]. **Electron-Transparent** [DO74]. **electron-yield** [CHL+11]. **Electronegativity** [Mic78]. **Electronic** [BW81a, BHH+15, FNRF89, FWW88, Fre70,

HJS98, KJ86, Key61a, Kog57, Kog58b, Kog58a, Kog59, KT84, Lan86, Lud78, Rey69, SF81, Sie70, SC88, SBC+12, WR00, AN98, Kit89, PBC+04, PK88, RR69, SJMBK08, TBB+09]. **Electronics** [Key88, Key00, MCK01, SS01, ZCM+96]. **Electrons** [Hon70, Lik88, Pri59, Pri65, Pri70]. **Electrophotographic** [BS84a, Bau84, Bro78, CEY84, EHMW81, SSL73, VW78, SBG+71, Sta97]. **Electrophotography** [LAG+84, TB82, Tu75, Sch71]. **Electroplated** [Ros78, Smi60, AR98, CBH+05]. **electroplating** [AUD+98, HHA93, Hor98]. **Electropositive** [KJSG+88]. **Electrostatic** [AEE77, FBW77, Fit57, Sch62a, Twa77, KWN01]. **Element** [BRR79, BCGS81, DW58, GLS67, SSW65, Zab79, AEH+04, BSHM01, BCGS00, Cor93, JL90, KL97, KN91b, VWE02, You90]. **Elementary** [ACG+86, Coo62, CLW79, Erd59, ACG+87, Mar90]. **Elements** [DMN+59, Hoh78, RP67, SLLP64, HMOS81, HMO81, Okl03, van89]. **eliminate** [MVI+07]. **Elimination** [Gab70]. **Ellipsoidal** [NGMW57]. **ellipsoids** [Bar82]. **ellipsometer** [HD73]. **Elliptic** [Par67, Wid67]. **Embedded** [BDN+02, IBP+05, AKG+19, CT06, FCE+15, Hui90, IFB+11, VTMB+90]. **Embedding** [HJ94, Irv01, AKB+17]. **embeddings** [BHW+17]. **Embodied** [BS84a]. **embrace** [DDDKW12]. **Emergencies** [ESS+20]. **emergency** [SLK+16, VAB+13]. **Emerging** [HST06, LPA+15, Tro00b, SGESR10]. **emerging-market** [SGESR10]. **Emission** [AC63, BN63, FP69, Gli69, MJS70, Mor79, RS69, SA66, SB64, SCHL66, SL66, SLHM67, SAL63, BSRM09, GRH+08, KWT+11, Lud00, MHW95, TK69, Tur69, VWJK11]. **emissivity** [Bra72b]. **Emitter** [Phi78, SGC+87, GOVC71]. **Emitting** [BLB+63, Dum63, LDDB63, MWN63, CA01, FPS66, HP01, RRB+01]. **Empirical** [SS87b]. **Empirically** [LS73]. **Employing** [HA58, GB93]. **Emptive** [And73]. **Empty** [Ort84]. **emulation** [Mey81, RT99]. **enable** [HMP+11, JGD+08]. **enabled** [BBD+98, DDDKW12, Vay12]. **enablement** [MLWC20, SSI+18]. **enabler** [CDS+19]. **enablers** [vKCD+10]. **Enabling** [AUW+09, CLP+13b, JSM+18, RSS+15, RWP16, SM16, SSY12, TPC+13, TCP+16, WBS+18, DSZ+12, Koe18]. **encapsulated** [Pai72]. **Encapsulation** [VGC79]. **encoders** [BNW99]. **Encoding** [BK74, KLS66, Pat75, Luh57, WRG99]. **Encrypted** [VPS88]. **Encryption** [Cop94, ACD+15, BC18, CJM96, JSM+18]. **encryption-based** [BC18]. **End** [HRF+17, SCHL66, Tay81, ARS+17, Lip92b, MDJV08, PGS+98, RRMD17, SN02]. **End-Pumped** [SCHL66]. **End-to-end** [HRF+17, ARS+17, MDJV08, RRMD17]. **Endocrinology** [SLG78]. **Endorsement** [MBT19]. **Endpoint** [DHC20, THL85]. **Energetics** [HB74]. **energies** [Tu90]. **Energy** [DKAC67, DHM75, Dou62, Fla81, Goo62, Hua79, Jon65, Jon70, Jur78, KL70a, KDG15, LS64, MJJ69, McC64, Mei62, NGMW57, RP66, SCYK78, Tin62, vHv+89, ABB+12b, Bar86, BSRM09, BR09b, CNL+19, CHL+11, Cop00a, EHLSW01, FNRF89, FWR+11, FRS+18, HvKI+09, HZB+06, KLHW16, KAF+16, KDT18, KTD20, MHK+11, NCB03, RES+15, RMM03, SKB+11, SD71, SFH+16, Tro00a, ZCK71, ZFD+15]. **energy-efficiency** [BR09b, HvKI+09]. **Energy-Efficient** [Jur78, NCB03]. **energy-filtered** [CHL+11]. **energy-management** [FWR+11]. **EnergyScale** [MBF+07]. **engagement** [HRS07]. **engagements** [BEJ+14, RWB+10]. **engaging** [SN15]. **engendered** [PH81].

**Engine** [BBHS84, CRDI07, BCK13, EK08, Mar98, BDHH+09, JB07, LJV+07, PBBL07, RWW07, RG09, SHL07]. **engineer** [ET69]. **Engineering** [KS90, LKL+81, Mul74, VAB+13, ABR71, CCFSZ12, KLRS96, SNP06]. **engineers** [GR92]. **English** [Bla88]. **Enhanced** [Chu82, OHK+07, PS80, Sar91b, vAR82, GW18, SC20, vS98]. **Enhancement** [EL83, FT80, WS75, LV94, LMW+01, Sta97]. **Enhancement-Mode** [WS75]. **Enhancements** [GSC80, ADH+07, BWB+18]. **enhancing** [JDBP10, SMP+04]. **ensembles** [CNP+17]. **entanglement** [Ter04]. **Enterprise** [ABC+99b, ADG+92a, ABD+92, BBGE+14, BEM+92, BBMP92, BRB92, BGJ+17, CTS+92, CDM92, Cov92, CW91, DHK+92, DSM+99, DGG+92, DGL+97, ECD+99, ES92, FGC92, GGRW91, GLOS92, GZM92, Haj91, HOWP92, IMSV10, KRTN+12, Lip92b, RGP+97, RCP+16, RHM+99, San12, Sar91b, SSW91, SSM97, SCC+97, SWC+97, SV91, SG99, TBB+09, TSC91, UDP+12, WMH+97, WHK+09, AAB+10, AYA14, BGLM09, Car10, CJK+13, DSZ+12, DHC20, FM10, FGG+13, HRF+17, HBT+16, JSS13, SM16, SLC09, SMC+14, SBC+12, VNT16, vKCD+10, CdLS92, NHH91, SY92]. **enterprise-class** [SM16, SBC+12]. **enterprise-level** [SM16]. **entire** [OIM+13]. **entities** [Coo18]. **entitlement** [CHM+16, ST17]. **Entity** [CA84, ST17, ZBG+10]. **Entity-centric** [ZBG+10]. **Entity-Relationship** [CA84]. **Entrance** [Fis88]. **Entropy** [Bar80]. **Enumeration** [Rio60, Mic72]. **Enveloping** [Mir72]. **Environment** [Bar73, Dub72, Fla81, MW82, Wie58, AHH+91, ATW97, AHM+07, BC00, BOS+95, CDSW06, CN94, DM03, DOJ+14, GHL+04, GBB+05a, KN91a, MAA+05, MME+97, ODL+09, Okl03, OEN+16, PZGL91, Rue72, VMG99, WNBP91]. **environmental** [KCH+09, KDG15, ODL+09, OB09, SCW10]. **environments** [AAB+14, AAS+14, BMS+17, BBG+14, Elg11, FHL+14, KRD+14, LBC+14, RCFN+08, VDO14, VMS+14]. **Epitaxial** [GK60, Mar60a, WKW60, GSG+90, GBBM90, SLYR72, SGT78]. **Epitaxially** [IM60]. **epitaxy** [CWC95, Far98, GI88, Mar79, Mey90, Mey00a, Tis90]. **Epoxy** [MLSS84, MVK85, KS01]. **Epoxy-Glass** [MLSS84, MVK85]. **equal** [MR14]. **Equalization** [God74, Gor65, Mil83, Sch85]. **equalizers** [Kar73, ST72, Ung72]. **Equation** [CS65b, Fla65, Lev66, Mil67, Mir60, Ode64, Tof88, vS57, BSHM01, CP72, Can73, HM89, HBW70, KRC68, Mic59, Mir61, Pri66, Sug59, Swi62]. **Equations** [Ano67g, Ano67u, Bil70, Bre72, Gar88, Her66, Lan85, Par67, Bil72, Bra72a, CFL67, Dan66, FW67, Ger73, Lax67, LO72, Mos61, Whi72, Wid67]. **Equilibria** [Sha58a, CJ78b]. **Equilibrium** [Lev64]. **Equipment** [KFSZ92, Col69b, CMR72, RWM+05]. **Equipment-related** [KFSZ92]. **equitable** [BMS+17]. **Equivalence** [Don74, Dur70]. **equivalences** [AO97]. **Equivalent** [BRR79, Dod63, Kah71, Str59, AO01, BDS+97]. **Era** [BCS+18, ABD+18, JDBP10, MWX+17, RCP+16, Sha02, SSI+18]. **Ergodic** [MN03]. **ERMIS** [VSS+09]. **Errata** [Ano66k, Ano66j, Ano66l, Ano05c, Ano06b]. **Erratum** [Ano66l, Ano01b, Ano06c, Ano08b, Lan84a]. **Error** [BM63, Bla79, Bos70a, BH82, BS70, CR76, CH84, Gri60, KST58, LT70, Meg60, Mel60a, MG63a, Mou86, OCT68, Pat80, SS59a, TL70, AC84, BSK+08, Bos70b, BH80, Dan66, Gor63, KBF+04, Mac60, MS96, Pat89, SKK+08, Sri96, ZMM+96]. **Error-Correcting** [CH84, Gri60, SS59a, AC84, Mac60]. **error-correcting/detecting** [AC84]. **Error-Detection** [BH82]. **Error-Sampled**

[KST58]. **Errors** [Dah63, How84, PL81, Pat86, SH57b, SH57c, Wyn64, ZS96, DWW90, Del08, HDBR08, KLHW16, KCOW08, Meg60, Mel60b, ORT+96, RBK+08, Tan96]. **ES/9000** [Att92]. **ESA** [SV92]. **Esaki** [PR59b, Rut59]. **ESCHER** [SKB+11]. **ESCON** [FGC92, CdLS92, ES92, GLOS92]. **eServer** [ABE+02, AFM+02, BEK+02, BHK+02, vBBE+02, CBB+04, CCW+02, FCS+04, GWS+04, GKMP04, GE02, HPW+02, HBL+02, KKS02, KKM02, PBC+04, PVAK02, SCS+02, SGK04, SNA02, SAB+02, SPM04, SvBC+04, SBC+02, VWE02, AV04]. **ESPER** [Ono93]. **ESPER-2** [Ono93]. **ESS** [IS20]. **essential** [KKT09, KKS02]. **EST** [DB01]. **establishing** [SJW+16]. **esters** [VBM71]. **Estimate** [Gam72]. **estimates** [Hei80]. **Estimating** [WYF+03, AP69, Mat03, Sit87]. **Estimation** [Bar80, Lin67, Mil83, Wel61, DB01, GYK99, Goz94, PTRC16, PM88]. **estimations** [Sta89a]. **estimators** [Sta73]. **estuary** [KCH+09]. **ETA** [HD73]. **etch** [PM72]. **Etching** [Chu82, CK79, vAR82, AHW+99, Fon99, Hsi99, Koh98, Kuo92, MSG72, OR92, ODK+99, RKL88b]. **Ethane** [Win78]. **Ethernet** [HTH+09, OBB+05]. **ethical** [BBMR19, NBM+19, RDL19]. **Ethics** [Ano19h, Sim19]. **Ethylene** [Blu79a, Dem78]. **EUDOC** [PMS+08]. **EuO** [ODR70, PFS+70]. **Europe** [Ano89]. **European** [RWP16]. **Europium** [Dim70, Kas70, MVB62, Von70]. **EuS** [PFS+70]. **EuSe** [PFS+70]. **EuTe** [PFS+70]. **evaluate** [CM19]. **Evaluating** [CXZ+17, EHLSW01, HS14, TOKN18, vv86a]. **Evaluation** [ÅC64, Far87, HHR99, KGF77, Sch81, TCCH98, AC84, BMF+16, BDS+97, BMT+90, CGH+17, Dor62, HL72, KMC+11, MPP+15, MME+97, Ris72, ST89, WG19, ZCK71]. **Evaporable** [OPR+78]. **Evaporable-Gas-Dielectric** [OPR+78]. **Evaporated** [BBG60, PW78, PBF60]. **evaporation** [TZZ+11]. **Evaporators** [Cas60]. **Event** [BFG+99, GRH+08, Sel07, Tan08, WLH+17]. **event-log** [WLH+17]. **Events** [AGH+16, LS76b, TPC+13]. **Everest** [NNMJ01]. **every** [WA15]. **evidence** [MFL+12, SvNH13]. **evidence-based** [SvNH13]. **Evoked** [UC62]. **Evolution** [CMR+90, DFaDNS98, GAB+08, HLS81, IK00, Jam81, JS81, KWJJ84, SF81, SCM+82, TJHK03, ADG+95, ALS81, BCK+05, CS03, CM90, CM00, Gre97, Nai02, ODA03, RGPP95, Ste81]. **Evolutionary** [DBNK+17, CFP20]. **Exact** [Mic72, Tak87]. **Examine** [Sch67]. **Example** [Sch67]. **Examples** [OH74, IBM13c]. **exascale** [LSS+20, NAB+15]. **excellence** [BWT+14, DRB+20]. **Exception** [GLS74]. **exceptional** [Hof60]. **exceptions** [LS73]. **Exchange** [AAJ14, HP84b, Kas70, KW62, Far98, Jon98, Whi72]. **Excimer** [JWL82]. **Excitation** [LM85, Pre66, SL67, Les71]. **Excited** [GCPVG85, Mor79, ARM+01, HDK+11]. **Exclusion** [BCH84]. **Exclusive** [FTY83]. **Exclusive-OR** [FTY83]. **executables** [Hei94]. **Execution** [BBB+20, CJ91, FH84, Tay79, WF87, APRS16, AEGP67, Gsc09, HM90, HHH86, MHR90, OWG+13, SSW91, SZ91]. **Executives** [NNF15]. **exemplified** [Pig88]. **Exhaustive** [TC84]. **Existence** [Bil72, LKY80, Ode64]. **Exit** [Fis88, Mas97]. **expanded** [FXL01]. **Expanding** [BL62]. **Expansion** [AFP+01, SAPT01, TFR+01, BAB+13, HSL+05, Jan69, Lew73]. **expediting** [ST17]. **Experience** [BCC+01, Ris84, JS14, LSS+20]. **experiences** [ABB+13, WSJ+19]. **Experiment** [BTW62, Bax58, Bla88, Dam66, DLK84, SBT87, ADG+92b, Nic92]. **Experimental** [BBT79, BFT79, BT84, BBT85, CSW73, CLOR87, CD85, CK63, DLW86, FGM+83, Hop59, Hor62, Mar71,

Men62, Ris84, RS59b, SHWK+90, SLHM67, TSNF88, WRLA57, ZCK71, BF69, Kel73, LD72, Rei69, Smo04, ACF+80, BHHO59]. **Experimenting** [EO13]. **Experiments** [ALL77, Ben59, Hat72, KT66, LR65b, ST75, Sch81, Gra71, JN82, Kel89, SG71, ZCM+96]. **Expert** [DLW86, ADG+92b, EGH+86]. **expertise** [CCE+20]. **Explaining** [CHdTG92]. **Explanations** [Gli69]. **explicit** [VRL10]. **Exploitation** [BIK+05, SSMGD10, CBB+05, MMS05, Sur15]. **Exploiting** [AGZ94a, FNY+10, LDSY91, Tom67, Wee79]. **exploration** [Kan15]. **Exploratory** [GLP76, PBC+06]. **Exploring** [EHPS05]. **exponential** [Moo72]. **Exponentials** [Che72]. **exposed** [LG88]. **Exposure** [Ahu80, BT67, ELMR77, HHSW01]. **Express** [BEE+02, GCS+12]. **Expressions** [BDH83, Hal76]. **Extended** [CDG83, Gum83, Ort84, Pad83, LT95, SMS80]. **Extending** [MG63a, HMK01]. **extensible** [BDH+19]. **Extension** [Koc59, Llo67, Cal70, Lam77a, Pri66, TS69]. **extensions** [CPT+08, Cra98, Wai05]. **External** [AA18]. **Extracting** [ZW17]. **Extraction** [WR83, AAA+17, DF15, EKTT90, FKGF12, TWM+14, WKF+12]. **Extrapolation** [Gaz78]. **eXtreme** [BBE+13]. **Extremely** [RVV88, MFPJ71]. **Extrinsic** [Was88]. **Eye** [RHM63, MG68].

**F** [LFR05, VLKW14]. **f.e.t** [HD73]. **Fabric** [MBT19, IJV19, BHH19]. **Fabricated** [BBC+64, O'H78]. **fabricating** [SLYR72]. **Fabrication** [Ame80, ATW+08, BHV85, BMWL80, BCRW82, GKK+80, Hat88, HWC88, Hsi99, MHI98, Mid70a, PW78, RHM63, Spr71, CAS+91, Dha68, FCH70, KFSZ92, KRT98, KOT99, LCHL95, MTH71, Mar71, MAD+98, RK72, TW69, TFL+98, ZCK71]. **Fabry** [Fan64]. **Facilitating** [SXYP12]. **Facilities** [Gum83, LG78, CMR+90, LS69]. **Facility** [AMG+87, GAC85, Lom80, Mul74, LL93, SdS89, AC86, GRSW86, JMLW94, RV89, SRO93, SV91, SY92, Sur15]. **Fact** [KPB+12]. **Fact-based** [KPB+12]. **Factor** [Bre60, Gia66, Hun59, CLP+13a, SBR64]. **Factoring** [Bra87]. **factorization** [EG00, GJ00, Tue68]. **Factors** [CK63, Dav79]. **FactSheets** [ABH+19]. **fails** [DFF+15, ZCM+96]. **Failure** [Bar83, DMP59, TAR84, TTI98]. **Failures** [Rot66a]. **fair** [FW83]. **Fairness** [BDH+19, SHCV19]. **family** [GR92, WD94]. **Far** [GHW70, GL62, OKH+02]. **Far-Infrared** [GHW70, GL62]. **Faraday** [Kus70, ZSZ96]. **Farey** [LT95]. **farmer** [FKOW16]. **Fast** [AEG+02, God74, Gup97, HJK+01, Jel69, KP59, KHKM64, Mil83, Raa76, CDC96, Cra98, ESI+12, GI88, Har71, Won90, Bra94]. **Fast-Switching** [KP59]. **Faster** [WT77]. **Fatigue** [Keh65]. **Fault** [Aic84, BH82, BCH84, BKRF02, CTS+92, Com83, Sta84b, Sta85b, Sta86, Sta89a, Cov92, SHL+20, SG99, Sta89b, Sta89c, TSC91, CR84]. **Fault-Isolation** [BH82]. **Fault-simulation** [Sta89a]. **Fault-tolerance** [CTS+92]. **Fault-Tolerant** [Aic84, Com83, BKRF02, Cov92, SHL+20, CR84]. **FCP** [ABE+02, SAB+07]. **Fe** [LR65a, MMT60, Mid62, Bru78, CW78, LR65a, Mid65, Pes71, YTF+11]. **Fe-B** [YTF+11]. **Feature** [CJH+15, Duk93, FS82, Kur87, BHW+17, TWM+14]. **Feature-scale** [Duk93]. **Features** [CMPR64, Gli69, ABD+18, BEE+02, DHK+92, FWR+11, HJW+16, MPP+15, SSN+15, SJZ+15]. **features-based** [SJZ+15]. **featuring** [SRH+18]. **Federal** [OO81]. **federated** [RBL+09]. **federation** [LNT08, NMV+09]. **federation-based** [NMV+09]. **FEDSS** [BHV85]. **Feedback** [KT73, Rei66, Cov92, DRSM15, Gus76a, Gus76b]. **Femtosecond** [TWRW89, MHW95]. **FEMvis** [Bal91]. **Fermat** [Nus76a, Nus77]. **Fermi**

[DV64, DM64, Sou64, WS64]. **Ferrite** [BBC+64, CM74, Pol78, RRSW61, Sha58a, Tan74, WWLF67]. **Ferrites** [NBRB70, She59b]. **Ferroelectric** [Tri58]. **Ferromagnetic** [THv70, Whi70, Haa70, Vur70]. **Ferromagnetism** [Mat62a, Sui75]. **Ferroresonance** [SH87]. **FET** [BBH82, Gra80, LST80, Mid70a]. **FETs** [KSF90, RG90, SHWK+90]. **FFT** [Cve87a]. **FFTs** [EFR+05]. **Fiber** [DSM+99, ABD+92, GLOS92, KACS95, CMW92]. **fiber-optic** [KACS95]. **fibers** [BS06]. **Fibre** [DHC20]. **Field** [Azb88, Boe69, Dou62, DSSS64, DS70, DH57, DPR86, EGS60, FFH64, FK62, Gar86, HBL62, JT66, KO69b, KO70, Kro58, Ku63, LC80, Met70, ORT+96, ODR70, PW67, Par60, Ree69, Swe62, Tin62, TH64, Vui64, Whi70, Wol70, BH89, CDS73, CDS00, DAB+97, KM73, LJ92, MHW95, Vur70]. **Field-Effect** [KO69b, KO70, Wol70, CDS73, CDS00]. **field-emission** [MHW95]. **Field-Quenching** [Boe69]. **FIELDAY** [BCGS81, BCGS00]. **Fields** [ASV76, Lan88, Dic91, HRWZ87, Lan57, Lan96, Lan00b, Lew73, RE71]. **Fifty** [BS03]. **Figure** [Esa62, Gia66]. **Filaments** [Bar69]. **File** [HP63, Hea76, How84, MT81, ODA+08, Osw74, van72, van73a, Bou97, BGW91, Coo90, GA68, HBP+81, Has98, JSS13, LNT08, Nii95, vdP72, van73b]. **Files** [BFT79, Len74, WY76, Dec90]. **filled** [FGMPK05]. **Film** [ABPS66, AGLM85, Blu79a, CC76a, CM74, GLS67, GS84, HM60, HCBA82, JT66, KJMS67, Lan85, Log70, MJS70, McG92, Ove70, PH79, PSS67, RK66, AT00, APOI92, AR98, Bag94, BHHO59, CWC95, CF72, CCH+96, CPTW98, DM01, Fuj92, Gro59, How92, HRS+95, JMM+96, KC89, KFYU92, Kuo92, KOT99, Lew78a, LL98, LCL+98, LS72, Mic59, MWEJ05, Pat72, PGS+98, SLK+97, SGS+09, TSH92, TCCH98, Tho94, TTI98, TKK+92, WWA+98, van89]. **Films** [Ahn66, ADH70, BB60, BBG60, BP75, Blu79b, BBT79, Boy60, Buc99a, Cha62, CH76, Coo62, Dav77, DH83, DP59, DPW60, Die62, EGS60, Flu67, Fre62, GM63, JC63, KDBT60, KH75, Klo87, Kro58, KEJ87, KG63, Kum65, KHBC66, KC66b, Kur57, KM74, Lin67, MPST66, MU77, MS60a, MMT60, Mid62, Mid65, Mid66, MW67, NM65, OHSP76, PC64, PDLM67, PBF60, RSSS82, RF78, Ree59, SK69, Sch75, SJ70, Seg62, SBdF64, SFD77, Slo66, Smi60, SSTF77, AF68, AdH00b, BNT86, Cha69, CCG73, CDM89, CNS+99, DPW00, GSG+90, Gre68, GMP90, GLG+99, LFC95, MFPJ71, MFS+11, Ngu99, Pen69, PW68, SF93, SAK70, SD71, SGT78, SHSY90, SHSY00, TCCH98, Tu90, WL73, You90]. **Filter** [COC61, Dod63, God74, Low78, RTM65, VSF65, Bus71, KFYU92, Peh69]. **filtered** [CHL+11]. **Filtering** [FF73, Nus76b, Nus77, PLHJ70]. **Filters** [Pis74, Roe66, GM69, WPH69]. **final** [BKP82]. **finance** [RS14]. **Financial** [ABD+14, HS14, Car10, KOP14, LSS14, RAR+14]. **Finding** [CCFB+12, HW72, Jam89, MN90, Nef90, Bra72a]. **Fine** [BBK+08, KZP03, HRS+95, KAB+05, SLC09]. **Fine-grain** [KZP03]. **Fine-grained** [BBK+08, SLC09]. **fine-pitch** [KAB+05]. **FinFETs** [SRH+18]. **Fingertips** [Goo58]. **Finite** [AG72, BF63, BCGS81, BCGS00, Cor93, Hoh78, RS59a, Ros66, You90, BSHM01, EM65, GA68, HMOS81, HMO81, JL90, KN91b, Lan66, MHI01, Mic59]. **Finite-Element** [BCGS81, BCGS00]. **fire** [PKXK07]. **Firm** [And10]. **Firmware** [KWH+12, AHM+07, ABB+15, GHL+04, KKB+09b, SMP+04, SvBC+04, TAE+07, TCK+15, WPL+12]. **First** [HPW+02, Koz81a, SM62, Swa57, WBH+04, CRDI07, DL02, FCE+15, GP06a, Gyg08, KBF+04, Koz81b, SS20, SS86, ACM01]. **First-** [HPW+02, SM62, WBH+04].

**First-Order** [Koz81a, Swa57, Koz81b]. **first-principles** [Gyg08]. **first-responder** [SS20]. **first-time** [DL02]. **Firstfilter** [VNT16]. **Fitting** [Nor58]. **Five** [Ano61e, Fre04]. **fixed** [SG94a, TLM83, ZTC+13]. **fixed-point** [SG94a]. **Flash** [Bau84, CAC+13, Lai08, Nii95]. **FLASH3** [FKL+08]. **Flashlamp** [SL67, HA71]. **flashlamp-pumped** [HA71]. **Flat** [Kum65, BE03]. **flaws** [Mar12]. **Fleshing** [MW80b, WM81]. **flexibility** [BBSW97, EBD+95, KWN01]. **Flexible** [Ada80, ALL77, BT78, BFT79, BKU88, BBKW86, CTT66, GHK67, Hai85, PVDF95, Pol78, PVAK02, Tib93, WSBL90, Wit85, DDA+93, KDG15]. **Flexible-Disk** [Ada80]. **flip** [Hei90]. **flip-chip-mounted** [Hei90]. **Floating** [ABC+99b, AEGP67, BD96, Cli90, SW90, CBB+05, DTH92, DDZ+07, GWS+04, HFH94, HM90, JO96, MHR90, SSM97, SK99, SKC09]. **Floating-Point** [ABC+99b, BD96, SW90, AEGP67, CBB+05, DTH92, DDZ+07, GWS+04, HFH94, HM90, MHR90, SSM97, SK99, SKC09]. **Flood** [Tod78b]. **flooding** [TPC+13]. **Flow** [CTT66, DH61, KWB88, LL83, Lev77, Tit61, Wit85, IMC+10, LPPT86, Lom77, PH81, VJA07]. **Flowcharts** [SBH82]. **Flowgraphs** [BBCV80]. **flows** [BS91]. **Fluctuations** [Was88]. **Fluid** [Fro84, Lev77, TC63, Bru76, HBW70, Okt71, PZGL91]. **Fluorescence** [Lun79, MVB62]. **Fluoride** [SS61]. **Fluorocarbon** [CK79]. **Flux** [Cro57, GMW80, Spr61, Pai72]. **Fly** [Pat86]. **Fly's** [RHM63]. **Fly's-Eye** [RHM63]. **fMRI** [RC17]. **focus** [GCS+12]. **focused** [BMD+20, BNSG09, CCE+20]. **focusing** [Shi73]. **Foil** [Bau63, Lan63, SWD74, VG74]. **Foils** [BP75, JD67]. **Fokker** [HJ88]. **Font** [ZL87]. **fonts** [CFW82]. **Food** [HT16, BKF+16, BMF+16, BW16, EBH+16, FKOW16, LZZ+16, NBF+16, WSE+16, YT16]. **food-stock** [NBF+16]. **footprints** [CLH+16]. **Force** [BB60, Col59, Mat95, Rat68, BCC+12, DB01, LFC95, PH81, Pes71, Sto91]. **Force-frequency** [Rat68]. **Forced** [Poh79]. **Forces** [CC76a, BKB76]. **forecast** [GSAB93]. **forecasting** [AYA14, KLHW16, NML+20, TYM+14, TWM+14, TPC+13, WAC+16]. **forecasts** [BKF+16]. **forest** [BJW72]. **Foreword** [And65, Ano67u, Cam00, GM60, Mar62, Pri64, Pug60, Sam64, Tuc60a]. **Form** [Fre79, Kuh88, Gre59, KRC68]. **Formal** [Luc81, SBF+97, GBRJ05, KSL95]. **Formaldehyde** [BRA84]. **Formalism** [BKU88]. **formalization** [Dun57a]. **format** [Jaq03]. **Formation** [FPS66, Har65, Kue90, Lee74, Pan78, Pim76, PL77, SBT87, Spe69, Tu90]. **Formatting** [Cha87]. **formed** [SF93]. **Forming** [Par66]. **Forms** [(Ga57, GLM+96]. **forms-processing** [GLM+96]. **Formula** [Mei83, SS88]. **Formulae** [Jam89, MR72]. **formulas** [AG72]. **formulation** [Lat73]. **FORTRAN** [Sar97, SK80, SSW91, SZ91, SK86]. **Forward** [Ahu80, SL76]. **foster** [KRS+17]. **Foundation** [DAC+03]. **Foundations** [HEH+10]. **Four** [Ano58g, Ano58h, Ano59e, Ano60f, Ano60g, GPL+92, Hos94]. **four-level** [GPL+92]. **four-parameter** [Hos94]. **Fourier** [AC86, AS87, DG84, Gaz78, GS70, Gre60, Har71, Kri82, NQ78, Zwe65]. **Fourier-Domain** [GS70]. **Fowler** [Dan66]. **FP** [HHH86]. **FPGA** [CJH+15]. **FPU** [LKFU05, Wai05]. **Fractal** [VMH+83, AO97, AO01, MM91, ODA03, Thi88]. **Fracture** [Klo87, Tho94]. **Fragmentation** [FC79]. **frame** [NCM+01]. **framers** [Cla03]. **Frames** [Alf89, MW80b]. **Framework** [HSS+10, ACC+15, BHK+02, DXZS13, EFR+05, FKL+08, FM10, GZE+05, GLK+12, GHH+17, HBT+16, KKB+09a, KKL+14, KJS09, LZZ+16, MBF+13, MMWLN99,

Mas97, RAMD19, RAR+14, RD12, SMX+14]. **Free** [CH74, Col62, DB79, Gun66b, HS81a, Mat62b, Pri58c, VM79, KLS+05, SAT+08, vK62]. **Free-Base** [VM79]. **Free-Charge** [CH74]. **Free-Induction** [DB79]. **Freed** [Lom75]. **Freedom** [Hau67]. **freestanding** [DN97]. **freight** [RC09]. **Frequencies** [Ins77]. **Frequency** [Ber64, FP69, JC00, KP59, Moh70, Rem67, RP66, Thr65, ZZ69, CCW+02, CFP+07, HAMC+04, PZK+03, Rat68, RH90, WL97, ZTC+13]. **Frequency-Division** [Thr65]. **frequency-programmable** [HAMC+04]. **Fresnel** [Arm65]. **Friction** [BP75, Mat95]. **Friedrichs** [Lax67]. **Fringe** [Abb66, PW68]. **Front** [Ano11, Ano12f, Ano12g, Ano12h, Ano13b, Ano14f, Ano14g, Ano14h, Ano14i, Ano14j, Ano15e, Ano15f, Ano15g, Ano15h, Ano16d, Ano17a, Ano17b, Ano17c, Ano18a, Ano18b, Ano18c, Ano18d, Ano19c, Ano19d, Ano19e, Ano19f, Ano20c, Ano20a, Ano20b]. **Front-cover** [Ano13b]. **Fronts** [BS69]. **frustration** [ABK89]. **fs** [HDK+11]. **fs-laser** [HDK+11]. **Full** [DWGC85, HA58, Rut57, PBC+06]. **full-system** [PBC+06]. **Full-Travel** [DWGC85]. **Fully** [MWW+07, HDK+11, MBJ+97]. **Function** [(Ga57, Lin84, Mic78, Mir69, NB61a, NB61b, Rad62, Ree69, BZ06a, CCC+15, FXL01, Kam98, KJP11, MVI+07, Shu94, Str68, WSCK17]. **Functional** [BGW+04, Fag77, GBRJ05, HAMC+04, JPTW92, KBG+09, LRH+02, Mat89, SRL+11, VLP+05, WMH+97, AGZ94a, GMS05, KAB+12, MMR89, SWF+09]. **functionality** [SNA02]. **Functions** [ACG+86, BBT79, Bra87, Bur75, Cle65b, DC73a, EP86, Hor76, Hud63, Rem67, Ris84, Sta67, Ull65, ACG+87, Cor69, DH69, DCB77, DH03, EFG+05, Fil70, FTY83, FJSS89, GM73, JC00, MN70, Mar90, May60, MM75b]. **Fundamental** [Ano62e, Lei62, Mar62, Ver88]. **Fundamentals** [ŽFE06, Mey90, Mey00a]. **Further** [Fla91, FC63]. **fused** [AEG+02]. **Fusible** [FT80]. **Fusing** [Bau84, Bro78]. **fusion** [ETWO08]. **Future** [AR98, Fra79, GA84, BIK+05, Isa00, JMM+96, KBS+99, Law02, MDB+02, NHKI03, The00, TB00, TPTH20, VDD+00]. **Future-Dependent** [Fra79]. **fuzzy** [BC00].

**G** [CS03]. **G3** [Mau97, RGP+97]. **G4** [Mau97, RGP+97, SSM97, SCC+97, SWC+97, WMH+97]. **G5** [SMK+99, ABB+99, CP99, CS99, DSM+99, JL99, KBM+99, MAF+99, RHM+99, SK99, SG99, TMB+99]. **G5/G6** [CP99, TMB+99]. **G6** [ABB+99, CP99, CS99, JL99, MAF+99, TMB+99]. **Ga** [MKP73, LMPP69, TZZ+11]. **GaAl** [Cro79, LSH79]. **GaAlAs** [DC82]. **GaAs** [BV78, BGS64, BLB+63, Gun66a, Gun66b, HVK+90, HD69, HFDN63, IBC64, JVP+90, Jon65, LDDB63, Lud78, LSH79, MB75, Mar60b, Mar64c, Mar71, MWN63, PR65, PRY65, Ree69, SSG69, SA66, Spe69, SAL63, TZZ+11, Tit63, Wei65, WW71]. **GaAs/** [LSH79]. **GaAs/AlGaAs** [HVK+90]. **Gadolinium** [SK69, SOC59, MKP73]. **Gadolinium-Iron** [SOC59]. **Gafac** [Sch84]. **Gaining** [CFH+09]. **Galapagos** [MDJV08]. **gallate** [GSG+90]. **Gallium** [And60, vM66, MKP73]. **Galvanomagnetic** [TH64, Vui64]. **Game** [Sam59, Sam67, Tuc60b, Lew12, PW72, Sam00, TGL+12]. **gamification** [CR15]. **gamma** [Sta73]. **GAN** [SHCV19]. **Gap** [Dou62, FK62, Ku63, Tin62, RDL19, FPS66, PF66]. **gaps** [Thi88]. **Garnet** [Dav77, Mee67, SK69, SOC59, MKP73]. **Gas** [AS78, BL62, BdM+78, GBC65, Ham78, Lan85, Lan74, LS78, LCH74, OPR+78, O'H78, PW78, RP78, RBC78, SS78, VGC79, Ano71, BHHO59, Gro59, Hun71, Mic59, SdS89]. **gas-phase** [Hun71]. **GaSb** [Lud78]. **Gases** [Cas60]. **Gasifier** [Sti79]. **Gate**

[Dan81, GS80, OG80, ABC+99a, AIH+98, BBH82, Buc99b, CKG+99, CAC+95, CDS73, CDS00, EB99, FCE+15, HD73, HBC+99, HBB99, JVP+90, KM73, KSK98, Luc99, OS99, OKH+02, SHWK+90, Sta02, WNV+02]. **gate-delay** [KSK98]. **gate-first** [FCE+15]. **gates** [GNF06]. **gathering** [MFL+12]. **Gazalé** [Rad62]. **Gb** [ABB+08, ESW+95]. **Gb/in** [ABB+08]. **Gb/s** [ESW+95]. **Gd** [MKP73, OHSP76]. **Gd-Co** [OHSP76]. **GdCoCr** [Sch75]. **Ge** [BC60a, BC60c, BC60b, Bay69, IM60, Jon65, Mar60a, Mar60b, Mey90, Mey00a, OMAW60, SAK70, SLYR72, SSFF11]. **Gene** [BCK13, ABC+05, ABB+13, AAC+05, ADG+05, BSJ+13, BGH+05, BBK+08, BHD+05, CCD+13, CBB+05, CP13, CKL+13, CNC+08, CBC+05, CHT+13, DT08, DLJ+08, EO13, EFR+05, EWS+13, FKL+08, GBC+05, GBB+05a, HBB+05, IBP+05, KHZ+08, LKFU05, MSW+05, MAA+05, OBB+05, OWG+13, PMS+08, RIB+13, SCG+13, SPP+05, IBM13a, IBM13b, IBM13c, WAB+05]. **Gene/L** [ABC+05, AAC+05, ADG+05, BGH+05, BBK+08, BHD+05, CBB+05, CNC+08, CBC+05, DT08, DLJ+08, EFR+05, FKL+08, GBC+05, GBB+05a, HBB+05, IBP+05, KHZ+08, LKFU05, MSW+05, MAA+05, OBB+05, PMS+08, WAB+05]. **Gene/P** [IBM08]. **Gene/Q** [BCK13, ABB+13, BSJ+13, CCD+13, CP13, CKL+13, CHT+13, EO13, EWS+13, OWG+13, RIB+13, SCG+13, IBM13a, IBM13c]. **General** [CHW75a, GM73, Hor57, Luk75, LSH76, RP78, Tay81, Wes78, DAUS91, Fra80b, Gra69, dTGHC92, HRW69, LH84, QS67, SS82, TLM83, Kov06, Mau18, Mau20]. **General-Purpose** [Tay81, DAUS91, Gra69, LH84]. **Generalizations** [Dor62]. **Generalized** [Azb88, Coo84, LB85, Ris76, Rob67, ACC+15, BHM04, EM65, Gus03, Str68]. **generated** [BL69, CN18, CPCC18, KBJ+18, MS89]. **Generating** [OH74, RHM63, SHCV19, van77, WLEF89]. **Generation** [Bea74, BMS80, CW85, Chi86, CN71, DGL+97, Sch67, TC84, Ver80, AEG+20, ACD+15, CCFB+12, DEG+01, GCL+19, HRS07, JGD+08, KWB+15, KAB+05, KCA+95, Lan61, Lan00a, LSF84, LBB+13, MWW+07, OW00, RAMD19, SFH+16, Tan08, TYSS19, VPD88, VTMB+90, WAC+16, WD94]. **generative** [SHCV19]. **Generator** [EL80, CL86]. **generators** [AEG+02]. **generically** [Gri04]. **Genes** [Pic87, DB01]. **Geneva** [HP66]. **GENRAND** [Wil97]. **geo** [BDMN14]. **geo-social** [BDMN14]. **Geologic** [ABC+85]. **Geological** [SM78]. **Geometric** [Gol69, JS89, Ree59, RR87, SJ89, WLPL+80, EKR87]. **Geometries** [Dem78]. **Geometry** [Gae79, Ins77, GA68]. **geospatial** [AEG+20]. **geospatial-temporal** [AEG+20]. **geotemporal** [MNWH20]. **Germanium** [And60, BA62, DH61, Hun59, Key61a, KK59, MN67b, NM62, SFG+06, GC68, MNS69, Mey00b, Pai69, Seg68, SNM69]. **germanium-based** [Mey00b]. **Germanium-Gallium** [And60]. **GeTe** [CSE66]. **Gettering** [GT80]. **GF11** [Kum92]. **GHz** [Sha02]. **Giant** [Gar64, Far98]. **Giant-Pulse** [Gar64]. **gigahertz** [Okl03]. **gigascale** [MDZH+02]. **Ginzburg** [Dou62, Sch89]. **Given** [OG87, ODA03, Sug59]. **Glamor** [LNT08]. **Glass** [IBC64, Ker64, MLSS84, MVK85, PW78, Pea69, Tan74, KFSZ92, TKK+92, YCB05]. **Glass-Bonded** [Tan74]. **glass-ceramic** [KFSZ92, TKK+92, YCB05]. **glass-ceramic/copper** [TKK+92]. **glass-ceramic/copper/polyimide** [KFSZ92]. **Glass-Passivated** [IBC64]. **Glasses** [GFHW82]. **Glassy** [Mor89]. **glaze** [Kah71]. **Global** [DR08, LHW81, Pul07, AUW+09, BKF+16, CPvR00, GRS13,

KJS09, KLE71, QS67, SP14]. **globally** [BGLM09, DSZ+12]. **globular** [FXL01]. **Globus** [GHN04]. **Glow** [Pen79]. **Glycine** [Tri58]. **glycosylation** [NBF+00]. **GMR** [Nes98]. **GNU** [GHL+04]. **go** [OKH+02]. **goals** [MDR+07, MWL+14]. **Gold** [JC63]. **Good** [SMD80, LKY80]. **governance** [BKN10, CM19]. **Governing** [Lan85, Mal13]. **GPFS** [AHH+14, JSS13]. **GPFS-based** [AHH+14]. **GPU** [EBB+20, SC20, TMT+20]. **Grade** [CSY79]. **Graded** [KO67]. **gradient** [CW72, RV89, Wol72]. **gradients** [ZCK71]. **Gradual** [BBT60]. **Grain** [KWB88, CDM89, KZP03, Pes71]. **grain-oriented** [Pes71]. **grained** [BBK+08, SLC09]. **Grammar** [BBCV80]. **grammars** [Arb86]. **Grammatical** [ODA03]. **Granular** [Gou89]. **Granularity** [Lor70]. **Graph** [BKU88, EB06, FL76, WML+16, Gup97, Hof60, May60, Sar91a, CP13]. **Graph-based** [WML+16]. **Graph-Unification** [BKU88]. **graphene** [HKvG+11, ZVW+11]. **Graphic** [GM69, PZGL91, MS89, PS91]. **graphics** [BKM+69, CS84, FGW81, GH96, Pic91, SHDK95]. **Graphite** [DM64, McC64, Sou64]. **Graphites** [Kle64]. **Graphs** [DH73, FLDC86, Luk75, RK62, Sow76, SW86, HS60, HRWZ87, Rai69, VPD88]. **grasps** [NS92]. **Grating** [BF63]. **Gratings** [BC65, SJK70, YL98]. **gravitational** [LQRS04]. **Gray** [TLR85, APOI92, TSH92]. **Gray-Scale** [TLR85, APOI92, TSH92]. **greedy** [AGJA06, DH03]. **Green** [Nun09, OB09, PF66]. **Grid** [Cha67, BPG+16, CRM02, GAJ+16, HSL+10, KFH+06]. **grids** [CN94, RWP16]. **GRIN** [FGW81]. **grocery** [YGR14]. **Gross** [BMT+90, Gli69]. **grossly** [PPG+01]. **Group** [LT70, Pat70, Joh87, Mel60b, Par98, YHA71, Bal05, CFG64, DR08, Des02, Des04, Mey03, Nun09, Pri07]. **groups** [SLC09]. **Grown** [AO60, BC60b, BC60a, BC60c, IM60, OMAW60, FPS66, PF66, MPCF82]. **Growth** [BV78, BS64, GK60, GM60, GLG+99, LL83, MJS70, Mar60a, Mar60b, Mol69, Nun09, Ros00, WKW60, BNT86, BJW72, Can73, DKR12, EK08, GBBM90, HKvG+11, MWEJ05, SSFF11]. **Guidance** [Soh76]. **guided** [BSRG17]. **Guiding** [Kan15]. **gyrokinetic** [ETWO08].

**H** [Ber76a, Wie76, Ano66j, Bra72b, GBC65]. **Haas** [Bro66]. **Haas-Shubnikov** [Bro66]. **Hacienda** [FGM+83]. **Hadoop** [GGH+13]. **Half** [Che64, KCA+95]. **half-micron** [KCA+95]. **Half-Space** [Che64]. **Halftoning** [GT87, AKM+03, AP82]. **Hall** [JJ64, Sie70, Azb88, Bra75, FFH64, KKK61, Pri57a]. **Hammers** [Hen83]. **hamster** [NBF+00]. **Hand** [BCRT74, DDMS92]. **Hand-Held** [BCRT74]. **hand-printed** [DDMS92]. **Handling** [AST67a, Hai85, PH79]. **Handprinted** [Cas70]. **Handwriting** [Lew83]. **Handwritten** [CK63, GMNE63]. **Hard** [BE03, Kum65, LeB62, NM65, KWT+11, Ono93, SPR+95]. **hard-disk** [Ono93]. **Hard-disk-drive** [BE03, SPR+95]. **Hard-Sphere** [NM65]. **Hardened** [Keh65]. **Hardening** [Pol78]. **Hardware** [ABB+03, Ano19j, BGM90, BBHS84, BHK+02, Des04, HSC82, LBH+75, MO84, Ost84, SBH82, Tod78a, BFG+99, CNL+19, CHMW07, Cra98, JWS+09, LBB+13, LRNS17, MP88a, NNMJ01, Pig88, RP14, SMP+04, TW85, VOW+12, VCM+20, WET+10, ZBBB17, ZS03]. **Harmonic** [Hel79]. **Harmonic-Drive** [Hel79]. **harmonization** [RM09]. **Harmonizing** [PP09]. **Harmony** [WML+16]. **Harnessing** [SPB+17]. **harvest** [BW16]. **Hashing** [Pip79, Hui90]. **Having** [BKM80b, HB73, Her66, Kar73]. **haystack** [CCFB+12]. **Hazard** [Eic65]. **HBr** [GBC65]. **HD** [Les71]. **HDTV** [LL99]. **He-Ne** [CBCM79]. **Head**

[Ada80, BBT85, CDS+86, CPL+74, Fan61, FMPS93, FK62, Gre79, Ibe03, Ku63, Osw74, Pol78, Ros66, Sea58, Hsi99, Led71]. **Head-Positioning** [Osw74]. **Head-Tape** [Gre79]. **Head/Disk** [BBT85]. **Head/Tape** [FT77]. **Heads** [Hem74, Tan74, AR98, BE03, CCH+96, CBH+05, FCH70, Hsi99, ILH03, TFL+98]. **health** [BC18, BISN+12, CFH+09, CN18, CPCC18, GHH+17, GAJ+16, HHC+18, JDBP10, KBJ+18, Sha12]. **Healthcare** [Kov06, CRH12, CDS+19, GDLS14, GSC12, KBJ+18, Sha12]. **HeapMon** [SKSP06]. **Heart** [Tay57]. **Heart-Lung** [Tay57]. **Heat** [Dui59, Led71, MDJ+70, Lan61, Lan00a, LD72, Pai72, RK72, Whi72]. **Heat-transfer** [Led71]. **Heater** [NGMW57]. **Heating** [HC78, Har63, Lin67, PR65]. **heatmaps** [PMW06]. **Height** [Car77, Rio60]. **Heights** [CP86, FR60]. **Held** [BCRT74]. **helical** [MKP73]. **helicopter** [JC00]. **Helios** [WSK+93]. **helper** [SKSP06]. **helper-thread** [SKSP06]. **Helping** [DDDKW12]. **Hematologic** [FE75]. **Heme** [FE75]. **HeNe** [AH79, CCC+79]. **Hermitean** [CW58]. **Heterogeneous** [MLM+19, NMTP14, CFS+19, FNY+10, IJV19, MSG72, SAA+18]. **Heterojunction** [KSF90]. **Heterojunctions** [And60]. **heterostructure** [TWF90]. **heterostructures** [LFC95]. **Heuristic** [EL80, MFT77, OH74, Ray69, HCO74]. **HI** [KJS09]. **Hidden** [Bir01]. **Hierarchical** [SNA02, BMD+20, CHG04, TMS+01]. **Hierarchically** [FGT91]. **Hierarchies** [Cho74, Fra87, Gec74, Mat03]. **Hierarchy** [FB78, GLS74, MS75, CFS+19, FLMKS06, JL99, KAB+12, MHI01]. **High** [Ano89, AFR62, BDWZ83, BCSE89, BJS80, BOS+95, BCF+07, BFG+06, BB82, BAH82, BHWZ63, BCRW82, CD78, CDS+86, Car60, Cas60, CT06, CEY84, Dav82, DHSC64, DKR+90, DC82, DB76, EB91, FP69, GCPVG85, Gau77a, GS84, Gra80, Gre79, Gus03, HBL62, HVK+90, HDW+07, Har63, HCBA82, Hoa58, Hoa61, Hop59, JWL82, KJMS67, Kra81, LV67, LHW81, Lin81, LY83, MM75a, MTF+95, MKW+05, Mar64c, MPST66, MHI98, Moh70, NNMJ01, Ngu99, OK82, PH74, Pat85, PGN88, Pre66, Ree69, RP66, Sam81, SW98, SJK70, SN02, Sch85, SRCW97, Sko58, SGC+87, TW69, TKK+92, VCP80, Vui64, Vur70, Wei79, Woo75, ZL87, vv86b, AAF+09, AGZ94a, AGZ94b, BJM+06, BGK+82, BGO03, BGL+92, CNL+19, CBB+05, CCJH81, CBH+05, CCW+02, CFP+07, Dat93, DHSC00, DKS+95, DHK00, Eme89, FNRF89]. **high** [FL89, FNY+10, FMP+03, GOVC71, GAOD71, GSG+90, GNF06, GJ00, HHB+89, HBC+99, Hoa00, IS20, Ism00, IFB+11, KC89, Kat89, Kel89, KBK+97, KIF+89, KPT+02, LPPT86, LL98, Lip92b, MCAW95, MIL+18, MPHC90, Meh89, MAD+98, MBB+01, MS89, MZS+03, Mor89, Nob95b, Pat73, PGS+98, Pet89, PV93, PZK+03, RAG11, RH90, Rub90, SST+98, Sar97, SGS+96, Sch71, Sch89, SWC+95, SPR+95, SWC+97, SLJ+15, SHL+20, SGS+20, Tho70, TPC+13, UBK+88, VW78, VWE02, WL97, Wie90, WBS+18, WKD98, YCB05, YR91, ZG71, ZCK71]. **high-** [GSG+90, GNF06]. **high-availability** [VWE02]. **High-Density** [BDWZ83, BCRW82, CDS+86, Gra80, LHW81, Pat85, Sko58, MTF+95, Ngu99]. **high-dimensional** [YR91]. **High-Efficiency** [RP66, SJK70]. **High-end** [SN02, Lip92b, PGS+98]. **high-energy** [FNRF89]. **High-Field** [HBL62, Ree69, Vur70]. **High-Frequency** [FP69, Moh70, CCW+02, CFP+07, PZK+03, WL97]. **High-level** [BOS+95]. **High-Linear-Density** [Sch85]. **high-moment** [CBH+05]. **High-numerical-aperture** [SRCW97]. **high-order** [Sar97]. **High-Performance** [BB82, BAH82, DHSC64, GCPVG85, HCBA82, OK82, SGC+87, BFG+06, Gus03,

TKK+92, AGZ94a, AGZ94b, BGL+92, CBB+05, DHSC00, DKS+95, FNY+10, GOVC71, GAOD71, GJ00, IS20, IFB+11, KBK+97, KPT+02, MCAW95, MIL+18, MZS+03, PV93, RAG11, Rub90, SPR+95, SWC+97, SLJ+15, SHL+20, WBS+18, WKD98]. **High-quality** [CT06, HBC+99]. **high-refractive-index** [BGO03]. **high-reliability** [WBS+18, YCB05]. **High-Resolution** [BJS80, DC82, Hoa58, JWL82, Kra81, LY83, SW98, LPPT86, LL98, MBB+01, PGN88, SST+98, TPC+13, UBK+88]. **High-Sensitivity** [VCP80, Sch71]. **High-Speed** [AFR62, BHWZ63, Car60, CEY84, DB76, Har63, Hop59, LV67, MPST66, Pre66, Wei79, Woo75, ZL87, BCF+07, DKR+90, HVK+90, HDW+07, Lin81, MKW+05, BJM+06, BGK+82, FMP+03, Ism00, MPHC90, Nob95b, SGS+20, Tho70, Wie90]. **High-Stability** [vv86b]. **High-T** [BCSE89, FNRF89, FL89, HHB+89, KC89, Kat89, Kel89, KIF+89, Meh89, Mor89]. **High-Temperature** [Ano89, GS84, Eme89, Pet89, Sch89]. **High-throughput** [NNMJ01, PGN88]. **High-Vacuum** [Cas60]. **High-Voltage** [Gau77a]. **higher** [DBK82, ZTC+13]. **higher-order** [DBK82]. **highest** [MR72]. **Highly** [Bea74, JWSP06, SG94b, SHTP11, ACFS16, ACD+15, BFG+99, CDC96, FGMPK05]. **Hill** [Str62]. **HiperSockets** [BEE+02]. **Historical** [PC85, SG99]. **History** [All81, Ben88, Ito00, Sam81, BPS81, Ben00, Spi93, Ito97]. **Hit** [Gec74]. **HIV** [YCJ+17]. **hodographs** [FS90]. **Hold** [Cor84]. **Holding** [Mat85]. **Hole** [FA70, GFHW82, RS69, VM79]. **Holes** [SBR64, Tie61]. **Holland** [Bil70, Bil72]. **Hologram** [SJK70, MS89]. **Holograms** [Arm65, UL70, Win70, BL69]. **Holographic** [ABB+00b, Lor70, RC17, WS72, Gab69, SGY+98]. **Holography** [DSW82, MW70, Ano70a, BWB+82]. **homeless** [YCJ+17]. **Homogeneous** [Gru79, Sat63]. **homologous** [YHA71]. **homomorphic** [BC18]. **Hook** [Ken61b]. **Hopscotch** [GM72]. **Horizontal** [Ost84]. **Horn** [vv86a]. **Horn-clause** [vv86a]. **Horner** [Dor62]. **host** [AHM+07, BCH+16]. **hosted** [CPT+08]. **Hot** [Lud00, MNP+69, Pri59, Pri65, HF90, Pri70]. **Hot-Electron** [MNP+69, Lud00, HF90]. **HR** [Sim19]. **HTC** [Gou89]. **Hub** [CNP+15]. **Hudson** [KCH+09]. **Hull** [AW76, Dun57a]. **Human** [CK63, TL70, DB01, FSG+73, MG68, RP14, RDL19]. **humanitarian** [KVP+20, NQ20, PSD+17]. **Huntington** [PCW+17]. **HW** [KKS02]. **HW/SW** [KKS02]. **Hybrid** [EBB+20, GKMP04, Llo67, MIL+18, PBK+09, RP70, WSW83, BMM+20, IMC+10, PLK09, VLB+09]. **Hydraulic** [MJ64, Tit61]. **hydraulically** [Gre60]. **hydrocarbons** [Cas71, CNC+08]. **Hydrodynamic** [SCRV78, TT74]. **hydrodynamics** [SdS89]. **Hydrogen** [BBS78, Key61b, Lev64, Pan78]. **Hydrogen-like** [Key61b]. **hydrology** [Fre72]. **hydrophobic** [FXL01]. **Hydrostatic** [MNP+69]. **Hyper** [KKS02]. **Hyper-acceleration** [KKS02]. **Hyperbolic** [Lax67, GM72]. **hyperconverged** [AHH+14]. **hypercubes** [HJ94]. **Hyperledger** [MBT19, BHH19]. **hyperparameter** [DFNNS17]. **hyperparameters** [OD17]. **hyperpyramids** [HJ94]. **hypersonic** [CPvR00]. **hypophosphite** [GB93].

**I/O** [ABB+12a, ABB+15, BAB+18, BBC+12a, CBB+04, CCD+09, CAC+13, CCC+15, CHJ+18, GMS05, Gre97, GE02, GCS+12, HBB+07, HBL+99, HS04, HSL+05, OHK+07, SHR+09, SBC+02, WMK+07, WYTO04].

**IBM** [ACG+87, Age04, Age05, Age08, Bal05, Ber76a, Che06, Che08, DR08, DCB77, Des02, Des04, Don00, Kov06, Lan96, Mau18, Mau20, Mey03, Pic18, Pri07, Ros03, SWC+97, Sta75, Wie76, WH94, ABC+99b, ADG+92a, ADG+95, ABE+02, AC86, ACG+86, ACG+87, ADS72, ABB+13, All81, ABB+03, AFM+02, ABB+12a, ABB64, ABB00a, Ana80, AST67a, AEGP67, ABB+12b, AAH68, Ano57k, Ano57l, Ano57m, Ano57n, Ano57q, Ano57r, Ano57s, Ano57t, Ano57v, Ano57u, Ano58j, Ano58k, Ano58l, Ano58m, Ano58n, Ano58o, Ano58p, Ano58q, Ano59f, Ano59g, Ano59h, Ano59i, Ano59j, Ano59k, Ano59l, Ano59m, Ano60i, Ano60j, Ano60k, Ano60l, Ano60m, Ano60n, Ano60o, Ano60p, Ano61f, Ano61g, Ano61h, Ano61i, Ano61j, Ano61k, Ano61l, Ano61m, Ano62f, Ano62g, Ano62h, Ano62i]. **IBM** [Ano62j, Ano62k, Ano63f, Ano63g, Ano63h, Ano63i, Ano63j, Ano63k, Ano63l, Ano63m, Ano64f, Ano64g, Ano64h, Ano64i, Ano64j, Ano64k, Ano64l, Ano64m, Ano64n, Ano65f, Ano65g, Ano65h, Ano65i, Ano65j, Ano65k, Ano65l, Ano65m, Ano65n, Ano65o, Ano66n, Ano66m, Ano66o, Ano66p, Ano66q, Ano66r, Ano66s, Ano66t, Ano66u, Ano66v, Ano66w, Ano66x, Ano67n, Ano67o, Ano67p, Ano67q, Ano67r, Ano67s, Ano67w, Ano67x, Ano67y, Ano67z, Ano67v, Ano67-27, Ano86a, Ano86b, Ano89, Ano90a, Ano90b, Ano90c, Ano92b, Ano92c, Ano92d, Ano92e, Ano92f, Ano92g, Ano93c, Ano93d, Ano93e, Ano94c, Ano94d, Ano94e, Ano94f, Ano94g, Ano94j, Ano94h, Ano94k, Ano94l, Ano94i, Ano94r, Ano94s, Ano94m, Ano94n, Ano94o, Ano94p]. **IBM** [Ano94q, Ano95d, Ano95e, Ano95f, Ano95i, Ano95g, Ano95h, Ano95j, Ano95k, Ano96g, Ano96h, Ano96i, Ano96j, Ano96k, Ano97f, Ano97g, Ano97h, Ano97i, Ano98g, Ano98h, Ano98i, Ano98j, Ano98k, Ano99f, Ano99g, Ano99h, Ano00i, Ano00f, Ano00g, Ano00h, Ano01c, Ano01i, Ano01j, Ano01l, Ano01m, Ano01k, Ano20e, Arc93, ABD+18, AAM+07, AHH+91, AV04, ADH+07, ABC+12, ACD+15, ABD+16, AHHN11, ABD+92, ABB+99, AHM+07, ABG+09, ABB+15, BBGE+14, BEK+02, BGM90, BS81, BEM+92, BS84a, BDN+02, Bar68, BBH+81, BR81, BHRS72, BAB+18, BHH+15, BBC+12a, BPS81, BSK+08, BCF+07, BAB+07, BWB+18, BWB+20, BSJ+13, BBD+17, BHK+02, BAV+09, BMM+20, BAB+13, BBK+08, BGM+67, BBMP92, BBB+20, BKRF02, BCK13, BCS+18, BS03, BBG+14, BRB92, BS70, BBC+12b, BCD+20, BMK+05]. **IBM** [vBBE+02, CNV+15, CCD+13, CSZ86, CDD82, CP99, CMPR64, CCG+81, CJJ+16, CP13, CTS+92, CBB+04, CCD+09, CAC+13, CCC+15, CDM92, CBC+18, CAD+09, CAK+15, CM90, CM00, CKL+13, Col69a, CM98, CNC+08, Cor69, CNC+95, CHT+13, Cov92, CHJ+18, CW91, CCW+02, CFP+07, CJB+15, DTH92, DHK+92, DSM+99, DGG+92, DT08, DSW82, DLJ+08, DL02, DEH+12, DHC20, DFF+15, EO13, EMM+18, Eic18, EWT+07, ES92, EGH+96, Eng81, EWS+13, FCS+04, FMPS93, FLS78, FKL+08, FGC92, FLR77, Fle95, FGK+07, FWR+11, FDS+13, FRS+18, FL67, FN71, FAJ+94, FBG12, FPB+11, GP06a, GGRW91, GRSW86, GLOS92, GWS+04, GRB+16, GR92, GGKK96, GT87, Gon99, GZM92, GKMP04, GPE99, GE02, GCS+12, GMS+12, Gro90, Gsc16, GS82b, HW12, Haj91, Har81, HPW+02, HDW+07, HHM70, HLS81, HHSR96, HTH+09, HF04]. **IBM** [HYA03, Hen68, Hip70, HAG+13, HBL+02, HM90, HS14, How84, HCTS81, HO96, HOWP92, ICO71, IS20, Ito97, Ito00, JL99, JWS+09, JSR+18, JML+18, JS81, JSM+18, KKS02, KS90, KN81, KMM+16, Kis96, Kis03, KLM+91, KKM02, KKB+09b, KWH+12, KDG15, Kos15, KDT18, KTD20, KBG+09, KAB+12, KHZ+08, KHK+18, LSF+07, LGW+15, LVT+18, LL93, LH57, LH00, Lip92b, MSSM07, MO84, MWS09, Mar90,

MIL+18, MD12b, MC09, Mau97, May81, MDR+07, MBB+18, MBB+20, MBF+07, MTS84, MLMP+12, MCG+15, MCH+82, MDN+18, MPP+15, Mil84, MHR90, MAF+99, NRD+09, NNF15, NAN+18, NK81, Nun09, OHK+07, OCB+90, OG90, ODA+08, OWG+13, PMS+08, PBC+04, Pat80, PMV15, Pat18, PGS+98, Pig88, PPS82, PC07, PSW+07, PVAK02, PHCR81, Pul07, RV89, RES+15, RAG11, RGP+97, RKW99, RB90, RSNG82, Rey69, Rit13]. **IBM** [RFC+07, RMM20, RBL+18, RGPP95, RWL81, RIB+13, SWF+09, Sam81, Sam64, SKK+08, SRJ+20, Sar97, Sar91b, SSW91, SHR+09, SRL+11, SLA+15, SAA+18, SCS+02, SKC09, SKP+15, SF81, Ser82, SWB+91, SBDT+09, SGK04, SNA02, SRO93, SAB+02, SKS+11, SSN+15, SVE+15, SV91, SPM04, SLJ+15, SKS+20, Sor79, Sor00, SG99, Spi93, SCM+82, SSD+15, SDS+18, Ste01, SvBC+04, SRH+18, SBC+02, SBC+12, SSI+18, Stu70, SdS89, SCG+13, Sur15, SKE+18, SLP+20, SHM+12, Tag09, TFJ+96, TS82, TAE+07, TBB+09, TBG+15, TFR+01, TJHK03, TCK+15, TSC91, TBS09, UDP+12, VWE02, VOW+12, VCM+20, Vay12, VLB+09, Wai05, WMB+15, WHC+18, WBW+15, War90, WMK+07, WLB+15, WLS+20, WBD+11, WGF+06, Wil93, WCB+86, WHK+09, WBS+18, YSH12, ZST+07, ZCM+96, ZDB+18, ZFG+11, ZTC+13, ZFD+15, Ano06c]. **IC** [Coo84, FS82, HHSR96, NSOO98, PBK96]. **iCARE** [SMX+14]. **ICU** [OOL+12]. **IDB** [TPF+91]. **Ideal** [FH84, KG80, Roe66]. **Identification** [Cio86, CLOR87, Dah67, Boh70, HRWZ87, JC00, PAZ72, NRA+07]. **Identifying** [APRS16, CCBLM12, FSG+73, KSH+08, RWB+10, GDB16, Mar12]. **Identity** [MBF+13, RCP15, SSY12]. **IEEE** [ABC+99b, GHW+20]. **IGFET** [HMO81]. **IH** [RAG11]. **II** [BK74, Bar68, BRA84, CGLL93, CAS+91, DMN+59, FDN59, HMO81, LDDB63, MS87, Mic59, NB61b, ND57, ND00, Sam67, SNM69, SJ89, SS59b]. **III** [AAH68, BBB+20, BHHO59, CASP91, Gun64, KSF90, MKP73, RW59]. **III-V** [KSF90]. **Illustrating** [Joz04]. **Image** [ABC+85, AMG+87, BK74, Ber76b, BDS+97, CCP85, DG84, FGM+83, Gar86, Har65, KB74, LC82, McA83, Par66, SM78, San83b, WSW83, WR83, AW82, ACC+15, ARG00, CBK+98, CJH+15, CGLL93, CNH73, DBK82, JN82, KWB+15, MHR+15, Mon82b, OMA+96, PB89, Pri94, SCC+15, SJZ+15, TPF+91]. **Image-Forming** [Par66]. **imagery** [Pri94]. **Images** [Man85, Sch62a, TLR85, van77, AP82, ATL+88, CNP+17, Dan82]. **Imaginary** [Hun59]. **Imaging** [Arm65, DV74, CNC+08, Far82, KJP11, Sch91, SLK+97, TKV00, ZVW+11]. **Immersion** [GS82a, KT84]. **Impact** [Bos97, Bru97, Hel79, Hen83, MT84, Zab79, ZL87, CXZ+17, GWB+17, HS04, Kum92, SAPT01, SSFF11, TCP+16, ZL97]. **impacts** [TPTH20]. **impaired** [AKNR10]. **Impedance** [Hor76, Maz70, Pen79, HRW69]. **Impedances** [BBT60]. **impinging** [MKJM93]. **Implantation** [GT80, ZCK71]. **Implanted** [DYHS78, GS80, RGL75, WS75, YDHS78]. **implement** [VRA+09]. **Implementation** [AK82, ABB+85, AC84, Ber85, BBGP94, EFR+05, FT80, GCPVG85, HF94, LBH+75, MS87, SW83, Sow84, Wil85, AAC+05, AHH+14, BCG+09, BDHH+09, BMK+05, CBV08, CRDI07, DDZ+07, FAD+07, HFH94, RB90, RWW07, Stu70]. **implementations** [BBG+14, MP88b, NFI+08]. **implemented** [LBB+13]. **Implementing** [NMF10, SW86, Har71]. **Implications** [RS79, Tu90, Del08]. **implicit** [CCBLM12, Mic72, Shu94, Wid67]. **Importance** [DBK82]. **imposed** [Coo90]. **Improve** [LV62, FKOW16, KEKP20, YT16]. **Improved** [BEM+92, Blu79a, CPZ63,

KDT18, KTD20, Lew83, Sav90, SK80, Dan82, GB71, Mat89, SRD94]. **Improvement** [DW58, Fle58, Lin84, RKL88b, EM94, EK08]. **improvements** [BWB+20, HS04, JWS+09, SvBC+04]. **Improving** [AGZ94c, FE75, KVP+20, LF77, LKL+81, MI10, Tol97, BHP17, Sit71]. **Impurity** [GK60, KO65a, KM66, Key61b, Pri58b, KMK68, KO69a, MFPJ71]. **in-host** [BCH+16]. **in-line** [ABC+99a]. **in-memory** [EGN+19]. **In-Plane** [Blu79b]. **In-situ** [Ahn66]. **InAs** [Lud78]. **Inch** [BS70, BBT85, FMPS93]. **Incidence** [PBF60]. **Incident** [DHM75, GWB+17]. **Incoherent** [Gef88, PLHJ70, SB62]. **inconsistency** [Sit87]. **Incorporating** [CKE+10, Tar63, SS00]. **Incorporation** [BC60b, BC60a, BC60c, MPCF82]. **Increase** [Ano06b, AAC+06, BWB+20]. **Increased** [Sie63, KDG15]. **Increasing** [AN98, ABH+19, BM96, ON60, WYTO04, WCK+07, Nai02]. **Indelible** [Eas86]. **Independent** [Fra83, AT78, CS84, MLMP+12, MM94]. **Index** [Ano93b, Ano93g, Ano93h, Bax58, PC64, Ano92a, Ano92h, Ano93c, Ano94a, Ano94b, Ano94t, Ano94u, Ano95a, Ano95l, Ano97a, Ano97j, Ano98a, Ano98l, Ano99a, Ano99i, Ano00a, Ano00j, Ano01a, Ano01o, Ano02a, Ano02b, Ano03a, Ano03b, Ano05a, Ano05d, Ano06a, Ano06d, Ano07a, Ano07b, Ano08a, Ano08c, BGO03, HSL+10, KEKP20, Sit87, WL73, Bar75]. **Indexed** [KHKM64]. **Indexing** [Bla59, SNA02]. **Indirect** [Whi70]. **Indium** [CJT62, How82, RL70]. **Indium-Lead** [How82]. **Indium-Mercury** [CJT62, RL70]. **individual** [MHW95, RG90]. **individuals** [CLH+16]. **indoor** [YBF+14]. **Indra** [BNN+09]. **Induced** [Azb88, DJ70, Har63, Hem74, HMR82, JD66, Lun79, DP68, FMS+92, HRC+08, HRS+95, RKL88a, Sri96, SGS+09, Tan96]. **Inducement** [Kuh88]. **Inductance** [BRR79, Rue72, HOWP92]. **Induction** [DB79]. **Inductive** [Dan60, Wat60b, WWMS79, CCH+96]. **industrial** [AAB+16, BOS+95, Peh69, SPP72]. **industries** [LMHM96]. **Industry** [Car10, Gom87, Kov06, DKRS07, HZG+16, KAF+16, SP14, VAB+05, Yan07]. **inelastic** [BEH+89, EHK+89]. **inequality** [Ris76]. **Inertial** [MR76b]. **Inference** [Wat60b, AC92, KBP+12]. **Infinite** [Ins76]. **Influence** [BS78, BB60, BBG60, HBR85, KMH82, Kus70, Mat62b, Pen79, RRB+01, Roe66, SSG69, HBR86, vK62]. **Information** [Ano58f, Hor00, IK00, KW62, Kuh88, Leh78, LP75, Lor70, MHI98, Sea57, Sha58b, Sho04, SY73, Tof88, Wat60a, Wat60b, Win70, AKNR10, AEG+20, AN98, And10, BS03, Cha77, GDA14, GAB+08, HHH04, Joz04, Luh57, MAD+98, PSD+17, SI09, SKC+10, SHM+12, VAB+13, WR00, ZW17]. **Information-Carrying** [Kuh88]. **Information-Content** [MHI98]. **Information-Theoretical** [Wat60b]. **Infrared** [BLLS79, CSH+89, FL74, GHW70, GL62, Heb64, BWB+82, Mah93, Sek93]. **Infrastructure** [RBB+02, AA18, AHH+14, BCG+09, BMS+17, BISN+12, CH06, CJJ+16, GCS+12, HBB+05, KAD+16, MOG+19, RRMD17, SHM+12, TCK+15, VSS+09]. **infrastructures** [BGM+16, CFH+09, KFW+14]. **Inhibition** [GSAP17]. **Inhibition-augmented** [GSAP17]. **Inhomogeneously** [CL74]. **Initial** [MW62, van72, BBF+04, vdP72]. **initialization** [CNSS12]. **Initiation** [HSM84]. **initiative** [NRD+09]. **Initiatives** [Nun09]. **Initio** [Cle65a, BBK+08, Cle00]. **Injection** [Ghe80, HFDN63, Key65, Key70, Las63, LF64, LS64, Mag73, Mar64c, PR65, HRG80, Key71]. **injector** [JWSP06]. **Ink** [AEE77, BHR77, BT84, BHWW77, BBT83,

Car77, CS85, CP77, DLK84, FBW77, LMT84, Lev77, SBT87, Tu75, Twa77, Zab77, Bru76]. **Ink-Jet** [SBT87]. **Inks** [BS78]. **Innovation** [BR81, BS03, CJK+13, GMS+12, HBP+81, KDT18, KRS+17, Viv14]. **Innovations** [HPWW81, HYA03, MT81, Nun09, TCK+15, ADS72, AAC+06, ABB+15, JSM+18, VCM+20, WHC+18]. **innovative** [MZS+03]. **inorganic** [MCK01]. **Input** [Fra79, Fra80a, Ins77, TW62, Tit61, BSK+08, DWW90, HBL+02]. **Input-Output** [TW62]. **Input-Restricted** [Fra79]. **input/output** [BSK+08, HBL+02]. **InSb** [FP69, Gli69, MNP+69, RK69, TK69, Tur69]. **Insensitive** [LR65a]. **Insider** [ASR07, CLH+16]. **insight** [CFH+09]. **insights** [GB93, LDSA02, RDL19]. **Inspection** [WSW83]. **Instabilities** [Boe69, Fri69, Gun64, SSG69, Bra69, HC69]. **Instability** [Kat89, MN67b, Whi72]. **Instagram** [SPB+17]. **installation** [Lie20]. **Instantons** [CCE+88]. **institutions** [VRA+09]. **Instruction** [AST67a, Bla94, GR90, VBE94, War90, BGAJ94, EV93, KMA+20, MHI01, Mat03, SLC+97]. **instructional** [WA15]. **Instrument** [Shi85, CM19]. **instrumentalism** [HHH04]. **instrumentation** [CLP+13b]. **Instrumenting** [CRHPP09]. **insulated** [CDS73, CDS00, KM73]. **insulated-gate** [CDS73, CDS00]. **Insulating** [PDLM67, TY64]. **Insulator** [RM70, HD73, IFB+11, Sta02, SRH+18]. **Insulators** [LMD70, CKG+99]. **Integer** [Mur57, GS72b, GS72a, Joh87, Lee07]. **Integral** [LC80, Ode64, Pri58c, Swi62]. **Integrals** [CCE+88]. **Integrated** [Ame80, BSS82, GPE99, GKK+80, Gsc09, HZG+16, KL70b, KL80, KW83, LRMT95, MW80a, OCR+98, OMA+96, RSSS82, RTM65, Rot66b, Rot74, RB92, Rue79, SLJ+15, Sta83, Sta84a, Sta84b, Sta85b, Sta87, SSTF77, BNN+09, BGLM09, CBBS90, DSZ+12, FMS+92, FMP+03, Hei90, LFR05, LD72, LGF+03, MPHC90, Ngu99, OR92, PZGL91, RP14, RFB+03, Rue72, SSY12, Sri96, Sta89a, Stu70, TFJ+96, TLS+06, Vor71, Wie90, WSBL90, EGS+85, RKW99, SY92]. **integrated-circuit** [Sta89a]. **Integrating** [AFFS98, HLZ+09, RBL+18, IFB+11, KBJ+18, BGL07]. **Integration** [BL15, BBH+67, Lev66, RR83, SKS+20, Thr65, War63, ABB+99, Buc99b, CAC+13, FW67, HKD06, IJV19, KAD+08, KYY+08, MDZH+02, MLM+19, NMTP14, PSP06, SMP+04]. **Integrity** [RM10, Irv89]. **Intel** [BCC+01]. **Intel-based** [BCC+01]. **Intelligence** [Gri92, Luh58b, AAB+16, BGM+16, CM19, DNZ+19, HJW+16, MLM+19, PL20, Rao16, RC09, SSK+16, ZBG+10]. **Intelligent** [GR58, WGF+06, YMR14, FGH+06, SN15, IMSV10, RKMY02]. **intensities** [Zie98]. **Intensity** [SA66, ZS03]. **intensive** [AHN+03, AHH+91, BBPS91, GR92, SSB+12]. **Intent** [HRZ14]. **Intent-based** [HRZ14]. **intentionally** [Irv89]. **inter** [SBG+13]. **inter-application** [SBG+13]. **Interaction** [Gre79, Les71, VMH+83, BBI94, Tan96]. **Interactions** [Kau81, Kuz70, Laf80, KWN01, TOKN18]. **Interactive** [AS74, Cha87, Dic91, Eas75, Far83, HMW74, PWFB91, PW72, SSL73, Sow84, AEZ84, Bal91, BKM+69, BL15, CSW73, FGW81, Kan15, KGT88, Koe18, NMH+07, PS91, SA98]. **interagency** [HS11]. **Interatomic** [Col59, HB74]. **Interatomic-Force** [Col59]. **Intercalate** [Kau81]. **intercalated** [ZVW+11]. **Intercept** [ABCR65]. **Interconnect** [LCHL95, MDZH+02, Sec95, HDW+07, HBB+07, IJV19, MSB+04, WDA05]. **Interconnected** [Str83, FGT91]. **Interconnection** [BSS82, BBH+67, Fra87, Kua95, ABC+05, ESHM95, HBL+99, KAB+05, LFR05, RGPP95, The00]. **Interconnections**

[KLC84, Rue79, AUD+98, DKS+95, Gol69, MCAW95, NL69, SAT+08]. **interconnects** [BIK+05, DSM+99, YCB05]. **Interdependence** [BLR84]. **INterface** [LH03, Ada80, BBT85, DV74, FT77, Sow76, AEH+04, BCF+07, HKLM97, HSH+88, HBL+99, HBL+02, HPZ+05, Led71, Lew12, Mir61, Okt71, Sek93, VWPB90, CMW92, SBJS15]. **Interfaces** [CW78, HKM+86, KG80, Ker64, BBF+05, KJSG+88, MYKK+17]. **Interfacial** [RF78, RRB+01, Tu90]. **Interfacing** [ABM+01]. **Interference** [Kob70, KT73, Mid70b, RP67, SH57a, ALH95, Bus71, Cha73a, Gou89, Pau89]. **interference-suppression** [Bus71]. **Interferometer** [Fan64, FL74]. **Interferometric** [PSH80]. **Interferometry** [GHW70, Le 62, VG74, AL76, GLCW93, LS72, WS72]. **interferon** [NBF+00]. **interferon-** [NBF+00]. **Interim** [Var89]. **interlayer** [Far98]. **Interleaving** [Gra71]. **interlock** [PV93]. **Intermetallic** [BTH62, CGHK77]. **intermiss** [Thi88]. **Internal** [BP75, DV74, RG90, FR01, Hei90, Rab69]. **Internet** [JS14, NMV+09, WLKS98]. **Internet-scale** [NMV+09]. **Interpolation** [LR65b, MM75b, AW82]. **Interposer** [MR79]. **interpretable** [HHC+18, VVHL16]. **Interpretation** [Far83, Far91, Leh78, Pri58c, FAFL91, GLCW93]. **Interpreter** [SW86, AT78]. **Interrogation** [Far87]. **interrupt** [AA18]. **intersections** [O'C89]. **Intersymbol** [Kob70, KT73]. **intervention** [HHC+18, RSS+15]. **intracellular** [PSP06]. **intrasystem** [DAS+94]. **Introduction** [Cro70, Fer12, FXB+10, GK60, HW12, JB07, KDH+05, LS75a, Mil84, MT84, Par98, PC85, Pen91, SS01, YS64, AN98, Dat98a, FM75, FT98, FBG12, How92, Lan84a, Lan84b, LBC+14, Tof04, CS97]. **Intuitive** [EWBR09]. **Invalidating** [Lom75]. **Invariant** [Ull65]. **Inventors** [Ano67n, Ano67o, Ano67p, Ano67q, Ano67r, Ano67s, Ano94c, Ano94d, Ano94e, Ano94f, Ano94g, Ano95d, Ano95e, Ano95f]. **Inventory** [BCE+07, KSB07, Sop59, KBA07, el 69]. **inverse** [HA00, Sit71, Tom72]. **Inversion** [FT64, SS00]. **investigated** [Dür94]. **Investigation** [AS74, MVK85, SGC+87, WB70, BNT86, BHHO59, Shi72]. **Investigations** [GMW80, SH63]. **investment** [GRS13]. **Iodine** [BC60c]. **Ion** [DG93, LG88, Lev66, RGL75, Bag94, Cop00a, KBF+92, Kuo92, LCL+98, RKL88b, Spo94, ZCK71]. **ion-beam** [RKL88b]. **ion-beam-processed** [LCL+98]. **Ionization** [KO65b, Pen79]. **Ions** [CGHK77]. **IoT** [PL20]. **IPV** [GDB16]. **Ir** [HKvG+11]. **Iron** [BB60, KS66, KP63, MHS62, NBRB70, PBF60, SK69, Sha58a, SOC59, KWT+11]. **Iron-Nickel** [NBRB70]. **irradiation** [SMVK90]. **Irredundant** [(Ga57]. **irregularly** [AG72]. **Irreversibility** [Lan61, Lan00a]. **ISA** [CT06]. **islands** [WTS+11]. **Isn't** [Knu90]. **Isolated** [CGR88, LS78]. **Isolation** [BH82, OG80, DHK00, HB73, Vor71]. **Isometries** [CLW79]. **isomorphism** [HHH04]. **isoparametric** [DF15]. **Isotope** [GM62]. **Isotropic** [Blu79b, Che64, CS65a]. **Issue** [Ano60f, Car81, MT84, Ano67h, Ano67i, GM60, Mar62]. **Issued** [Ano66n, Ano66o, Ano66p, Ano66q, Ano66r, Ano67n, Ano67o, Ano67p, Ano67q, Ano67r, Ano67s, Ano94c, Ano94d, Ano94e, Ano94f, Ano94g, Ano95d, Ano95e, Ano95f]. **Issues** [Ano57j, Ano58g, Ano58h, Ano58i, Ano59e, Ano60g, Ano60h, Ano61e, BBD+02, FGM+83, Ano62d, Ano63e, Ano66g, Ano66h, Ano66i, Ano67j, Ano67k, Ano67l, Ano67m, Lee07, MNWH20, ODK+99, PPG+01]. **IT-enabled** [DDDKW12, Vay12]. **Italian** [DFM+88]. **Iterated** [MN70]. **iteration** [GON+06, Mir72]. **iterations** [Lan66].

**Iterative** [ET86, HMW74, Jam89, Lin84, TC84, BS71b]. **Iterative-Improvement** [Lin84]. **Iterative-Interactive** [HMW74]. **Itinerant** [Hon70]. **IUPS** [NNN+06]. **IV** [CFG64]. **iWARP** [NMF10].

**J** [ACG+87, Ano93c, Ber76a, DCB77, Lan96, Sta75, TFJ+96, Wie76, WH94]. **J90** [PBK96]. **Janeiro** [TPC+13]. **Japanese** [MMUS88, TSNF88]. **Java** [AAB+10, SSMGD10, TWX+10]. **JBIG** [CM98, Mar98]. **JBIG-ABIC** [CM98, Mar98]. **Jeopardy** [Lew12]. **Jet** [AEE77, BS78, BHR77, Bog79, BT84, BHWW77, BBT83, Car77, CP77, DLK84, FBW77, Lee74, Lee77a, LMT84, Lev77, Pim76, PL77, SBT87, TC63, Twa77, Zab77, Bru76, MKJM93]. **Jets** [Fro84]. **Jitter** [BS85, Nob95a]. **job** [DKR12, SHL+20]. **Jobs** [Cho75]. **joined** [Okt69]. **joining** [Mil69, Mil00]. **Joints** [CN79, KLS+05]. **Josephson** [Ame80, Ana80, BKM80a, BJMO80, BMWL80, BKM80b, Bro80, Don80, FHVZ80, Ghe80, Gou89, GKK+80, GMW80, KL80, MW80a, Mat80, Tsu80, ZG71]. **Journal** [Ano67v]. **Journals** [Ano57k, Ano57l, Ano57m, Ano57n, Ano58j, Ano58k, Ano58l, Ano58m, Ano59f, Ano59g, Ano59h, Ano59i, Ano60i, Ano60j, Ano60k, Ano60l, Ano61f, Ano61g, Ano61h, Ano61i, Ano62f, Ano62g, Ano62h, Ano63f, Ano63g, Ano63h, Ano63i, Ano66s, Ano66t, Ano66u, Ano66v, Ano66w, Ano66x, Ano67w, Ano67x, Ano67y, Ano67z, Ano67-27, Ano94r, Ano94s, Ano94o, Ano94p, Ano94q, Ano95i, Ano95j, Ano95k]. **journey** [UDP+12]. **JSP** [Tsu80]. **Junction** [KMO64, KO65a, KO65b, KO66, KO67, KO69b, KO70, MG63b, PR65, Rei66, TDM+87, VCP80, Ano06c, GP06a]. **Junctions** [BKM80a, BS69, BJMO80, BMWL80, BKM80b, CL64, CSE66, Dum63, FPS66, Gef88, GS80, Han86, Lik88, OMAW60, PF66, SAL63, GP06a, MC68, OKH+02, Sun06]. **Just** [Kan15, SMC+14]. **Just-in-time** [Kan15, SMC+14]. **justification** [Gil60].

**Kalman** [God74]. **Kantorovich** [RS66]. **Kapitza** [Lit62]. **kappa** [Hos94]. **Keeper** [RK66]. **Kenya** [FKOW16]. **kernel** [NMF10]. **Kerr** [Shi73]. **Key** [ABC+99a, Eas86, KAB+12, SR63, vKCD+10]. **Key-Sequence** [Eas86]. **Key-to-Address** [SR63]. **Keyboard** [DWGC85, Yha75]. **Kiln** [MS67]. **Kinematics** [TO77]. **kinetic** [Hun71]. **kinetics** [GI88, SR71]. **kinoform** [LHJ69]. **Kinoforms** [PLHJ70]. **Kittyhawk** [AUW+09]. **knapsack** [GS72b, GS72a]. **knit** [MDMN10]. **Knots** [Ins76]. **Knowledge** [BP92, FLDC86, HKM+86, Kuh88, Wal86, ADG+92b, FKGF12, FGP+85, FJSS89, GLS86, Nic92, WN92]. **Knowledge-Accumulating** [Kuh88]. **knowledge-acquisition** [Nic92]. **Knowledge-Base** [HKM+86]. **Kr** [BKB76]. **Kraft** [Ris76]. **Kutta** [War63]. **KWIRE** [Elm84].

**L** [ABC+05, AAC+05, ADG+05, BGH+05, BBK+08, BHD+05, CBB+05, CNC+08, CBC+05, DT08, DLJ+08, EFR+05, FKL+08, GBC+05, GBB+05a, HBB+05, IBP+05, KHZ+08, LKFU05, MSW+05, MAA+05, OBB+05, PMS+08, WAB+05]. **lab** [DFF+15]. **Laboratory** [Kov59, LL83, Ros03, Col69b, Gra71, LS69, Mol69, PMS+08]. **Lagoon** [SCRV78]. **Laminated** [Blu79b]. **LAN** [VWPB90]. **Land** [CRM02]. **Landau** [Dou62, Sch89]. **Landauer** [SS88]. **Landsat** [DBK82]. **landscape** [EHLSW01]. **landscapes** [MM91]. **Langevin** [Gar88]. **Langmuir** [RSSS82, TZZ+11]. **Langmuir-Blodgett** [RSSS82]. **Language** [All81, ADST78a, BS06, BHP83, BKU88, DFM+88, Hei76, KRD+14, Kin61, LG78, Leh78, LN79, Pet76, Pla76, SFT78, Sow84,

AKB+17, ADST78b, ARS+17, BCD+17, BHP17, CFK+91, CGH+17, Den80, Kel73, KVP+20, MIL+18, NMTP14, SMS80, TYSS19, WN92, HAG+13]. **Languages** [Lom76, Luc81, MO84, Sam81, AR87, CGS61, Dun57a]. **LANs** [BS85, CS03]. **Lanthanide** [GSG+90]. **Laplace** [KRC68, LC80, Lew75, Sug59]. **Laplacian** [KJP11]. **laptop** [LGF+03]. **Large** [Ast58, BSS82, BHP83, Bra64, BBH+67, CD85, DFM+88, DO74, DAB+97, EMM+18, ETWO08, GHK67, Mer88, Mon82a, RBB+11, Sch80, Sta89b, Wre83, ABM88, BKF+16, CBK+98, CHG04, Dav69, Elg11, HdTR06, HBT+16, KJS09, Kum98, LSW13, MSB+04, PS91, RBB+02, TWRW89, TBS09, VNT16, Hud76]. **Large-Area** [DO74, Sta89b]. **Large-field** [DAB+97]. **Large-Scale** [BSS82, BBH+67, CD85, Mon82a, EMM+18, ETWO08, RBB+11, BKF+16, HdTR06, HBT+16, KJS09, LSW13, RBB+02, VNT16]. **large-tree-search** [CHG04]. **Large-Vocabulary** [DFM+88]. **Larger** [CAS+91]. **Larger-scale** [CAS+91]. **Laser** [Bro78, BH79, CCC+79, Chu82, Cro79, DN97, EHMW81, FL74, FLR77, Gab70, Gar64, HHM66, Har63, HD69, HMR82, HDK+11, HFDN63, Key65, Key70, LS64, Lun79, LSH79, SA66, SLLP64, SLHM67, Zwe65, vAR82, DAB+97, DP68, HA71, Key71, Mar71, Sor79, Sor00, SPP97, Spr71, TWRW89, WW71, vS98]. **Laser-Enhanced** [Chu82, vAR82, vS98]. **Laser-excited** [HDK+11]. **Laser-Induced** [Har63, HMR82, Lun79, DP68]. **Laser-Optical** [FLR77]. **Laser-pumped** [SLHM67]. **Lasers** [AH79, Cha79, DC82, Har65, JWL82, KMCY82, Las63, LF64, Mar64c, MG63b, PR65, SL67, TB82, CBCM79, MG68]. **Latch** [Cor84, Gra80, Mat85]. **Latch-Up** [Mat85]. **latencies** [BS06]. **latency** [CHJ+18, FGG+13]. **Latent** [Dui59, Sch62a, YCB05]. **Lateral** [Gil79, LJ92]. **Latin** [HBC70]. **Lattice** [ASV76, BKB76, CERS76, CCD57, Dod63, Pic87, Seg62, SdS89, WY76]. **Lattice-gas** [SdS89]. **Launch** [BDH76]. **launches** [RMR94]. **Law** [Col59, Swi62, CPD+09]. **Layer** [BW83, Kue90, Lee77a, RWC80, RVV88, Wre83, CDD+10]. **Layered** [CS65b, Sch89]. **Layers** [FT64, Gar86, KLBP64, Mid70b, O'H78, PW78, TY64, CU98, PM72, Whi93]. **Layout** [Coo84, FLKA84, BGH+05]. **Layouts** [Lew80]. **LC** [YL98]. **LCD** [JPTW92, KSK98]. **Lead** [GL62, How82, JC63, Vil82, BCSE89, KLS+05, SAT+08]. **lead-free** [KLS+05, SAT+08]. **Lead-Thallium** [GL62]. **leadership** [ADF12]. **Leading** [HM90]. **Leading-zero** [HM90]. **leads** [EG00, Gus97]. **Leakage** [GT80, VCP80]. **leaks** [SBG+13]. **learn** [BBMR19]. **learned** [DRB+20, Mer04]. **learner** [CFP20]. **Learning** [BBD+17, Fri58b, FDN59, OD17, RSS+15, Sam59, Sam67, WM92, BHW+17, BSRG17, CK17a, CFS+19, CNP+17, CNP+15, DBNK+17, EGN+19, Fri58a, GKT17, HKD06, KCML13, LRMT95, LGBV17, MBK+15, NG17, NML+20, NBM+19, RK15, Sam00, SCC+15, TGL+12, ZBBB17, CNP+15]. **Least** [Cio86, Goz94]. **Least-Squares** [Cio86, Goz94]. **Leduc** [Pri58a]. **Leed** [Jon70, Bru78, MJJ69]. **legacy** [HS11]. **Legendre** [Rob67]. **Legendre-Clebsch** [Rob67]. **Legion** [GHN04]. **Lemmas** [Kuh60]. **Length** [Don81, Fra70, GLP76, DY89, JVP+90, SHWK+90]. **Lens** [RHM63, TH11, Bru97]. **lenses** [DH69, TW69]. **lesion** [BSRG17]. **Lessons** [DRB+20, DSZ+12]. **Letter** [And60, BC60b, BBT60, BB60, BD62, Bre60, BA62, BLB+63, BN63, Car60, COC61, Con60, CK63, Dam66, Die62, Dod63, Dum63, FMP61, FK62, FC63, Has62, IM60, Ken61a, Key61b, KW62, KKK61, KP63, Ku63, Kue60, LDDB63,

Le 62, Lei62, MW62, MVB62, Mar60b, Mat62b, MS60a, MP61, Mel60a, MWN63, MHS62, MG63b, NM62, ON60, Pal61, Par60, PK61, Rad62, Sch67, Seg62, Smi60, SB62, SS61, Tid62, Tit63, WKW60, Yu61]. **levee** [SvNH13]. **Level** [BCK13, Bru78, Cle83, FHL+82, Sam81, SH69, AW82, Agn02, BOS+95, BSJ+13, BBS+03, DSW71, GON+06, GPL+92, HPW+02, JK93, KYY+08, Pat89, RBK+08, SM16, SG95, Wil97, WBH+04]. **Levels** [Fle58, KLC84, Sop59, KSB07]. **Lewy** [Lax67]. **LEXX** [Cow87]. **Li** [Les71]. **libraries** [Agr01, Aus90]. **Library** [LS75b, BPS+96, MBC+96]. **Life** [ABD+14, BB09, Kov06, Kuh88, CDS+19, McC69]. **lifecycle** [BGJ+17, KAA+18, WTT+14]. **Lifetime** [FL59]. **Lift** [HCS80, MW80a]. **Lift-Off** [HCS80, MW80a]. **liftoff** [CH82, HMM82]. **Ligand** [STW+08]. **Light** [BLB+63, CJ78a, Dum63, FPS66, Her66, Key63, KHKM64, LDDB63, LS64, MWN63, PRY65, SW98, SB62, VG74, BLDM97, CU98, CA01, DSRC98, DP68, ESS+20, HP01, Lax67, LS72, Rab69, RRB+01, RDD+98, SGY+98, SST+98, SS00, Shi73, TMS98, YL98]. **Light-absorbing** [Her66]. **Light-Activated** [PRY65]. **Light-Emitting** [BLB+63, Dum63, LDDB63, MWN63, FPS66, CA01, HP01, RRB+01]. **light-source** [DSRC98]. **Light-Valve** [SW98, SST+98]. **Lightly** [Lan63]. **lightwave** [BGO03]. **like** [Key61b]. **likelihood** [Boh70, EÖH10, Sta73]. **likely** [OKH+02]. **Limit** [Heb64, Tau02, Var19]. **Limitations** [LS64, BJW72, CBBS90]. **Limited** [BJM+06, Fra70, Mag73, MS60a, HC69]. **Limits** [Bro88, Key88, DDA+93, DAS+94, Emm97, EHPS05, Fra02, Key00, NBF+16, PK88, Sta02]. **LiNbO** [HD69]. **Line** [BF77, Ber64, Dah67, GHW70, GC81, GM63, Hop61, SAL63, Sve78, Tay79, Tod78b, ZL87, ABC+99a, ATW97, BH95, BP74, BFH+93, HRW69, MBC+96, RS94, Rei69, Tib93, Wee72, WC69, WWA+98, YG81]. **Linear** [Ast67b, CW72, ET86, GK64, MY67b, MW70, Nus77, Pim76, Pli66, Pri57a, Sch85, Sie63, Tuc60b, AW82, AGZ94c, BE03, BM68, CIE+03, DWW90, GB71, Gus76a, Gus76b, Gus97, Gus03, Las61, May60]. **linear-algebra** [Gus97]. **Linearization** [Ger73]. **Linearly** [KO67]. **Linearly-Graded** [KO67]. **Lines** [Gru79, Hor76, Mul67, Ost84, Wit85, Bra68, Cha88, DKR+90, Ho73, HRS+95, Kep75, Lan60]. **linewidth** [CAC+95]. **linguistic** [BC00]. **Link** [Cro79, MT77, DRSM15]. **Linked** [CT76]. **Links** [TW62, CBB+04, FMP+03, GLOS92, KACS95, PK03]. **Linpack** [KGBB09]. **Linux** [BBK+16, BBB+20, ZST+07]. **LinuxONE** [BBB+20]. **Liquid** [BL62, Bog79, DC82, Lan85, Lee74, Lee77a, McG92, Pim76, PL77, RL70, SW98, Spr63, Tu75, AT00, APOI92, AIH+98, CJ78a, CJ78b, How92, KFYU92, KRC68, LL98, LCL+98, NSOO98, RDD+98, SHWK+90, SST+98, SS00, TSH92, TCCH98, WWA+98, Yan71, YHA71]. **Liquid-Crystal** [DC82, McG92, SW98]. **liquid-nitrogen** [SHWK+90]. **Liquids** [MW62, DP68, Shi73]. **Literary** [Tas57, Luh57]. **Literature** [Luh58a, BWK20, MIL+18, Bax58]. **Lithographic** [DMWW77, MPS77, BDS+97]. **lithographical** [BTWY92]. **Lithography** [BLDM97, Bro88, Dav80, Gil84, HWC88, JWL82, Par80, PS80, RFK+97, Rot80, War93, AWHK97, Arc93, BRB+01, BGK+82, Bru97, CS97, DEG+01, GHP+93, GC93, HMH97, Ito01, LL93, LMW+01, MBB+01, PGN88, See93, SMVK90, SGL+97, SRO93, SS93, Spi93, Wil93]. **lithological** [BBPS91]. **Lived** [SH84]. **LLNL** [CCD+13]. **Load** [Chi60a, Con58, Con60, Mar59, MR76b, BZ06a, CHG04, EV93]. **load-balancing** [CHG04]. **Load-Sharing** [Chi60a, Con58, Con60, Mar59]. **Loaded**

[GM63, HG83, Lan63, EC71]. **Loading** [van72, BBF+04, CGLL93, GLCW93, vdP72]. **Loads** [ALL77, BGT74, KS01]. **Local** [Cro79, DJBT81, Fra83, HS85, HS81a, Str83, BSRG17, MCAW95, OCB+90, RC17, ST89, SJZ+15]. **Localized** [FWW88, Hon70, JT66, Lan88, Lan57, Lan96, Lan00b]. **Localized-Field** [JT66]. **Location** [DYHS78, LMPP69, YBF+14]. **Locked** [KHBC66]. **Locks** [HS82]. **locus** [Dan66]. **log** [McN94, RRMD17, WLH+17]. **log-structured** [McN94]. **Logarithms** [Che72]. **Logic** [AFR62, Bei92, Bra87, CGG+64, Cle83, DJBT81, DBG+84, DHSC64, DHSC00, DLW86, Don80, Don81, EL80, EL83, GRS87, Ghe80, Gia66, GLL80, GHKO57, HMW74, Jon75, KL70a, KC66a, Koz81a, LM80, LBH+75, MS05, Mat80, NW64, RWL81, SKB+96, TC84, Vil82, Voi65, Wei79, Woo75, AAH68, BEM+92, BJM+06, BGL+92, BMT+90, CCJH81, CAC+95, DBG+00, Di 88, Don74, Fag77, FM75, FN71, dTGHC92, HCO74, HBB99, KL63, KCA+95, Koz81b, MTB+90, WPL+12, Wei91]. **Logic-based** [MS05]. **logic/firmware** [WPL+12]. **Logical** [AHJ+57, Ben73, BDH83, Bon62, DMN+59, PR59a, SGK04, Swa60, WW75, Win62, Zul01, Ber76a, Wie76, WYTO04]. **logistics** [BCE+07, BKP82, SS20, SCH+09]. **Lognormal** [NB61a, NB61b]. **London** [Str62]. **Long** [Kuz70, SH84, BBC+08, DKS+95, GCL+19]. **Long-Lived** [SH84]. **Long-Range** [Kuz70]. **long-term** [BBC+08]. **Longer** [MG63a]. **Look** [Kin61, LT70, CGS61, Dan66]. **Look-Ahead** [LT70]. **Look-up** [Kin61, CGS61]. **Loop** [Ben59, MS67, WC75, BSSZ76, BCH+16, Cov92, Hip70, ST89]. **Loops** [BA62, CT76, MKP73]. **Lorenz** [Pri57b]. **Loss** [Kar74, Las63, MVK85]. **losses** [Yas07]. **lossless** [Bra68, Ho73]. **Lossy** [GC81, DKR+90]. **lots** [NBF+16]. **love** [Mer04]. **Low** [BH89, CFH64, CNC+95, CHJ+18, Cre58, GM62, GBB+05b, HOWP92, HS91, Ins77, Jon65, Jon70, KDBT60, KBC+03, MJJ69, Mey90, Mey00a, MPD86, RL70, SKB+11, SCYK78, Tay81, Tro00a, Bea90, BJM+06, CNL+19, CT06, DTTK95, EB91, EO13, FGG+13, HSS+10, JK93, LZZ+16, LCHL95, MZS+03, MHK+11, NHKI03, PZK+03, SAT+08, SN02, SKSP06, SPR+95, SCG+13]. **Low-cost** [GBB+05b, HSS+10, LCHL95]. **Low-End** [Tay81]. **Low-Energy** [Jon65, SKB+11, Tro00a, MHK+11]. **Low-field** [BH89]. **Low-inductance** [HOWP92]. **Low-latency** [CHJ+18, FGG+13]. **low-margin** [LZZ+16]. **low-noise** [DTTK95]. **Low-Operating-Voltage** [MPD86]. **Low-overhead** [HS91, EO13, SKSP06]. **Low-power** [KBC+03, BJM+06, CT06, MZS+03, PZK+03, SPR+95]. **Low-temperature** [Mey90, Mey00a, Bea90, SN02]. **Low-Toxicity** [RL70]. **low-voltage** [NHKI03]. **low-volume** [SAT+08]. **Lower** [DH73, FL75, LF77]. **LPE** [Lew78a]. **LRU** [BK75]. **LSI** [CHS82, FS82, KMH82, Mon82a, OK82, Rot82, Sak79, Sta76, Sta00, Ver80]. **LSS** [DBG+84, DBG+00]. **LSSD** [BTP+90, Cor84, EL83, LSF84]. **LT1280** [Bar83, PW83]. **LTO** [Jaq03]. **Lubricating** [Lan85]. **Lubrication** [TT74, VG74, BHHO59, Gro59, Mat95, Mic59]. **Luminescence** [PF66]. **Lumped** [Rut59]. **Lumped-Parameter** [Rut59]. **Lung** [Tay57]. **lysozyme** [ZEH+08]. **LZA** [HM90].

**M** [Don00, BDN+02, Bra72b, HWC88, PZK+03, SHWK+90, SWC+95, TMF+95, ACM+89, Yet89]. **m-gate-length** [SHWK+90]. **MAA** [Lye77]. **Machine** [AST67a, Ast67b, Bax58, Fri58b, FDN59, Gro90, HF78, HKD06, LH57, ND57, RR83,

Sam59, Sam67, WM92, ZBBB17, AT78, Bei92, CGS61, Fri58a, HM71, MYKK+17, NML+20, OD17, Sam00, SSMGD10, ZY72, LH00, ND00, VBE94].
**machine-independent** [AT78].
**Machine-Made** [Bax58]. **machine-printed** [HM71]. **Machines** [Bau84, BMS80, GR58, Gum83, SH57a, FHPR01, PLS20]. **Macro** [GLL80, HY84, MM82, Ver80, SPR+95].
**macromolecules** [HMK01]. **Macros** [Jon75, Sch80]. **Made** [Bax58, BA70, SBF+97]. **Magic** [CSS83, Par98]. **Magnet** [JT66]. **Magnetic** [AKK+67, Adl70, ABK89, Ahn66, ABPS66, Azb88, BTW62, BBP72, BBG60, Blu79a, Boy60, BBKW86, BS70, CDS+86, CHBH85, Cha62, CLW80, CC76a, Dav77, DP59, DPW60, Die62, Dou62, DSSS64, EGS60, Fan61, FLP90, Flu67, FP57, FK62, GLS67, Goo62, HPWW81, Hoa58, Hoa61, KPST61, KJMS67, Kro58, Ku63, KHBC66, Kus70, Kuz70, LL83, LR65a, Map62, MPST66, Mat70, MP61, Met70, Mid65, Mid66, MW67, ND57, ODR70, OHSP76, PW67, Par60, PH74, Pat75, Pat85, PFS+70, PSS67, RK66, SSW65, SH57b, SH57c, Sch85, Sea58, Sie63, Sko58, Slo66, SM66, SHSY90, SHSY00, SN98, TW74, Tin62, TH64, Whi70, WCB+86, WY76, AF68, AW98, Ano70b, Ano06c, BP88, BW81b, BS03, Coo90, Dec90, DPW00, EÖH10, EKS+04, FCH70, GP06a, GDR70, HJS98]. **magnetic** [Hoa00, Hsi99, ICO71, Jon98, KT70, Kob71, Lew73, Meh89, NDM+04, ND00, OCR+98, Par98, Pat89, RE71, Ste81, SHCS05, TB00, TFL+98, Vin81, Yan71, van89].
**Magnetic-Core** [FP57]. **Magnetic-Disk** [ND57, ND00]. **Magnetic-Field** [EGS60].
**Magnetic-Field-Induced** [Azb88].
**Magnetic-Recording-Head** [Sea58].
**Magnetically** [NW64, ETWO08].
**magnetism** [KIF+89]. **Magnetite** [Sie70].
**Magnetization** [DP59, KG63, Mee67].
**magnetized** [YTF+11]. **Magneto** [Beb62, WB70, Bro72, Pat72].
**Magneto-Optic** [Beb62, Pat72].
**Magneto-Optical** [WB70, Bro72].
**magnetoresistance** [Far98].
**Magnetoresistive** [BCRT74, CPL+74, Hem74].
**Magnetostatically** [Cha62].
**Magnetostrictive** [Pre66].
**Magnetotransport** [SKEG+98]. **magnets** [YTF+11]. **Magnitude** [Par80, CIE+03].
**Main** [Gha75a, GMW80, PSS67].
**Mainframe** [AK82, DP13, EDGL+13].
**Maintaining** [Now02, Tom72].
**maintenance** [CHMW07, WLH+17].
**Majority** [LM80]. **Majority-Logic** [LM80].
**Make** [GW57a, GW57b]. **maker** [MD12a].
**Making** [CP91, CAS+91, CASP91, ESI+12, Kis03, Pen91, PBBL07, MAG+01, PW72, RDL19].
**maleimide** [GA88]. **malicious** [APRS16, VNT16]. **malware** [HJW+16].
**Man** [BA70]. **Man-made** [BA70].
**Managed** [CJJ+16, ISV16, KAA+18, Pon17, VSS+09].
**Management** [Ano20d, CT76, GLP76, LS76a, Pri07, RM10, Skl76, AAB+14, AEG+20, ABB+12b, BKN10, BWK20, BMD+20, BPS81, BGM+16, BSD+20, BNN+09, BNSG09, BFRT13, BHH03, BBB+05, BM96, BGJ+17, Car10, CHH+01, CTD+16, CNP+15, DB20, DM03, DJL+16, DYK10, EB06, EWBR09, FGK+07, FWR+11, FM10, FGG+13, FLMKS06, GDA14, GAB+08, GAJ+16, HZG+16, HS11, JS14, JWW+11, KKB+09a, LRV+09, LSS14, MSV14, MBA+12, MN97, MS07, PL20, PKXK07, PAB+05, RAR+14, RHM+99, SCI05, SBD+10, SPB+17, SGK04, SvNH13, SHL+20, SCH+09, SCM+82, SCG+13, Tal20, VRL10, VOW+12, VCM+20, VAB+13, WLB+15, WLS+20, WSE+16, YSH12, vKCD+10, CHY92, PS09].
**Manager** [Kov06, Mau18, Mau20, FBG12, MBA+12, YSH12]. **Managing**

[Aus90, BCC+16, Jen10, Kru84, WAC+16, BC18, SPS+06]. **manganate** [SKEG+98]. **Manganese** [Sha58a]. **Manganese-Iron-Oxygen** [Sha58a]. **Manipulation** [AMG+87, CAE+76, THL85, Agn02]. **Manipulator** [Tay79]. **Manley** [RP66]. **Manned** [Jam81]. **manufacture** [CAC+95, GHP+93]. **Manufacturing** [BW83, Don00, EGS+85, GAC85, Har81, HMH97, MT81, SW67, AP69, BBH82, CDD82, CMS85, CNC+95, FGP+85, FS82, KL70b, KL94, LRMT95, MCH+82, Osb93, Ros99, Rot82, SCH+09, Stu70, Tib93]. **Many** [Adl64, BCSE89, BMPS91, Di 88]. **many-body** [BMPS91]. **Many-Valley** [Adl64]. **many-valued** [Di 88]. **mapper** [BMK+05]. **Mapping** [ABC+85, CA84, GHLW84, MY65, Ost84, LPPT86, PB89, RK15]. **Mappings** [Cve87b]. **MapReduce** [SXW+13]. **maps** [BBPS91]. **margin** [LZZ+16]. **Mark** [Dav80]. **market** [Sav69, SGESR10]. **Marketing** [Sel07, BDMN14, LB07, TYM+14]. **marketing-mix** [TYM+14]. **markets** [Car10]. **Markov** [Bir01, Hei80, LB07]. **Markovian** [IS83a, IS83b]. **Maser** [Fan64, SS61, Smi57]. **Mask** [Ham78, KO65a, KM66, Rot74, BM93, BDS+97, MAG+01, Rot82]. **mask-making** [MAG+01]. **Masking** [JMLW94, Mid70b]. **Masks** [RHM63, SPP97, GHP+93, SMVK90]. **Mass** [Lev66, MKJM93, Pat80, SFD77, MS89, Spo94]. **mass-production** [MS89]. **Massey** [Gus76a, Gus76b]. **Massive** [CP13, SCC+15, Sof13, BBC+08, GGK+13, KCML13, SXW+13, ZSY+13]. **Massive-scale** [SCC+15, Sof13, GGK+13, ZSY+13]. **Massively** [CNC+08, VBC+08, ZEH+08, BSHM01, CBV08, CDD+10, RQBW08, STW+08]. **Masterslice** [Bra75, CCJH81]. **Match** [BR82]. **Matched** [VSF65]. **Matching** [KR87, Kur87, LC80, Maz70, Tap82]. **Material** [BS84b, CS65a, Hai85, Par60, AAC+06, DVM81, RK72, Yan07]. **Material-Handling** [Hai85]. **Materials** [Ame80, BHR77, BS77, Buc99b, Hat88, Hov78, KN81, Lew78b, Lip92a, Mer78, STCR84, ARM+01, ABR71, AR98, BK76, BWB+82, CBH+05, Cop00a, DG93, EKS+04, Gri99, Hsi99, JS00, Kel89, MBC+96, Nes98, NSOO98, See93, SA00, Tan96]. **math** [EFG+05]. **Mathematical** [DB69, KO67, KO69b, Opr03, Paz75, Pul03, SH57b, SH57c, SS59a, Var19, CFL67, KM68, KM73, WH94]. **Mathematics** [Coh87, HM87, Wan60, AKM+03]. **Mathieu** [Lev66]. **Matrices** [Erd59, Fla65, Sch84, VM79, AGZ94c, CW58, Fil70, Gus03, PS91, Tue68]. **Matrix** [Chi60a, Con58, Con60, Her66, Mar59, McA83, Tuc60b, ZH89, AGZ94b, ABG+95, AIH+98, CAW+98, Gup97, LCL+98, RSS91, Ris72, Sit71, Tol97]. **matrix-multiplication** [AGZ94b]. **Matter** [FRE+08, GZE+05]. **Mature** [Tay84]. **maturity** [CM19]. **Maximal** [Ari69, Mar64a, MS60b, Pat70]. **Maximizing** [RMM03]. **Maximum** [Bar80, Bar86, Boh70, EÖH10, FHSD06, Mac60]. **maximum-energy-concentration** [Bar86]. **maximum-likelihood** [EÖH10]. **Mb** [FKOP90, GP06a]. **Mbps** [OCB+90]. **Mc** [Rut59, RS59b]. **MCAW** [EBH+16]. **McGraw** [Str62]. **McGraw-Hill** [Str62]. **MCM** [KBM+99, KPT+02, Lee77b]. **MDGRAPE** [EKS+04]. **MDGRAPE-2** [EKS+04]. **Mean** [Col62, Pri58c, Mat03]. **mean-value** [Mat03]. **meaning** [AC92]. **Meaningful** [Sha12]. **Means** [AK82, Sie63, CNH73]. **Measure** [SS88, DB01]. **Measured** [SS88]. **Measurement** [BDS+97, Cha73b, EGS60, FF73, Hun59, KKS+73, Smi60, VCP80, BP74, DR93, GRH+08, GLCW93, HD73,

KMK68, KO69a, KS01]. **Measurements** [Ahn66, Bro66, CEY84, DKAC67, FFH64, KC89, KWB88, Map62, PSH80, Sie70, WB70, ABC+99a, CDM89, ESHM95, EFR+05, LS72, NBF+16, Peh69]. **Measures** [FH84, Gia66, HP84a, Sav70]. **Measuring** [Beb62, DH69, FL74, KRS+17, RSL+70, Yan71]. **Mechanical** [AOR62, BBKW86, DH83, LW77, Tay57, TBG+15, Wan60, WLPL+80, WCB+86, Bal91, BBF+05, Fer70, GPL+92, KLS+05, Pri66, WGC93]. **Mechanics** [CF72, Pri58b, Moi91, Tho94]. **Mechanism** [Bay78, Cla79, HP66, Mee67, MWEJ05, HMM82]. **Mechanisms** [BLR84, BRA84, Cha69, Gom86, Ho66, Kas70, PL79, Sch62a, vAR82, BW72, MMV+01, PAZ72, Whi93]. **Mechanistic** [GB93]. **mechanized** [Luh57]. **Media** [Bay69, Blu79a, Pol78, SW74, BDMN14, BEJ+14, HPZ+05, JMM+96, KSSC+13, MA96, NMH+07, RVT+13]. **mediated** [GB93]. **Medical** [Pet77, ACC+15, GDLS14, KWB+15, OMA+96]. **medical-image** [OMA+96]. **medicine** [Far82]. **Medium** [Cop00a, Gru79, Mir60, CDD+10]. **Medium-energy** [Cop00a]. **meeting** [MWL+14, KSB07]. **meets** [MBB+01]. **Megacycle** [WRLA57]. **megapixel** [SGY+98]. **Meissner** [Mat62b, vK62]. **melanoma** [CNP+17]. **Mellin** [Lew75]. **MEM** [KJP11]. **Membrane** [DWGC85, Pet79]. **membranes** [ABM+01]. **Memories** [Ast58, Gra80, Sch63, WT77, FR01, Gab69, Hui90, KMB+08, Lai08, ORT+96, VTMB+90, WW71]. **Memory** [Aic84, ABPS66, Bar75, BBC+64, Bla63, BCH84, CFL73, CH84, CR84, CLW80, CPZ63, Cro57, Cve87a, Dah63, Dub72, FHVZ80, FMP61, FP57, Gar57, Gha75a, Gha75b, GMW80, Has62, Hor62, JM64, KPST61, KJMS67, KHBC66, LL99, LH57, LH00, LST80, MRH89, MLGD84, Mat80, MP61, NAB+15, ND57, ND00, OBB+05, Ost84, Pea69, PSS67, PHCR81, RS94, RRSW61, RWC80, SSW65, SMD80, Swa60, TFR+01, Tro80, WWLF67, AGZ94b, BS06, BBP72, BMD+20, BPS81, BAB+13, BH80, BCCK92, BKS+08, CNL+19, CP97, CTT91, CGN72, CW91, Don74, DMR+81, EGN+19, FP73, FHPR01, FW08, GBK+19, Hat72, HRG80, Lar80, LGW+15, Lee77b, LH84, MBJ+97, MDB+02, MHI01, Mat03, MLMP+12, MCG+15, NFS+17, OWG+13, Pat72, RBB+08, RHC73, SKSP06, SSD+15, SDS+18, Sur15, Tol97, TGB+80, VLT+12, Won90, AFP+01]. **Memory** [SAPT01]. **memory-system** [Tol97]. **mentor** [WA15]. **Mercury** [CJT62, RL70]. **Merge** [Tod78a, TW85]. **Merged** [SS76, Lee77b]. **merging** [GLK+12]. **Merit** [Esa62, Gia66]. **Mersenne** [Nus76b, Nus77]. **mesa** [AA71]. **MESFET** [Moh70]. **MESFETs** [JVP+90]. **mesh** [FGH+06]. **mesh-connected** [FGH+06]. **Mesoscopic** [CGR88, KH88]. **Message** [Age04, Age05, Age08, Bal05, Cal81, Che06, Che08, DR08, Des02, Des04, Don00, Kov06, Mau18, Mau20, Mey03, NNF15, Nun09, Pea09, Pic18, Pri07, PS09, Pul07, Ros03, San12, Str81, Viv14, AAC+05, KLMV19, LDSY91]. **message-passing** [AAC+05, LDSY91]. **Messages** [MG63a]. **messaging** [BEE+02, NNMJ01, SCW10]. **META** [AGH+16]. **Metabolic** [NBF+00]. **metabolism** [LPPT86]. **Metal** [BLR84, BRA84, Fre70, LMD70, RM70, RWC80, Was88, BNT86, CWC95, Dat98b, DN97, Dür94, GB93, GNF06, HSH+88, KMB+08, OHWR88, SN98, VWJK11]. **Metal-Insulator** [RM70]. **metal-mediated** [GB93]. **metal-oxide** [VWJK11]. **metal-polyimide** [DN97]. **metal-polymer** [HSH+88]. **Metal-To-Polysilicon** [RWC80]. **Metallic** [Coo62, Lan88, SC88, CCG73, Lan57, Lan96, Lan00b]. **Metallization** [FHL+82, Ham78, Mid70a, WKD98, CU98, GPL+92, LV94, WDA05]. **metalloenzymes** [MMV+01]. **Metallographic** [Han57, KWT+11]. **Metallography**

[Kov59]. **Metallurgy** [GRS87, KT84, BA69, TS69]. **metalorganic** [Tis90]. **Metals** [KJ86, Lit62, Dat93, KJSG+88]. **Metastable** [RVV88]. **meteorite** [KWT+11]. **Meteorology** [Kol67]. **metering** [Sch96b]. **Methacrylate** [AGLM85, GOJN77]. **Methacrylate-Based** [AGLM85]. **Methacrylates** [Hir77]. **methane** [HHA93]. **Method** [ARV64, Beb62, BP84, Bre72, Dan60, GS87, Hua79, LC80, Man85, MJJ69, MS67, MVI+07, Pri58c, Rot66a, SR63, Thr65, VCP80, WSW83, Wel61, Yha75, BGK+82, Boh70, BBK+08, BS72, Bra72a, CP72, CW72, Dan66, FRPG01, Fra80b, Fro71, Gil60, GB71, HRW69, JP94, KN91b, KSK98, Lan66, LS77, Lei61, MN70, MC87, Mic72, MTB+90, SNA02, Sit87, TLM83, Tom72, WLEF89]. **methodologies** [GGKK96]. **Methodology** [CW83, LSH76, SH84, TS82, ABB+99, BAB+07, BWB+18, BBS+03, CCW+02, DL02, EGH+96, FPB+11, HNS+03, HKR+97, KBK+97, KEL+00, Mat98, RB90, RBK+08, RFC+07, SCC+97, TMF+08, WBW+15, ZFG+11, EPP10]. **Methods** [Bro66, Dub83, Fra70, FP83, Gaz78, HS85, HW81, HS61, KLS66, Meg63b, Mir69, Ode87, Sch62b, ATW06, Boh73, GM72, GK64, Ham99, HHR99, HM71, HKD06, Hor98, HRS07, HE10, Kri82, LO72, Mac60, MDR+07, Meg63a, RW59, Wid67, Wol72, WBT+10]. **Methyl** [AGLM85, GOJN77]. **metric** [DRSM15, FM10]. **metrics** [BC18]. **Metrology** [Rot74, Rot82]. **Mexico** [HF78]. **MgO** [AS78, JWSP06, PW78]. **MHz** [RHC73]. **Michelson** [GHW70]. **Microanalysis** [NM62]. **Microarchitecture** [FAD+07, BBS+03, LSF+07, MWS09, SCS+02, SBDT+09, SKT+05, SVE+15, TDF+02]. **microarchitecture-level** [BBS+03]. **Microarchitectures** [CNL+19]. **microbiome** [WSE+16]. **microblogging** [CGM+15b]. **microcode** [vBBE+02, GMS05, KKM02]. **Microcoded** [CN74]. **Microcontact** [BLDM97]. **Microdisplays** [HP01]. **microelectronic** [Cop00a, CNC+95, KLS+05, TW69]. **Microelectronics** [DHSC64, Ang01, BRB+07, DHSC00, JS00, KBF+92, OSP+98, RWM+05, RB92]. **microelectronics-related** [JS00]. **Microfabrication** [Dat98b, Dat98a, vS98]. **microfractography** [Mon82b]. **Microglossaries** [Tar63]. **Micrographs** [Kra81]. **microinch** [CMR72]. **Micromechanical** [Pet79]. **Micromechanics** [LDL84, Poh95]. **Micrometer** [Ghe80, BK76]. **Microminiature** [LFR05, VLKW14]. **micromodels** [LS73]. **micron** [KCA+95, MTH71]. **Micropitch** [NSOO98]. **Microprobe** [KM74]. **Microprocessor** [AK82, CT82, Cor82, HS81b, ML82, ADH+00a, BGW+04, BBH+95, BAB+07, BCJ+96, BBGP94, BBC+12b, CCW+02, CFP+07, CJB+15, FGK+07, FPB+11, GP81, HKR+97, JSR+18, JO96, KL97, KAB+12, LR97, LRH+02, MBF+07, MP82, SRJ+20, SRL+11, SBDT+09, SWC+97, SPM04, SMK+99, VMM+94, VLP+05, WKP+02, WL97, Web00, ZS03, ZFG+11]. **Microprocessor-Based** [HS81b, GP81, MBF+07]. **Microprocessors** [RS85, Sta85a, ABB+99, BBS+03, CS99, CT06, DKS+95, GBRJ05, SLC+97, SCC+97, WBS+18]. **Microprograms** [Bir74]. **Microscope** [AMGC86, APS86, BMC86, CW86, DHTW86, KJ86, vv86b, BNT86, KKT+95, MPHC90]. **Microscopy** [Ano86c, DPR86, FF86, Fin86, Gar86, GH86, Gom86, HG83, HBR85, Poh86, SB86, TH11, WKB+86, All00, Bat00, BR00, Dür94, EBd+86, HBR86, KWT+11, Lud00, LFC95, Mat95, MHK+11, Poh95, Ros00, SKB+11, SA00, Sto91, Tro00a, TTI98, VWJK11]. **Microsecond** [RRSW61]. **Microsectioning**

[Han57]. **microstrip** [HRW69]. **Microstructural** [SGC+87]. **Microstructure** [GH86, Hat88, KLS+05, KWJJ84, Kuh88, Lye77]. **Microstructures** [SC88]. **Microtasking** [CSZ86]. **microturbulence** [ETWO08]. **Microwave** [BGS64, FP69, Gli69, GRT74, RS69, Smi57, SOC59, Wol70, BH89, Tur69]. **mid** [Jaq03]. **mid-range** [Jaq03]. **Middleware** [AGH+16, KOP14, FGG+13]. **midplane** [HPZ+05]. **migratable** [BPS+96]. **Migration** [GRSW86, AT00, CBV08, HBT+16, NML+20, WGS04]. **military** [BCE+07]. **Millicode** [HF04]. **Millimicrosecond** [DP59]. **Millipede** [VDD+00]. **MIN** [BP74]. **MINI** [HCO74]. **Miniaturization** [Key88, Key00, Llo67]. **Minicomputer** [Rad83, Rad00]. **minima** [LMPP69]. **Minimal** [GJ00, KL70a, Moo60]. **Minimal-storage** [GJ00]. **Minimaximal** [Rai69]. **Minimization** [OH74, Pal61, Rot60a, Rot60b, RK62, Tid62, HCO74, RW59]. **minimizing** [MWL+14]. **minimotor** [OCR+98]. **Minimum** [Hsi70, Mar61, Pat70, HZB+06, Kar73, Mac60]. **minimum-distance** [Mac60]. **minimum-energy** [HZB+06]. **mining** [ASR07, BGL07, KSSC+13, MIL+18]. **Mira** [CKL+13]. **Mirror** [Kue60, Pet80]. **MIS** [CL74]. **Miss** [SS76, MHI01, Thi88]. **missile** [RMR94]. **misuse** [SJW+16]. **mitigate** [ESA02, SLZL18]. **mitigating** [BDH+19, SP14]. **mix** [TYM+14]. **Mixed** [Azb88, BLR84, GS72b, GS72a, Lee07, NBF+16, Mey00b, NML+20, VWPB90]. **Mixed-effects** [NBF+16]. **Mixed-integer** [GS72b, GS72a, Lee07]. **mixed-signal** [Mey00b, VWPB90]. **Mixing** [FGMPK05, SB62]. **Mixtures** [GBC65, CJ78b]. **MMA** [Lye77]. **MMA-Co-MAA** [Lye77]. **MNETS** [Mat98]. **MnO** [Mat70]. **MNOS** [FP73]. **MnRh** [Sui75]. **MnTe** [MDJ+70]. **Mo** [HBL62]. **Mobile** [CJK+13, GRB+16, Rit13, CLP+13b, CLP+13a, HHC+18, KKT09, OYHSB14, RRMD17, RFB+03, SSK+16, YGR14, MBF+13]. **mobile/BYOD** [SSK+16]. **Mobilities** [PK61]. **Mobility** [LB85, PB69, Sie70, AAM+07]. **Mode** [Dum63, GHW70, KHBC66, PK61, SAL63, Tie61, WS75, CJM96, HB73, SGK04]. **Model** [AKKJ72, AST67a, AEGP67, And73, AHH+91, BBS78, BM63, BGM+67, BH82, BHWZ63, Cha74, Cho75, CP77, DB69, Doo83, Eas75, Eas78, El 74, FL67, Ins77, KS79, Kle64, LS75b, Lom76, Lom80, MDJV08, MTS84, MMV+01, Nor58, NM65, Sav69, SH57b, SH57c, SNP06, SFT78, SMD80, Sta84b, TY64, TC63, TO77, AP69, Agi74, ABK89, AKRS04, Bar78, BC00, CG71, CBD+09, Fla91, Gam72, GGRW91, Gsc09, GSAP17, HCL72, HdTR06, JL90, KMGD19, Koc59, Lew78a, LGBV17, Moo72, MS07, PLK09, QS67, QGT13, RBL+09, SHC+72, SM71, Sta75, TWM+14, TMW+17, Var89, Wor06, Yar12]. **Model-based** [SNP06]. **Model-driven** [MDJV08, TWM+14]. **Modeling** [BS81, BKM80b, CH06, DKS+95, EGS+85, Fla81, GL87, GC93, Ham99, Hoh78, Irv93, KW76, KGCS85, LS76a, LGBV17, LBT99, MMJ69, OHM+85, PB89, Pau89, RR87, SCRV78, Sri96, Sta83, Sta84a, IBM13c, VDP94, Was77, WLPL+80, Wes90, WWK+87, Yas07, AHN+03, BWK20, Boh73, DJK14, FGW81, HNS+03, HS11, KCOW08, KTD20, Law02, LLF+92, Lee07, Mah93, Man90, MS96, NNN+06, Osb93, PLS20, PCW+17, RES+15, RWM+05, RBK+08, Rub90, SJMBK08, Sta76, Sta00, Tan08, VMG99]. **modelling** [DSW71]. **Models** [BS84a, CW85, ET86, Fer75, FN71, LB85, Mil84, Ohb84, SC75, ZG65, ADG+92a, AKB+17, ARS+17, BHP17, BW16, Bir01, Car10, CCF+10, CKE+10, HA00, Mat03, NBF+16, NLP17, OTC14, OIM+13, SMS80, TCP+16, VVHL16, el 69]. **Modem** [CN74, GP81]. **Modems** [HS81b, Nob95b].

**modern** [ZBBB17]. **Modes** [Bei74, Fan64, AL76, YL98]. **MODI** [MBF+13]. **Modification** [AMGC86, KMCY82, ACM+89, EM94, LV94]. **Modified** [Ho75a, JP94]. **modify** [TMW+17]. **Modular** [Bra75, LV62, Mat98, NCM+01, FGH+06, KMC+11, WPL+12]. **Modulated** [ASV76]. **Modulation** [Ano66j, Bla65, Hop59, PL83, Pat75, CN71]. **Modulation-Demodulation** [Hop59]. **modulator** [SGY+98]. **modulators** [YL98]. **Module** [BGR82, BB82, CW83, HCBA82, HW87, OK82, PW83, San83a, DHK+92, ESA02, GZM92, KLM+91, KPT+02, PGS+98, YCB05]. **Modules** [Cle83, Mul74, BRB92, HOWP92, MKW+05, WKD98]. **Moduli** [AW62]. **Modulo** [CM80]. **modulus** [AEG+02]. **Moiré** [GLCW93, Abb66]. **Moisture** [BP84, MLSS84, MVK85, BBF+05]. **Molecular** [ABR71, BBS78, Dem78, Lun79, MY67a, MY68, RSSS82, AHK+18, ACM01, ABM+01, BBK+08, DP68, EB06, EFG+05, Far98, GZE+05, GI88, Gyg08, KHZ+08, Mat95, SPP+05, WNBP91, ZEH+08, ZHP+18]. **Molecule** [MY67b]. **Molecules** [Cle65a, SLLP64, Cle00, Hun71, MHW95, TWRW89]. **Moment** [Cas70, HC70, CBH+05]. **momentum** [Sun06]. **monetization** [CDL+14]. **Monitor** [MHI98, MHR+15, MAD+98, WCNSH94]. **Monitoring** [Cle83, CMR72, Irv91, ABC+99a, BCH+16, BAV+09, BISN+12, BFG+99, CDSW06, HKA+13, Hor98, KCH+09, LR97, MSV14, MC09, ODL+09, SCW10, Sta76, Sta00]. **Mono** [Fin86]. **Mono-Atomic** [Fin86]. **monochromatic** [PW68]. **monogamous** [Ter04]. **Monohydride** [Pan78]. **Monolayer** [Mor79, BLDM97]. **Monolayers** [DK79, RSSS82]. **Monolithic** [BFL66, DHK00, CGN72, KACS95, Spr71, TS69]. **Monopole** [Lev66]. **monoxide** [KLE71]. **Monte** [Ken61a, LFF90, MNR86, MS96]. **Moore** [HS60, Koc59, Lam77a]. **Moore-Shannon** [Koc59]. **Morphological** [Ins77, BBPS91]. **morphologies** [KSH+08]. **morphology** [SRD94]. **MOS** [BBHS84, Lud00]. **MOSFET** [Ano06b, AAC+06, EKTT90, Gae79, OKH+02]. **MOSFETs** [LBT99, LDSA02, WS75, RGL75, SFG+06]. **Motion** [BBT83, Hau67, Hen83, Her65, Mir60, RVV88, Bau72, BS71a, GYK99, Gre60, HAG+13, MHW95]. **motion-estimation** [GYK99]. **Motions** [ASV76, Oht95]. **Motor** [MR76b, BSSZ76, LRNS17]. **motorneuron** [DC73b]. **Motors** [Fre67]. **mounted** [Hei90]. **move** [BGS13]. **movement** [BSY+15, McN94]. **Movements** [Pic87, LRNS17, PAH+18]. **Moving** [ALL77, AAM+07, BGT74, LPA+15, Sti79, BM68]. **moving-coil** [BM68]. **MPEG** [AFFS98, AF99, BNW99, GYK99, MRG99, RT99, WRG99]. **MPEG-2** [AFFS98, AF99, BNW99, GYK99, MRG99, RT99, WRG99]. **MR** [Lan96]. **MRAM** [Ano06c, ATW06, GON+06, GP06a, MDG+06, Wor06]. **mu** [Bra72b]. **Much** [Goo58]. **Multi** [BT67, BW83, CW83, HSL+10, Kru84, Okt71, Ros66, Sak79, TYM+14, Wre83, ATL+88, BBMR19, CLP+13a, GWRS90, Irv93, KMM+16, LQRS04, Mon82b, NLP17, Okl03, RBB+02, SLC09, ST89]. **multi-adaptive** [LQRS04]. **multi-armed** [BBMR19]. **Multi-Chip** [CW83, GWRS90]. **multi-core** [SLC09]. **multi-delay** [NLP17]. **multi-factor** [CLP+13a]. **Multi-fluid** [Okt71]. **multi-gigahertz** [Okl03]. **Multi-Head** [Ros66]. **multi-image** [Mon82b]. **Multi-index** [HSL+10]. **Multi-Layer** [BW83, Wre83]. **multi-loop** [ST89]. **multi-node** [Irv93]. **Multi-period** [TYM+14]. **multi-purpose** [ATL+88]. **multi-site** [RBB+02]. **Multi-Stage** [BT67]. **multi-tenant** [KMM+16]. **Multi-Terminal**

[Sak79]. **Multi-Version** [Kru84]. **Multiband** [DG84]. **multibook** [BGW+04]. **multibooks** [WGS04]. **Multichannel** [WA79]. **multichip** [KPT+02, MKW+05, PGS+98, WKD98, YCB05]. **multicolumn** [Bil72]. **Multicommodity** [VJA07]. **multicompartment** [TMW+17]. **Multicomponent** [Bil70, WC69]. **Multiconductor** [Wee72]. **Multiconic** [DJ75]. **multicore** [BFH10, CBD+09, FNY+10, SSMGD10, SKS+11, TWX+10, WNW+10, ZCLS10]. **multicore-processor** [FNY+10]. **Multidimensional** [KM77, FAFL91, TG91]. **Multifaceted** [GSC12, HJW+16]. **Multifont** [RH75, KL63]. **Multilayer** [BB82, LDL84, Cha88, DN97, FLP90, GA88, RRB+01, TKK+92]. **multilayers** [Jon98, Par98, SN98, VWJK11]. **Multilevel** [CM80, Gec74, Kan74, Mer88, RT75, BSHM01]. **Multimedia** [DFS98, FT98, Gon99, SS15, BBD+98, DFaDNS98, Has98, MMWLN99, BBD+98]. **Multimode** [SA66, ABD+92]. **Multiobjective** [Agr01]. **multiparty** [BHH19]. **Multiple** [Ano66j, Bla65, Dah63, DLK84, DK67, DW58, Elm84, FLCB85, GFHW82, Hor57, Pat86, RK75, Sch80, Slo66, TW62, Tod78a, Tom67, WYTO04, Bra72a, DWW90, DSS+92, GA68, KBJ+18, LKY80, LD72, MN70, Oht95, Hei80]. **Multiple-Access** [Ano66j, Bla65, LKY80]. **Multiple-Curie-Point** [DK67]. **Multiple-Element** [DW58]. **multiple-input** [DWW90]. **Multiple-logical-channel** [WYTO04]. **Multiple-Nozzle** [DLK84]. **multiple-output** [MN70]. **Multiple-Technology** [Elm84]. **multiple-valued** [GA68]. **Multiple-Variable** [FLCB85]. **Multiplexing** [RTM65, Thr65, BNW99]. **Multiplication** [Ken61b, Meg62, RSS91, AGZ94b, ABG+95, Tol97]. **Multipliers** [VPS88, BH95]. **Multiply** [MS87, SN87, AEG+02]. **Multiply-Connected** [MS87, SN87]. **Multiprocessing** [KSW74, MSB+04]. **Multiprocessor** [FL75, KDH+05, LDSY91, LRH+02, MHI01, RSS91, SRL+11, SWB+91, SON+91, VLP+05]. **Multiprocessors** [CSZ86, BLM+92, FGT91]. **Multiprogrammed** [CDW75, Cho75]. **Multiprogramming** [And73, CFL73, Gha75b]. **Multipurpose** [Dun57b, DMN+59, EBD+95]. **Multiqueue** [Lei62, Lei61]. **Multiqueueing** [Sch62b]. **Multiscale** [DKA+05, PSP06, NNN+06]. **Multispectral** [Kan78, SM78, DBK82, NT72]. **Multistep** [Ode87, LO72]. **multithreaded** [ABF+10, BEKK00, CDD+10, CJB+15]. **Multithreading** [Ano05c, ABB+15, MMM+05]. **multivalued** [BP74]. **Multivariate** [Wat60a, BS72, OOL+12, YR91]. **multiwavelet** [FBHJ04]. **Muon** [Kel89]. **Muon-spin** [Kel89]. **Murphy** [Mei83]. **Mutually** [LF64]. **MVS** [ALS81, CHY92, SV92]. **MVS/ESA** [SV92]. **MXT** [AFP+01, SAPT01, TFR+01]. **mycotoxin** [NBF+16]. **myocardial** [LPPT86]. **myofilament** [HdTR06].

**n** [HC69, KO66, MG63b, BS69, BGK+80, EB99, KO67, Kog58b, Kog58a, MN67b, SS87b, VM79, Wei65, Bay69, LDSA02, MNP+69]. **N-Alkane** [VM79]. **n-Ge** [Bay69]. **n-InSb** [MNP+69]. **n-MOSFETs** [LDSA02]. **N-Queens** [SS87b]. **N-type** [MN67b]. **NACME** [Gar00]. **NAMD** [AHK+18, KHZ+08]. **name** [AFCB94]. **nanocrystal** [MSG+01]. **nanocrystals** [MSG+01]. **Nanolithography** [UBK+88, SS93]. **nanomagnetic** [Sun06]. **Nanoscale** [ZVW+11, HST06]. **Nanoscience** [TH11]. **Nanosecond**

[DPW60, DPW00, PSS67, WWLF67]. **Nanostructure** [CKK+88, HST06]. **nanostructures** [HJS98]. **nanowires** [SHCS05]. **NaOH** [PM72]. **narrative** [GCL+19]. **Narrow** [DKAC67, KM66, LC83]. **National** [Coh87]. **Natural** [BKU88, Hei76, Leh78, O'C89, Pet76, Pla76, SFT78, AKB+17, BCD+17, CGS61, KVP+20, KM20, MIL+18, TYSS19, WN92]. **Natural-Language** [BKU88]. **Nature** [BD62, MKP73, VMH+83, Eme89]. **Navy** [Com83]. **Nb** [HBL62, ZBL+72, ZBL+72]. **Nb-Zr** [HBL62]. **NChilada** [LQRS04]. **Nd** [TCCH98, YTF+11]. **Near** [DPR86, KG80, KO65a, Mee67, Pri60, Tau02]. **Near-Field** [DPR86]. **Near-Ideal** [KG80]. **Necessity** [Sch67]. **need** [Agn02, BGS13, BH11, VRL10]. **needles** [CCFB+12]. **needs** [KVP+20]. **Negative** [Bay69, CGHK77, ET70, Goo62, HA58, MNS69, PB69, Rut59, Rut64, SGL+97, SNM69, CASP91, Pai69]. **Negative-Resistance** [HA58, Rut59]. **negatives** [CP91, CAS+91, CASP91, Pen91]. **Nematic** [YL98, LJ92]. **neocortex** [DLJ+08]. **neonatal** [OOL+12]. **nested** [HS91]. **Net** [Chi60b, AKG+19]. **NetMessage** [AEH+04]. **NetMessage-protocol-based** [AEH+04]. **nets** [AKG+19, Mat98, PS86]. **Network** [Ahu79, BCH+16, CW77, Cve87b, HP84a, HS81a, Ho75a, HS81b, KP63, MHS62, Pal61, RK15, SL76, Sie63, SW83, Str81, Str83, Tid62, ABC+05, ABB+03, Ari69, BCE+07, CFS+19, DXZS13, FNY+10, HW72, HT69, JAC+19, LDJ+10, LSW13, LSZ+10, MYKK+17, Moo72, NQ20, OCB+90, ODA+08, PSP06, Rey69, SHCV19, SMS80, Sed67, SM71, VJA07, ZSY+13]. **network-attached** [ODA+08]. **network-centric** [BCE+07]. **network-optimized** [LDJ+10]. **Network-structured** [RK15]. **networked** [QGT13]. **Networking** [Whe88, BAB+18, DM03, DOJ+14, HSCG05]. **Networks** [Ahu80, Bra64, CHW75a, CHW75b, Cha67, Fra83, Fra87, HS85, MT77, MFT77, Moo60, RK75, Sau81, Alf89, ATC+15, BSRG17, Bra68, DFNNS17, EPP10, Gla97, HF91, Irv93, Ism00, Lam77a, Lam77b, MMWLN99, MM94, MDMN10, Pip87, RR69, SP17, SS82, SXW+13, ST89, SPS+06, SGS+20, VNT16, WP11, WT91, YCJ+17]. **Neumann** [AG72]. **Neural** [JAC+19, MYKK+17, AKG+19, DFNNS17, LGBV17, MM94, SP17, WT91]. **Neural-network-based** [MYKK+17]. **neurodegeneration** [PCW+17]. **neuroimaging** [PCW+17]. **Neuromorphic** [NLP17, FLB+19, LRNS17, MYKK+17]. **neuron** [KSH+08]. **neuronal** [TMW+17]. **neurons** [GSAP17]. **neurophysiology** [TR77]. **neuroprosthesis** [DBNK+17]. **neuropsychiatric** [CGH+17]. **neuroscience** [CK17b]. **neurosynaptic** [ATC+15]. **neutron** [BEH+89, CP72, EHK+89, HHB+89]. **neutron-scattering** [BEH+89, EHK+89]. **newspaper** [ZW17]. **NEXAFS** [CHL+11]. **Next** [AEG+20, ACD+15, DEG+01, EK08, FW08, JGD+08, KAB+05, OW00, SFH+16, WD94]. **Next-generation** [AEG+20, DEG+01, JGD+08, KAB+05]. **Ni** [MMT60, Mid62, CW78, Dem78, LR65a, MFS+11, Mid65]. **Ni-Fe** [MMT60, Mid62]. **Ni/Fe** [CW78]. **Nicholas** [Don00]. **Nickel** [AC63, BB60, Fre62, NBRB70, PBF60, AT00]. **nickel-base** [AT00]. **Nickel-Iron** [BB60, PBF60]. **Nicolson** [Fla65]. **NiFe** [Flu67]. **Nigeria** [TBH+17]. **night** [ESS+20]. **nighttime** [ESS+20]. **NIL** [SS87a]. **nineties** [Pul03]. **Niobium** [BMWL80]. **NiS** [HC70]. **nitridation** [Hes99]. **Nitride** [DA77]. **Nitrided** [HBB99, GLG+99, Luc99]. **nitrogen** [SHWK+90]. **nitrogenous** [MFPJ71]. **nitrones** [YHA71]. **Nitrous**

[EB99]. **NLP** [KMC+11]. **nm** [AWHK97, BRB+01, BFG+06, BWB+18, FAD+07, FRS+18, FCE+15, Ito01, IFB+11, KACS95, LBB+13, RFK+97, SS93, SRH+18, WBS+18, WNV+02]. **NMP** [SGT78]. **NMR** [CSS83, KIF+89, Lye77, LY83]. **No** [Car60, ACG+87]. **Noble** [VGC79]. **Nodal** [Ho75a]. **Node** [SL76, BWB+18, DRSM15, FRE+08, Irv93, WNV+02]. **node-link** [DRSM15]. **Noise** [Ano66j, Bla63, Bla65, CCM65, DG84, Eli58, Fal70, Gar88, PL83, PH65, Pri59, SA66, SW74, TK69, VSF65, DTTK95, EÖH10, PAZ72, Tur69]. **noise-predictive** [EÖH10]. **Noiseless** [Chi60a, Fra82]. **noisy** [Gri04]. **Nominal** [Bau63]. **Nominally** [IM57]. **Non** [IS83b, LS76b, MT84, Roe66, Sch64, Sta67, BTWY92, CHdTG92, IS83a]. **Non-Bandlimited** [Sta67]. **Non-ideal** [Roe66]. **Non-Impact** [MT84]. **Non-Markovian** [IS83b, IS83a]. **non-normal** [BTWY92, CHdTG92]. **Non-Ohmic** [Sch64]. **Non-Stationary** [LS76b]. **nonbinary** [Dan82]. **Noncoded** [CMP87]. **Nondegenerate** [Gar64, Lew73]. **Nondestructive** [AH79, KJMS67, PC64]. **Nondestructive-Read** [KJMS67]. **Nonexistence** [CLW79]. **noninvasive** [Hei90]. **Nonlinear** [Bre72, ELMR77, GM63, Hau67, Key63, LC82, Mul67, RP67, BS71b, Bra72a, Can73, DHMP94, Dur70, Fro71, GM72, GK64, HA00, Lan60, Lee07, Mir61, Peh69, Whi72]. **Nonlinearity** [ON60]. **Nonmetallic** [HSM84]. **nonohmic** [Vur70]. **Nonparabolic** [PB69]. **nonrigid** [RG09]. **nonsingular** [RW59]. **Nonsupervised** [NT72]. **Nonsymmetric** [Hau67]. **Nonuniform** [BKM80b, Cal81, van88]. **nonvacuum** [ZSZ96]. **nonvolatile** [NFS+17]. **Nonzero** [Pet77]. **Normal** [Bei74, Dui59, Erd59, Gef88, Lit62, Mei62, BTWY92, CHdTG92, CSH+89]. **Normalization** [Cas70]. **normally** [EC71]. **northeastern** [BJW72]. **Note** [Ano01b, Ano05b, BD62, Fan64, KKK61, Lei62, MG63a, Par60, Wyn64, CW58]. **Notes** [Ben88, Ben00, Jam89, Swa61]. **Noun** [SFT78]. **Noun-Phrase** [SFT78]. **Novel** [HJ88, Hov78, KCML13, KN81, Man85, NDM+04]. **Nozzle** [DLK84]. **Nozzles** [Lev77, SBT87]. **NP** [Koz81a, Koz81b]. **NP-Complete** [Koz81a, Koz81b]. **NPML** [EÖH10]. **ns** [MMR89]. **nsec** [ABPS66]. **NStrace** [SLC+97]. **Nuclear** [Mas62, Meh89, Tan96, ZBL+72, Bev69, BKM+69, FL69, Mol69, Yan71]. **NUMA** [KFB+97]. **Number** [LHW81, Nus77, Pri57b, AEG+02, BW81b, DB01, Lan66, LBB+13, Nus76a]. **Numbers** [BD96, Cli90, SW90, Hol78, Kum98]. **Numeral** [CK63]. **numerals** [GMNE63]. **Numeric** [SCRV78]. **Numerical** [Bei74, BFT79, BS72, CPL+74, DB76, DBC+06, Dub83, Fro71, Fro84, GS87, LS78, LLF+92, Lev66, LR65b, NB61a, RE71, San83a, SBT87, Shi73, Shi72, SM63, Sug59, AGZ94a, BS71b, BGL66, FW67, KS01, MY65, SRCW97, Whi72, Mic59]. **numerically** [AHH+91, BBPS91, GR92].

**O** [CSE66, KLBP64, MKP73, WTP64, ZBL+72, ABB+12a, ABB+15, BAB+18, BBC+12a, BPL+89, BH89, Bra72b, Bru78, CDM89, CBB+04, CCD+09, CAC+13, CCC+15, CSH+89, CHJ+18, EB99, GSG+90, GMS05, Gre97, GE02, GCS+12, HBB+07, HBL+99, HS04, HSL+05, MRH89, OHK+07, SHR+09, SBC+02, Var89, WMK+07, WYTO04, vHv+89]. **Obeying** [Tof88]. **Object** [Bea74, SK80, Alf89, MS89, NFI+08]. **object-based** [NFI+08]. **object-oriented** [Alf89]. **objectives** [And10]. **Objects** [Gro76, Lom76, EKR87]. **oblivious** [PVDF95]. **Observation** [Ber76b, BA62, KP63, MHW95, PW68]. **observational** [SXYP12]. **Observations**

[AAB+10, Jon65, MHS62, She59b, ESS+20, NT72]. **Observed** [SL66]. **obtain** [DN97]. **Obtaining** [Ham78, HRW69]. **occupational** [BC00]. **OCR** [CJ83, RH75]. **Odd** [Hsi70]. **Odd-Weight-Column** [Hsi70]. **Off** [HCS80, MW80a, MSW69, DTTK95]. **Off-Axis** [MSW69]. **off-chip** [DTTK95]. **offering** [BDN+02]. **Officer** [Pea09]. **offloading** [TMT+20]. **Ohmic** [Sch64]. **Oil** [ET86]. **Omega** [Cve87b]. **On-Board** [CC76b]. **On-Chip** [Kua95, CU98, SP90, BAB+13, DKS+95, ESHM95, LFR05, NFS+17]. **On-demand** [Elg11]. **On-Line** [BF77, Dah67, GHW70, Sve78, Tod78b, BP74, MBC+96, RS94, Rei69, WC69, YG81]. **On-The-Fly** [Pat86]. **One** [Bog79, BH79, CHS82, Erd88, Gri90, LM80, Pim76, RWC80, She59a, WA15, CIE+03, FRE+08, Gam72, Mar71, MN03, SGY+98]. **One-And** [BH79]. **One-Device** [RWC80]. **One-Dimensional** [Bog79, CHS82, Erd88, Pim76, Gam72, Mar71, MN03]. **one-megapixel** [SGY+98]. **One-Step** [LM80]. **one-terabyte** [CIE+03]. **One-Way** [She59a]. **Online** [RP14, SS20, BBMR19, Koe18, MOG+19]. **Only** [FMP61, Has66, JT66, MPST66, TK64]. **onto** [DKA+05]. **Ontology** [Pon17, FPST14, HHH04]. **Ontology-driven** [Pon17]. **Open** [AHM+07, BHP17, HTH+09, LD74, SP14, ZST+07, ADG+92b, BBE+20, CBD+09, GHL+04, GDA14, GWRS90, LH03, Mat03, RBL+09, van73b]. **open-queuing** [Mat03]. **open-source** [BBE+20, LH03]. **Open-standard** [AHM+07]. **Open-Tube** [LD74]. **open/short** [GWRS90]. **OpenCAPI** [SSI+18]. **OpenCL** [CIJ+10]. **Opening** [KM66]. **OpenMP** [EO13, EBB+20, TMT+20]. **opens** [SSI+18]. **OpenStack** [CJJ+16, ACFS16]. **Operated** [BMC86, SW67, Col69b, SHWK+90]. **Operating** [BCR91, Gau77b, HS82, MMS05, MPD86, PS09, ALS81, Irv93, JDBP10, MMR89, MAA+05, Cal70]. **Operation** [Gar57, HFDN63, LCH74, Mag73, Mar64c, PR65, BP92, HD73, HSL+10, SBD+10, ZG71]. **Operational** [Col69a, MP67, BWT+14, DJK14, VOW+12, YMR14]. **Operations** [CT76, DR08, LH03, PR59a, Win62, BCE+07, EGH+86, Sur69]. **Operator** [Ben59]. **Operators** [TL70, FBHJ04, GM73]. **Opportunities** [JAC+19, SFG+06, HvKI+09, MDZH+02, MLM+19, PPG+01]. **OPRO** [SLK+16]. **Optic** [Beb62, ABD+92, DSM+99, GLOS92, KACS95, Pat72, Wie90]. **Optical** [BDWZ83, Cha73b, CS97, DB79, DDMS92, Dim70, DPR86, EHHP67, FLR77, HD69, HCS80, MA96, OPR+78, PFS+70, SH63, SB62, SS61, SSTF77, WSW83, WR83, WB70, AAH68, AFF96, Bar68, BIK+05, Bro72, Bru97, DH69, DSRC98, GM69, HHF69, Hei90, Hen68, PK03, PR71, SGL+97, SRCW97, TJHK03]. **Optical-Digital** [WSW83]. **Optics** [LC82, MPS77, RSSS82, Zwe65]. **Optimal** [BJ67, Bud67, Chi60a, Her75, Hsi70, Kan74, LF77, Lew80, Low74, Mil83, MP88a, PH74, Rob67, BM68, EBD+95, FXL01, GHH+17, GB71, HSL+10, MD12a]. **Optimization** [BBH82, BDH83, Bou97, BMS80, Bra80, Cho74, Hal76, How82, Jur78, KLC84, LH03, MS75, PSW+07, SK80, SKK14, SMD80, Agr01, AAS+14, BCC+12, BKN10, BBH+95, BSJ+13, BGL07, BDHH+09, BR09b, CDSW06, Cor93, DFNNS17, DXZS13, DBNK+17, FRS+18, Gol69, GCFW07, HHSR96, KBA07, KKL+14, KSB07, Mey00b, MS07, NRA+07, PK18, Sel07, SC20, SS20, TYM+14, TGL+12, TMT+20, ZFG+11, ZFD+15, Pul07]. **optimizations** [HS04]. **Optimized** [Bea74, MBF+13, BEE+02, EBB+20, FCE+15, LDJ+10, MDN+18, Mye72, SDS+18, Wei91]. **Optimizing** [Ada84, BGH+05, FHSD06, GKT17, LB07].

**Optimum** [vdP72, van72, van73a, van73b]. **optoelectronic** [HVK+90]. **Orbital** [BBS78]. **Orbiter** [Soh76]. **orchestration** [AAS+14, HBT+16, NBM+19]. **Order** [El 74, Koz81a, Pet77, SM62, Swa57, Tri58, van89, Agi74, BMK+05, DBK82, Koz81b, Kri82, Sar97]. **Ordered** [HC70, JM64, DH03]. **Ordering** [Kus70, PFS+70, Sie70, Gup97]. **orders** [CIE+03]. **ordinal** [HE10]. **ordinary** [FW67]. **Organic** [BH79, DM01, GFHW82, Lew78b, Mer78, MCK01, SS01, SL66, SL67, SLHM67, ARM+01, CA01, DVM81, DG93, HP01, RRB+01, Sch71]. **Organic-inorganic** [MCK01]. **Organization** [BMK+05, LH57, RR83, WY76, BBP72, Cor69, FR01, GA68, Gro90, Jee58, LH00]. **organizational** [DSZ+12]. **organizations** [NQ20, VRL10]. **Orientation** [BTW62, Cam57, RSSS82, DDMS92, WTS+11]. **Oriented** [FE75, LP75, Lom80, SGT78, Alf89, GGH+13, Pes71, RD12]. **Origin** [CGHK77, Kuh88, Cre81]. **original** [Lan96]. **Originating** [Dah63]. **Origins** [MS05, Mat95]. **ORNL** [LSS+20]. **Orthogonal** [HBC70, OG87]. **Orthotropic** [BBT79]. **OSA** [BEE+02]. **OSA-Express** [BEE+02]. **Oscillations** [BGS64, FP69, Gef88, Gun66a, SH69, WS64]. **Oscillator** [Ros59, Rut59, Las61, MWW+07]. **Oscillators** [Net60]. **Oscillatory** [AW98]. **Oscilloscope** [GFS71]. **OSI** [FP83]. **Other** [Ano57k, Ano57l, Ano57m, Ano57n, Ano58j, Ano58k, Ano58l, Ano58m, Ano59f, Ano59g, Ano59h, Ano59i, Ano60i, Ano60j, Ano60k, Ano60l, Ano61f, Ano61g, Ano61h, Ano61i, Ano62f, Ano62g, Ano62h, Ano63f, Ano63g, Ano63h, Ano63i, Ano66s, Ano66t, Ano66u, Ano66v, Ano66w, Ano66x, Ano67w, Ano67x, Ano67y, Ano67z, Ano67v, Ano67-27, CPD+09, NB61a, NB61b, WR83, Ano94r, Ano94s, Ano94o, Ano94p, Ano94q, Ano95i, Ano95j, Ano95k, LZZ+16]. **our** [FvGGM90]. **out-of-order** [BMK+05]. **outages** [CHMW07, MVI+07]. **outlook** [GGK+13]. **Output** [BHWW77, HW81, Sve78, TW62, BSK+08, HB73, HBL+02, MN70]. **ovary** [NBF+00]. **Oven** [GMT57a, GMT57b]. **Overflow** [SL76]. **overhead** [EO13, Fla91, HS91, SKSP06]. **Overlap** [Bra72b]. **overlapped** [AGZ94b]. **overlapping** [CN94]. **Overlay** [Rot80, BTWY92, CL86, MMWLN99]. **Overlying** [Lan85]. **Overview** [Ame80, BCC+05, Bro80, BKS+08, CAC+95, GBC+05, GCS+12, IBM08, Mat80, SPP+05, YS99, BGM90, CdLS92, DBC+05, FBG12, GR92, Oht95, PMLA88, Pen91, SAB+02, Sri96, TFJ+96, ZL97]. **Own** [CLP+13b, JKB+13]. **Oxidant** [LD74]. **Oxidation** [DJ70, KEJ87, Pli66, Hes99, MFS+11]. **Oxide** [BKM80a, Gar86, OG80, RF78, EB99, GLG+99, KMB+08, Lud00, RG90, SF93, VWJK11]. **Oxides** [Fre70, Hon70, RM70, BPL+89, HBC+99, HBB99, KIF+89, LBT99]. **Oxygen** [HHB+89, MPCF82, Sha58a]. **oxynitride** [EB99]. **Oyster** [KW83].

**P** [Ber76a, IBM08, MB75, Wei65, Wie76, Lye77, PK61, BS69, KO67, KLBP64, Wei65]. **P-N** [BS69, KO67]. **PACE** [ET69]. **Package** [BB82, CHS82, Dav82, HCBA82, JH80, KMH82, BCK+05, CS84, CBC+18, KAB+05, KRT98, Pai72, CMS85]. **packages** [PGS+98, RBWH93, Rub90, SJMBK08]. **Packaging** [Att92, Bro80, BHWZ63, CBC+05, CHT+13, HW87, KLC84, KT84, PBC+04, SF81, STCR84, TBB+09, Wee79, WHK+09, AKRS04, Ano01c, BHH+15, BBF+05, CAC+05, DHK00, HPW+02, HDW+07, KDT18, KTD20, LFR05, PK88, SAB+02, SBC+12, TBG+15, VLKW14, WBH+04, YT16]. **Packet** [Str81]. **Packets** [MFT77]. **Packing** [KM77]. **Packs** [BT78]. **Padé** [Ris72]. **Page**

[CFL73, AAH68, Ano58e, Bar68, Hat72, Hen68, KGT88, LS73, Bar75]. **page-reference** [KGT88]. **Paged** [FLW78]. **pages** [TBS09]. **Paging** [Bar73, BP74, TKG89, Tue76]. **Pair** [Cor84, HL83]. **palette** [KLMV19]. **palmitate** [VBM71]. **Panda** [CMP87]. **Panel** [Ham78, Lan74, LS78, LCH74, PW78, RBC78, Wre83, Wym57]. **Panel-Drilling** [Wre83]. **Panels** [AS78, BdM+78, OPR+78, O'H78, RP78]. **Paper** [Ast67b, Bay78, BS84b, CD78, Sve78, Lax67]. **Papers** [Ano57k, Ano57l, Ano57m, Ano57n, Ano57v, Ano57u, Ano58j, Ano58k, Ano58l, Ano58m, Ano59f, Ano59g, Ano59h, Ano59i, Ano60i, Ano60j, Ano60k, Ano60l, Ano61f, Ano61g, Ano61h, Ano61i, Ano62f, Ano62g, Ano62h, Ano63f, Ano63g, Ano63h, Ano63i, Ano64k, Ano64l, Ano64m, Ano64n, Ano65k, Ano65l, Ano65m, Ano65n, Ano65o, Ano66s, Ano66t, Ano66u, Ano66v, Ano66w, Ano66x, Ano67t, Ano67w, Ano67x, Ano67y, Ano67z, Ano67v, Ano67-27, Ano01c, Bos97, Buc99a, CP99, Gri92, Hau96, Kle91, Kuo99, McG92, Tro00b, Ano86b, Ano92a, Ano92h, Ano01n, GM60, Mar62, Par98]. **Paprs** [Ano67g]. **para** [HKvG+11]. **para-sexiphenyl** [HKvG+11]. **Parabolic** [Pli66, Wid67]. **paradigm** [RCFN+08]. **Parallel** [ABC+99b, ARG00, CP72, CCC+79, Cha79, CD85, Cve87a, CTT66, DKN87, DSM+99, DGL+97, DEH+12, ECD+99, ET86, GPE99, Kle91, Kog74, Mir69, RGP+97, RKW99, RHM+99, SSM97, SCC+97, SWC+97, SG99, SKE+18, VPS88, WMH+97, AGZ94b, ABG+95, BSHM01, BHH03, BCR91, CBV08, CFK+91, CN94, CIJ+10, CNC+08, EG00, Fla91, JZ91, MKJM93, PMW06, RQBW08, Sar91a, SSW91, SNP06, STW+08, SZ91, VBC+08, ZEH+08, ABB+91, DP13]. **parallelism** [AGZ94a, HS91, LDSY91]. **parallelizable** [SG94b]. **parallelization** [BBK+08]. **parallelized** [CJ91]. **Paramagnetic** [SG64, Tit63]. **Parameter** [FL59, LHW81, Rut59, TLR85, Twa77, EKTT90, GFS71, Hos94, Sta73]. **Parameterization** [ZHP+18]. **Parameters** [CCD57, GOJN77, Lei62, WF87, DBNK+17, NG17]. **Parametric** [CHW75b, Okt69, ZZ69, Lan60]. **Parity** [Pat85]. **Parkinson** [PAH+18]. **Parrinello** [BBK+08]. **Parsers** [Mou86]. **parsing** [MMB12]. **Part** [Hun59, KKS02, BLB+63, Dun57b, DMN+59, Fri58b, FDN59, Kin61, LDDB63, Swa59, SS59b]. **Partial** [BLR84, BRR79, CHL+11, Die62, Her66, CFL67, Dan66, EC71, Ger73, KT70]. **partial-response** [KT70]. **Partial-Switching** [Die62]. **Partially** [SMD80, DH03]. **Particle** [BTW62, Sta87, Tan96, ETWO08, GRH+08, HRC+08]. **Particle-induced** [Tan96]. **Particles** [CHBH85, Sta86]. **Partition** [SKLC20, AAM+07, SGK04]. **partitionable** [SWB+91]. **Partitioned** [WF83]. **Partitioned-Block** [WF83]. **Partitioning** [AK82, DH73, Gha75a, Gha75b, HMW74, Luk74, Luk75, PS80, Gup97, Mic72, Sar91a]. **Partner** [BDMN14]. **Partner-marketing** [BDMN14]. **pass** [MRG99, WRG99]. **Passage** [SS82]. **Passing** [BS85, AAC+05, LDSY91]. **Passivated** [CL64, IBC64, Leh64, TY64]. **passivating** [PM72]. **Passivation** [KLBP64]. **Passive** [Sie63, SSK+16]. **past** [KLRS96, SLK+97]. **pastes** [FGMPK05]. **Patch** [DB76]. **patent** [MIL+18]. **Patents** [Ano57o, Ano57p, Ano57q, Ano57r, Ano57s, Ano57t, Ano58n, Ano58o, Ano58p, Ano58q, Ano59j, Ano59k, Ano59l, Ano59m, Ano60m, Ano60n, Ano60o, Ano60p, Ano61j, Ano61k, Ano61l, Ano61m, Ano62i, Ano62j, Ano62k, Ano63j, Ano63k, Ano63l, Ano63m, Ano66n, Ano66m, Ano66o, Ano66p, Ano66q, Ano66r, Ano67n, Ano67o, Ano67p, Ano67q, Ano67r, Ano67s, Ano94c, Ano94d, Ano94e, Ano94f, Ano94g, Ano95d, Ano95e, Ano95f, Ano95b, Ano95c, Ano96a,

Ano96b, Ano96c, Ano96d, Ano96e, Ano96f, Ano97b, Ano97c, Ano97d, Ano97e, Ano98b, Ano98c, Ano98d, Ano98e, Ano98f, Ano99c, Ano99b, Ano99d, Ano99e, Ano00e, Ano00b, Ano00c, Ano00d, Ano01d, Ano01e, Ano01g, Ano01h, Ano01f, Ano64f, Ano64g, Ano64h, Ano64i, Ano64j, Ano65f, Ano65g, Ano65h]. **patents** [Ano65i, Ano65j, Ano86a, Ano90a, Ano90b, Ano92b, Ano92c, Ano92d, Ano93d, Ano94h, Ano94i]. **Path** [CCE+88, Col62, Fra87, GLP76, GS74, HJK+01, Mat62b, Pri58c, Sve78, GCL+19, vK62]. **Paths** [MS60b, HT69, Rai69]. **Pathway** [SPS+06]. **Pathways** [RSS+15]. **patient** [PMS+08, Sha12]. **patient-centric** [Sha12]. **Pattern** [Bon62, Bra80, DB69, EL80, EL83, KR87, KGF77, MD65, PS80, TC84, AL76, FRPG01, GK64]. **pattern-based** [FRPG01]. **Pattern-Matching** [KR87]. **patterned** [Duk93, SGS+09]. **patterning** [MBB+01, PSP06]. **Patterns** [FGS75, Ham78, Sta84a, Bar82, CR15, FSG+73, Hat72, RWB+10, RC17, WLEF89]. **Pb** [BKM80a, BJMO80, HHA93, Hor98]. **Pb-alloy** [BKM80a, BJMO80]. **PC** [Shi85, CFK+91]. **PC-Based** [Shi85]. **PCI** [GCS+12, SNA02]. **PCIXCC** [AV04]. **PCOS** [Cal70]. **Pd** [Dem78, Kah71]. **PdO** [Kah71]. **PdO/Ag** [Kah71]. **PdO/Ag-Pd** [Kah71]. **PdSn** [OHWR88]. **Peak** [BTW62]. **Peculiar** [Mid65]. **pedestal** [GAOD71, SLYR72, ZCK71]. **pedestrian** [BMS+17, Tof04]. **pedestrian-centered** [BMS+17]. **PEEM** [CHL+11, HDK+11, YTF+11]. **peer** [RK15, TBH+17]. **Penalty** [Lin84, MHI01]. **Penalty-Function-Driven** [Lin84]. **PENGUIN** [dTGHC92]. **Penrose** [HM89]. **people** [CGM+15a, DDDKW12]. **Perception** [Ano59n, SMSC14]. **perceptions** [AWK20]. **Perceptual** [San83b]. **PERCS** [RAG11]. **Percus** [HBW70]. **Performance** [ABPS66, Ano06b, Arc93, BCD+17, Bar75, BS81, BGR82, BDMW81, BB82, BAH82, Bos97, BBI94, BBKW86, CDS+86, CDSW06, CDW75, CW77, Cve87a, DHSC64, DAS+94, DS70, Dur70, Esa62, FCE+15, GCPVG85, Gia66, GA84, GMS+12, HS81a, HS61, HCBA82, HS82, KFB+97, Kam98, KW76, KACS95, OK82, Pat73, RS79, RTM65, Sch81, SGC+87, WHC+18, AFP+01, AGZ94a, AGZ94b, AGZ94c, ADH+00a, AAB+10, AAC+06, BLM+92, BCC+12, BEM+92, BBE+20, BBH+95, BFG+06, BSJ+13, BDHH+09, BBS+03, Bro72, BGL+92, CPvR00, CH06, CBB+05, CRDI07, DHSC00, DDA+93, DKS+95, ESHM95, EB91, EFR+05, EBD+95, EG00, Emm97, EK08, EWS+13, FKK+03, FHSD06, FNY+10, FAJ+94, GZE+05, GOVC71, GAOD71, GW18, GJ00, Gus03, Hat72, HS04, ITS+15, Irv91, IS20, IFB+11, JL99, JWS+09, KBK+97, KPT+02, Kum92, KEL+00]. **performance** [LR97, Luc99, MCAW95, MIL+18, MSW+05, Mat89, Mat03, MWL+14, MPP+15, MZS+03, Ono93, PV93, RES+15, RAG11, RKW99, RHM+99, Rub90, SHWK+90, SGS+96, SBP+03, SWC+95, SC20, SPR+95, SWC+97, SV91, SLJ+15, SHL+20, TWX+10, TW69, Tol97, TFL+98, TKK+92, VLB+09, WCNSH94, WBS+18, WKD98, WNW+10, YSH12, ZCLS10]. **Performance-optimized** [FCE+15]. **Performances** [MW79]. **period** [TYM+14]. **Periodic** [LC80, Mil83, Mir61, Bau72, CPvR00]. **Permalloy** [Ahn66, DKAC67, GM63, KC66b]. **Permanent** [BH82, JT66, YTF+11]. **permission** [SBG+13]. **Permissive** [GW57a, GW57b]. **Permissive-Make** [GW57a, GW57b]. **Permits** [Lew83]. **Permutation** [BF77, BCH84]. **Permuting** [CLW80]. **Perot** [Fan64]. **perovskite** [GSG+90]. **perovskite-type** [GSG+90]. **perovskites** [SKEG+98]. **perpendicular** [Sun06]. **Persistent** [CGR88, Gar57].

**Persistent-Supercurrent** [Gar57]. **person** [CPCC18]. **person-generated** [CPCC18]. **Personal** [GBS+87, ABD+14, BC18, Shi85]. **personalized** [BEJ+14, RSS+15]. **Perspective** [Har81, AG06, ACM01, Bra69, CNG09, CDM92, DDZ+07, GBK+19, SG99, Tan96, WCT06]. **perspectives** [MD12a]. **PERT** [Nad79, KC66a]. **Perturbation** [Bog79, Par60]. **pervasive** [JSM+18, WPL+12]. **Petabytes** [WGF+06]. **petaflops** [GBW+09, LQRS04]. **petascale** [PLK09]. **Petri** [PS86]. **Pg** [MHI98, SW98]. **pH** [DR93, JK93]. **Pharmit** [Koe18]. **Phase** [BF63, BBG60, CJ78b, CDH64, DG84, Dui59, GS70, GBC65, Hop61, Kov59, MP81, RBB+08, SJK70, Sha58a, Hun71, LG88, Nob95a, Ros00, Tis90, Woo04, YL98]. **Phase-change** [RBB+08]. **Phase-Contrast** [Kov59]. **Phase-Hologram** [SJK70]. **Phase-Reversal** [CDH64]. **Phased** [RBK+08, LGBV17]. **Phaser** [RBK+08]. **Phases** [Pan78]. **Phenomena** [BT84, KH88, LeB62, MNP+69, RP67, SBdF64, Tro80, MNS69, SNM69]. **Phenomenological** [O'H78]. **philanthropic** [LHS+17]. **philanthropy** [CCE+20]. **philosophical** [GHN04]. **Philosophy** [AST67a]. **phonological** [MC87]. **Phonon** [YWWK64]. **Phosphorus** [JD66, JD67, MFPJ71]. **Phosphorus-Diffusion** [JD66]. **phosphorus-impurity** [MFPJ71]. **Photo** [EHHP67, MC68, Gri69, MS89, OCT68]. **Photo-** [MC68]. **photo-digital** [Gri69, OCT68]. **Photo-Optical** [EHHP67]. **photo-polymer** [MS89]. **photoablation** [VDP94]. **Photochemical** [GFHW82, PL79, VM79]. **Photochemistry** [BH79]. **Photoconducting** [Boe69]. **Photoconduction** [Cas71]. **photoconductive** [SG71]. **photoconductor** [Sch71]. **Photocurrents** [DA77]. **Photodecomposition** [Her66]. **photodetector** [KACS95]. **Photoelectric** [AC63]. **Photoelectrochemical** [Koh98]. **Photoelectron** [RF78, KWT+11, MPHC90]. **Photoemission** [Bru78, DV74, CBBS90, RG90]. **Photographic** [BT67, Fal70, ZG65]. **Photographs** [Har63]. **Photography** [BLLS79, MG62]. **Photoinduced** [GDR70]. **Photolithographic** [Sta84a]. **Photolithography** [Rot74, ATW97, Lin76]. **Photon** [BH79, Gar64, Loy79, MNR86]. **Photoproducts** [Her66]. **Photoresist** [DS77, Mid70b, SFD77, RKL88a]. **Photoresists** [AWHK97, PL79, SGL+97]. **photothermal** [vS98]. **Photovoltages** [Swa61]. **Photovoltaic** [Lew78b, Mer78]. **Phrase** [SFT78]. **Phthalocyanine** [SLLP64, SL66]. **Physical** [BWB+20, Cor82, DHK+92, MM82, PK88, Pri58c, Swa60, AEZ84, AAM+07, BBD+02, BAB+07, BHD+05, HHSW01, SGK04, WKP+02, WBS+18, CP91]. **physicist** [Tan96]. **Physics** [CD85, Fri69, KN81, Kuh88, Bev69, CFL67, HST06, Mol69, Tan96]. **Physiome** [NNN+06]. **PI** [Shi85, Kau81]. **Pi-Donor** [Kau81]. **Picosecond** [CBBS90, Hei90, MPHC90, TKV00, RHC73, WSBL90]. **Picture** [Sto91]. **Pictures** [Kan78]. **Picturing** [Pic91, Woo04]. **piece** [WS72]. **Piecewise** [RR87]. **Piecewise-Circular** [RR87]. **Piezo** [JJ64]. **Piezo-Hall** [JJ64]. **Piezo-Resistance** [JJ64]. **Piezoelectric** [BBT83, Vie86]. **pilot** [ATW97]. **Pins** [HW87, PW83]. **Pioneer** [WM92]. **pipe** [TMS98]. **pipelined** [EV93]. **pipelines** [ZS03]. **pipelining** [KZP03]. **piston** [GZM92, Gre60]. **pitch** [KAB+05]. **Pivoted** [SM63, BHHO59]. **pixel** [SS00]. **PL8** [GHL+04]. **PLA** [Sch80]. **Placement** [DKN87, HY84, Twa77, HHSR96, SKLC20]. **Placements** [Don81]. **Planar** [AA71, CL64, KO65a, KO66, KO69b, vM66, ABK89, BGO03, SAK70, You90]. **planarization** [GPL+92, WDA05]. **Planck**

[HJ88]. **Plane** [BC65, Blu79b, SM63]. **Planes** [BBC+64]. **Planet** [Pal14, CRHPP09, Jen10, MVCW10, MI10]. **planned** [CHMW07]. **planner** [SG94b]. **planners** [GBJ+08]. **Planning** [Buc62, Tay79, ABD+14, GCFW07, JWW+11, KRTN+12, LB07, LSS14, PKXK07, SGS+96, Str62]. **plans** [HRS07]. **Plant** [MW82, HHM70]. **Plasma** [AS78, AHW+99, CK79, CNS+99, EM94, Fon99, Gri99, Hes99, KOT99, Kuo99, Luc99, MM64, OR92, RS69, BBH82, GMP90, Ham99, MMJ69, Ngu99, ODK+99, VDP94]. **Plasma-assisted** [CNS+99, Hes99, GMP90]. **Plasma-based** [OR92]. **Plasma-deposited** [Gri99]. **Plasma-etching** [AHW+99]. **plasmas** [ETWO08]. **Plasmons** [Mor79]. **Plastic** [DH61, CF72, Pai72]. **plastic-encapsulated** [Pai72]. **Plate** [CCC+79, Cha79, CASP91, DKRS07]. **plates** [CP91, CAS+91, CASP91, MKJM93, Pen91]. **Platform** [MBB+18, ZSY+13, BBE+13, CGM+15a, CHM+16, DGH+14, HKA+13, HSS+10, IBP+05, IJV19, KAA+18, LRV+09, PMS+17, RRMD17, SFH+16, TBB+09, WHC+18, YSH12]. **platforms** [GDA14, HRZ14, KdAC+15, ZCLS10]. **Plating** [BLR84, BRA84, HSM84, vAR82, GB93, JK93, VBDA05, WKD98]. **Playback** [Fan61]. **playfulness** [CR15]. **Playing** [NSS58]. **PLL** [VMG99]. **plot** [PS91]. **Plotter** [Kro58]. **Pneumatic** [Voi65]. **pnp** [Gil79]. **PNPN** [KK59]. **poaching** [FNS+17]. **Point** [ABC+99b, BD96, Cli90, DK67, Kar74, LC80, RS67, SW90, AEGP67, CBB+05, DTH92, DXZS13, DDZ+07, GWS+04, HFH94, HM90, JO96, MHR90, RS66, SSM97, SK99, SKC09, SG94a]. **Point-Matching** [LC80]. **Point-To-Point** [Kar74]. **Points** [MLGD84, McA83]. **Poisson** [BSHM01]. **Polarimetric** [Beb62]. **Polarity** [Cor84]. **Polarization** [Cha79, KH75]. **Polarized** [BBT83, Le 62, Mar61, All00]. **polarizing** [TMS98]. **Polarographic** [Hor98]. **Polarons** [CCE+88]. **policies** [BBC+09]. **Policy** [Kan74, KKB+09a, Pea09, EWBR09, HHC+18, NBM+19]. **Polishing** [GBC65]. **pollution** [CXZ+17]. **Poly** [Blu79a, GOJN77, Hir77]. **Polycrystalline** [BV78, Cha69]. **Polydisperse** [SH63]. **Polygonal** [MS87, SN87]. **polygons** [MN90]. **polyhedra** [MN90]. **Polyhedron** [AW76]. **Polyimide** [GS84, DN97, KFSZ92, LCL+98, RKL88b, SRD94]. **Polymer** [BRB+07, BBT79, GSVE83, Gre68, RSSS82, TO77, EM94, HSH+88, KJSG+88, MS89]. **Polymeric** [BS77, SSTF77, LG88]. **Polymers** [AGLM85, BMW83, BP84, CSS83, GFHW82, HG83, Kau81, LY83, SC81, Ang01, Bro94, Ito01, LV94]. **Polymorphism** [VBM71]. **Polynomial** [FC63, LR65b, Rog66, Dor62, HA00, Kri82, NQ78, Sur69]. **Polynomials** [Meg63b, Meg63a]. **Polypyrrole** [DH83, DVM81]. **polySi** [GNF06]. **Polysilicon** [GS80, RWC80, SGC+87, LBT99]. **pooling** [GSAB93]. **Population** [Dum63, BISN+12, Can73, Lam77b]. **Porphyrin** [VM79]. **portability** [BBE+20, GW18]. **Portable** [ZSZ96]. **portal** [Tag09]. **portfolio** [BKN10, VRL10]. **portfolios** [GRS13, GMX14, MR14]. **Porting** [PLS20]. **Posets** [MR76a]. **Position** [KST58, Tin62, Ull65, DDMS92]. **Positioners** [Her65]. **Positioning** [MR76b, Osw74]. **Positive** [Koz81a, Koz81b, Mur57, SFD77, HHSW01]. **Positive-Integer** [Mur57]. **positive-tone** [HHSW01]. **Positron** [Pet89]. **Possession** [Sau81]. **Possibility** [KW62]. **Possible** [Gli69, Gom86, ZCK71]. **Post** [PSH80, DFF+15, HHSW01]. **Post-Detection** [PSH80]. **post-exposure** [HHSW01]. **post-silicon** [DFF+15]. **Postprocessing** [RH75]. **posts** [VMAB18].

**potable** [BR09b]. **Potential** [BLR84, CRAG18, CL74, KWB88, MW80a, RVV88, Sak79, TY64, TR77, UC62, DC73b, GC68, GBBM90, Les71, TMW+17]. **Potentials** [Erd88, HB74, Swa57, ABF+10]. **Potentiometer** [MPD86]. **powder** [HHB+89]. **Power** [BDMW81, BAV+09, CNV+15, CFP+07, Fra02, Gau77a, Hor76, MN67a, Mar64c, RP67, Wel61, ZFG+11, Ano01c, BPG+16, BZ06a, BJM+06, BBH+95, BSJ+13, BHH03, BBS+03, CH06, CT06, Cov92, CAC+05, EB91, EBD+95, FGK+07, FDS+13, GAJ+16, HSL+10, JGD+08, KAD+16, KKM02, KBC+03, MAB+03, MZS+03, PZK+03, RMM20, SBP+03, SPR+95, SAB+02, SCG+13, TBG+15, WLB+15, WLS+20, Yet89, ZTC+13, Gsc16]. **Power-constrained** [CFP+07, Fra02]. **power-on** [KKM02]. **power-performance** [BBS+03]. **Power/Performance** [BDMW81, BBH+95]. **POWER2** [FAJ+94, AGZ94a, BGAJ94, HFH94, SG94a, WCNSH94, WD94, HF94]. **POWER3** [OW00]. **POWER4** [BKRF02, BMK+05, LRH+02, TDF+02, WKP+02]. **POWER5** [AAB+05, MMS05, MMM+05, SKT+05, VLP+05, Ano05c]. **POWER6** [PC07, AAM+07, BSK+08, BAB+07, CFP+07, EWT+07, FGK+07, LSF+07, MSSM07, MBF+07, SKK+08]. **POWER7** [BAB+13, FDS+13, LBB+13, Rit13, ZTC+13, AHHN11, FWR+11, FPB+11, RAG11, SRL+11, SKS+11, WBD+11, ZFG+11]. **POWER7-IH** [RAG11]. **POWER8** [CNV+15, DFF+15, LGW+15, MPP+15, PMV15, RES+15, SLA+15, SSN+15, SVE+15, SSD+15, ZFD+15]. **POWER9** [ABD+18, CBC+18, FRS+18, JML+18, KHK+18, LVT+18, NAN+18, Pat18, SAA+18, SDS+18, SSI+18]. **PowerNP** [ABB+03]. **PowerPC** [Wai05, BBH+95, BCJ+96, BEKK00, BBGP94, HF94, JO96, KMH+98, LR97, NCB03, OW00, SLC+97, SBP+03, VMM+94]. **PowerStorm** [GH96]. **pp** [Str62]. **PR** [SKLC20]. **PR/SM** [SKLC20]. **Practical** [Rog66, WMK+07, HRW69]. **practice** [KSB07, Wal86, WBT+10]. **practices** [Mal13, PP09]. **pragmatic** [WN92]. **Pre** [And73, LSS+20, TWM+14, BW16, CBV08]. **Pre-Emptive** [And73]. **Pre-exascale** [LSS+20]. **pre-harvest** [BW16]. **Pre-release** [TWM+14]. **pre-stack** [CBV08]. **preamplifier** [KACS95]. **Precipitation** [JD67, MPCF82]. **Precise** [Hua79, KKS+73, San83a, SLK+16, THL85]. **Precision** [GHW+20, RSL+70, MR72]. **precursors** [ZHP+18]. **predict** [TCP+16]. **Predicted** [MW79]. **Predicting** [Bry75, FNS+17, LRNS17, TPTH20, WSCK17, VMS+14]. **Prediction** [Doo83, KB74, AKB+17, BC00, EHLSW01, HHR99, ITS+15, RQBW08, SJZ+15, TMS+01]. **Predictive** [GCPVG85, WLH+17, AHN+03, BK74, EÖH10, GWB+17, GAJ+16, KB74, PCW+17, VVHL16]. **Preface** [AS06, Ano67t, Ano19g, Ano19h, Ano19i, Ano19j, Ano20d, Ano20e, Ano20f, Att92, BSD09, BNS15, BR09a, BR17, BFH10, Bos97, Bra05, Bra03, Buc99a, BJ06b, CK17a, CP99, CK17b, CRH12, CN18, CGR05, Cor18, CS02, DFS98, DA04, DS03, DLN14, Don90, Don92, Eic18, EJ03, Far91, Fle95, FHL+14, FS05, GP06b, Gar00, Gon99, Gri92, GP09, HI06, Har01, HPW11, Hau93, Hau96, Hef01, HHR08, HT16, HF94, HNRiC07, Hor93, Hor00, HO96, IK00, ISV16, Jor04, KN08, Kle91, Kni08, Kog94, Kos15, Kua95, Kue90, Kuo99, LCB93, Lip92a, Lun02, MVCW10, Mau97, May90, McG92, MW09, Meh07, Min08, Mit94, NHH91, Opr03, Pal14, PWW13, PD10, PMV15, Pat18, Rao16, RM10, RS14, RR02, Rit13, Sch07, Sch04, STCR84, SGESR10, SNB+09, Sof13, SS15, Sol02, SCR01]. **Preface** [Ten05, Tro00b, TH11, Tur02, Tur07, Vay12, War93, Wes90, WR95, Wil09,

WCRiC10, WH94, You57, ZS96]. **prefetch** [AGZ94c, BCK13]. **Prefetching** [CP97, EHPS05]. **Prenucleation** [JC63]. **Preparation** [DO74, Moh70, SG77, YHA71, OS99]. **Prepared** [DH83]. **preparedness** [PKXK07, SLK+16]. **Prescribed** [CS65a, Rem67]. **prescriptive** [GAJ+16]. **Presence** [Eli58, HC78, KWB88, Rad62, KLHW16, Lom77]. **Present** [Har81, Bar62, KLRS96, SLK+97, Sor79, Sor00]. **preservation** [RCFN+08, RCFN+08]. **Preserving** [Irv89]. **President** [Age04, Age05, Age08, Bal05, Che06, Che08, DR08, Des02, Des04, Don00, Mey03, Nun09, Pea09, Pic18, Pri07, PS09, Pul07, San12, Viv14]. **presilicon** [KAB+12]. **Pressure** [BMC86, MNP+69, SAL63, Swe62, SR71]. **Pressurized** [BT78, BFT79]. **pretty** [Fre04]. **PREVAIL** [DEG+01]. **Preventive** [Ada84]. **Previous** [Ano57j, Ano58g, Ano58h, Ano58i, Ano59e, Ano60f, Ano60g, Ano60h, Ano61e, Ano62d, Ano63e, Ano66g, Ano66h, Ano66i, Ano67h, Ano67i, Ano67j, Ano67k, Ano67l, Ano67m]. **Pricing** [Low74]. **Primary** [LMHM96]. **Primitives** [Woo87, CIJ+10, PAH+18]. **Principal** [Kan78, SM78]. **Principle** [Bar80]. **Principles** [GHK67, Hoh78, Mal13, Wal86, BTP+90, CP91, Gyg08, PMLA88, PP09]. **Print** [Car77, CEY84, ELZ79, Hen83, Pre66, Sta97, SW90, Zab79, CFW82, KL63, ZH89]. **Print-quality** [Sta97]. **Printed** [BDWZ83, BAH82, GHKO57, Has62, Has66, LDL84, Man85, Ser82, STCR84, Wal58, Wym57, ABM88, BBMP92, Cha88, DDMS92, GA88, HM71, Pau89, Whi93, WGC93]. **Printed-Circuit** [BDWZ83, BAH82, Ser82, Wal58]. **printed-circuit-board** [ABM88]. **Printer** [ABB+85, AEE77, BS84a, BHR77, BCD+85, Bro78, BHWW77, CD78, Car77, FBW77, FLR77, GT87, MR79, NK81, Sve78, Twa77, Zab79, VW78, WS72, ZH89]. **Printers** [BS84b, CEY84, Hel79, ZL87, Sta97]. **Printing** [BS84a, BS78, BBT83, BD96, CS85, DLK84, EHMW81, FLS78, LMT84, MTS84, MBB+01, Mil84, MT84, PC85, Pre66, Twa85, Zab77, BLDM97, BGK+82, CP91, CAS+91, CASP91, Mas97, Pen91, ZL97]. **Printwheel** [May85]. **priorities** [BBMR19]. **Priority** [And73, GS75, MT77]. **prismatic** [MKP73]. **Privacy** [GDA14, KKT09, Pea09, RM09, BBC+09, CNG09, GDB16, HLZ+09, JMLW94, KKB+09a, KMO+14, PP09, VTC09]. **privacy-aware** [VTC09]. **Privacy-value-control** [RM09]. **Private** [Hop61, Yar12, BHH19]. **Prizma** [Eng03]. **Proactive** [CHH+01, WLS+20]. **Probabilistic** [Nad79, Kob71, QGT13]. **Probabilities** [Bar80, SH57b, SH57c]. **Probability** [PM88]. **Probe** [FT77, KKK61, PSA+08, MTF+95, Poh95]. **Probe-based** [PSA+08]. **Probing** [ALH95, CBBS90, LPMDG14, RG90, WSBL90]. **Problem** [ADST78a, GR58, HP63, HHJW84, HS81b, NSS58, Pal61, Pim76, RD12, SM78, Sch62b, Sch63, SS87b, Tid62, AAA+17, ADST78b, BH80, BK61, BGK62, DHMP94, Ger73, GS72a, Joh87, Mic72, Ray69, VJA07, WYF+03, Yan07]. **Problem-Determination** [HS81b]. **Problem-oriented** [RD12]. **Problem-Solving** [ADST78a, GR58, ADST78b, WYF+03]. **Problems** [Bil70, Cha79, HWC75, HE10, Key65, Key70, Kog74, LC80, MD65, RS59a, RS67, Tuc60a, dG58, BS71b, CP72, CFP20, CHG04, Don69, Gre59, GCFW07, GS72b, Ism00, Key71, Lei61, Mas97, PZGL91, RS66]. **Procedural** [Gro76, Lom76]. **Procedure** [MS75, Har71, Her72, Lom77]. **Procedures** [Ada80, GS74, HP66, HKM+86, Kin61, MP88a]. **Process** [Agn02, Ame80, BHV85, BJMO80, CH82,

Dah67, DS65, Fan61, GS82a, GKK+80, GS82b, HCS80, KS79, KGCS85, Law02, Mar60a, Mey90, Mey00a, OHM+85, SSL73, SRH+18, Twa85, Was77, ABM88, Cal70, CPTW98, CGN72, CKE+10, DN97, HHSW01, KKM02, KRT98, Lan61, Lan00a, LV94, Mah93, SBG+71, SKC+10, Sta76, Sta00, Stu70, VW78, Van97, WSE+16]. **process-characterization** [CPTW98]. **processed** [LCL+98]. **Processes** [Die62, FL59, Hat88, Meg62, Mid62, Mid70a, NB61a, NB61b, Red57, STCR84, Wes90, AHW+99, Bea90, CNC+95, FSG+73, Hei80, LB07, LCHL95, MD12b, OS99, RWM+05, Ros00, SPP72, See93, WT91, vS98]. **Processing** [ABC+85, ABB+91, And65, Ber76b, BKU88, BHWW77, Bur75, BDH76, CCP85, Dav77, DB76, DMP59, FLDC86, FGM+83, GBK+19, HF78, HAG+13, Kin61, Kle91, Kuo99, MW80a, May81, Moh70, Mur57, PSH80, Shi85, Tas57, WSW83, Woo87, AKB+17, ARG00, ARS+17, BK75, BBH82, CGLL93, CGS61, EB99, Fon99, FNY+10, GON+06, GLM+96, Ham99, KVP+20, Kuo92, KOT99, Luc99, Mar98, MIL+18, MP82, MKJM93, NAB+15, PB89, RB92, SPR+95, Sto91, CMP87]. **Processing-in-memory** [GBK+19, NAB+15]. **Processor** [All81, Ber85, Coo82, DR82, Fre67, GCPVG85, GS82b, LS76a, MSB+04, NHH91, PPS82, Ser82, SBJS15, TS82, Tsu80, UMK+85, ABB+03, ABD+18, AEH+04, BGM90, BHH+15, BSK+08, BCF+07, BDHH+09, BAB+13, BEKK00, BKRF02, CJ83, CNSS12, DTH92, ESA02, Emm97, FAD+07, FNY+10, FXB+10, FAJ+94, GGRW91, GH96, GMS+12, Gro90, Haj91, HDW+07, HF04, HSL+05, JZ91, KBG+09, LGW+15, LVT+18, LBB+13, Lip92b, LJV+07, MWS09, Mar90, MDR+07, MME+97, MZS+03, OG90, PBBL07, RB90, RWW07, RG09, SKK+08, Sar91b, SCS+02, SKC09, SHL07, SKS+11, SVE+15, SKS+20, Sta90, SSD+15, SRH+18, SBC+12, TSC91, WMB+15, War90, WBD+11, WBH+04, ZDB+18, RSNG82]. **processor-based** [CJ83, SKS+20]. **processor-performance** [Emm97]. **Processors** [AK82, CW77, Tod78a, Aus90, BBMP92, BS95, BRB92, BMK+05, CNV+15, CMR+90, CTS+92, CDD+10, Cov92, DGG+92, EV93, HOWP92, OW00, SLC09]. **procurement** [GSAB93]. **Produced** [Hut74]. **Product** [Cle83, KB06, SMD80, BMT+90, BKP82, EBD+95, Fil70, RAMD19]. **Product-representative** [KB06]. **Production** [DBG+84, DKRS07, DS65, GAC85, Kov59, WWK+87, BKF+16, DBG+00, LMHM96, MS89]. **Productivity** [FT80, LKL+81, SMD80, LRMT95]. **Products** [Ada84, Wes90, DKRS07, EGH+96, GSAB93, LZZ+16, LCHL95, Man90, Pat89]. **professional** [NRA+07]. **Profile** [Gil84]. **Profiles** [JD66, KP80, FKOW16, KRC68, MFPJ71, Okt69, Pai72, PL73]. **Profiling** [CW78]. **prognosis** [SLK+97, SSB+12]. **Program** [Bar73, Bon62, BCGS81, Chi86, DGB78, Don80, Fer75, FE75, FGS75, GHP+85, Knu90, OHM+85, Paz75, Pri07, PS09, RR83, ABL+84, BBF+04, BCGS00, CDSW06, Col69a, Hat72, Hei94, KN91a, KSL95, LFF90, MS96, PBBL07, Sar91a, Sed67, TBH+17]. **Programmable** [Cow87, EL80, GLL80, LBH+75, Wei79, Woo75, HAMC+04, MMWLN99, Mey81, MZS+03, SKSP06]. **Programmed** [ET69]. **programmer** [LR97]. **Programming** [DLW86, Hei76, KGBB09, LG78, Len58, LW77, Luc81, Sam81, SH84, Tuc60b, Alf89, AKE+92, Bei92, BCR91, Bur72, CFK+91, CCF+10, Gsc09, dTGHC92, HKLM97, JP94, Joh87, Kel73, Lee07, MAA+05, NRA+07, PLK09, el 69]. **Programs** [CD85, Dor60, Fer75, Jee58, KSW74, Kru84, NSS58, SK80, Urs75, ABF+10, Aus90, CJ91,

SSW91, Sta89a, SZ91]. **Progress** [HCTS81, JS81, ARS+17, GNF06, MAG+01, Sam67]. **Progressive** [CBK+98]. **Project** [Ana80, Str62, BKN10, CIE+03, RBB+02, SPP+05, IBM13b, VRL10, WGF+06, Buc62, IBM08, NNN+06]. **Projection** [DC82, DSRC98, LC82, MHI98, Mid70b, SW98, DEG+01, MAD+98, RDD+98, SST+98, SS00]. **Projections** [WM81, O'C89]. **projects** [CM19, LHS+17]. **Prolog** [Arb86, AKE+92]. **promote** [SR19]. **Promoting** [LH03]. **promotions** [SMSC14]. **Proof** [CLW79, Dan60, Knu90, PV93, Gil60]. **Proofreading** [TSNF88]. **Propagation** [Bay69, Bei74, BT84, Car60, CS65b, GM63, JH80, JHH+81, Mul67, Sat63, WS64, DKR+90, TMW+17]. **Properties** [Ahn66, Arm65, Blu79b, BJMO80, BMWL80, BS64, CP86, Dav77, DH83, Dim70, Flu67, FN95, Gun66a, Gun66b, HK64, HM60, KP79, Key61a, KL80, Kle64, Log70, Lud78, MU77, MY67a, MY68, Mil83, NBRB70, OMAW60, PDLM67, RS59b, SD85, Smi77, SG77, SSTF77, Wei65, Wol70, Von70, AF68, AW98, BS72, FL89, How89, KLS+05, Kri82, Mat70, Pau89, Pri73, RDD+98, SHCV19, Spr71, SN98, SHCS05]. **property** [Lew78a]. **Proposed** [SB64, CJM96]. **propositional** [Fag77]. **prospects** [Agn02, NHKI03, SKB+11]. **protected** [Irv89]. **Protecting** [BBK+16]. **protection** [BFH+93, FNS+17, GDA14]. **protective** [LG88]. **Protein** [KWN01, EHLSW01, RQBW08, TMS+01]. **proteins** [FXL01]. **Protocol** [GHW+20, WZ78, Wes78, AEH+04, SC20]. **proton** [ZSZ96]. **Prototype** [MHI98, FGP+85, KFB+97, MAD+98]. **Provides** [Ost84]. **Providing** [FP83]. **Proving** [Bir74]. **provisioning** [GBJ+08, LSS14, SBB+09]. **proximal** [MTF+95]. **Proximity** [GSC80, Par80, PS80, BGK+82, GC93]. **Proximity-Effect** [PS80]. **PS** [AHH+91]. **PS/2** [AHH+91]. **pSeries** [BKRF02, GBRJ05]. **Pseudo** [Ano66j, Bla65, CCM65, Meg62, VSF65]. **Pseudo-Noise** [Ano66j, Bla65, CCM65, VSF65]. **Pseudorandom** [RB90, RT99, AEG+02]. **pseudorandom-number** [AEG+02]. **Pseudoternary** [Cro70]. **PSG** [KH75]. **PSI** [Bar75, FLKA84]. **psychiatry** [PCW+17]. **psychology** [KLMV19]. **Pt** [DVM81, Dem78, HBR85, HBR86]. **PTP** [GHW+20]. **Public** [Kov06, AWK20, BCC+16]. **publications** [Ano90c, Ano92e, Ano92f, Ano92g, Ano93e, Ano94j, Ano94k, Ano94l, Ano94r, Ano94s, Ano94m, Ano94n, Ano94o, Ano94p, Ano94q, Ano95i, Ano95g, Ano95h, Ano95j, Ano95k, Ano96g, Ano96h, Ano96i, Ano96j, Ano96k, Ano97f, Ano97g, Ano97h, Ano97i, Ano98g, Ano98h, Ano98i, Ano98j, Ano98k, Ano99f, Ano99g, Ano99h, Ano00i, Ano00f, Ano00g, Ano00h, Ano01i, Ano01j, Ano01l, Ano01m, Ano01k]. **publish** [SCW10]. **publish/subscribe** [SCW10]. **Published** [Ano57k, Ano57l, Ano57m, Ano57n, Ano58j, Ano58k, Ano58l, Ano58m, Ano59f, Ano59g, Ano59h, Ano59i, Ano60i, Ano60j, Ano60k, Ano60l, Ano61f, Ano61g, Ano61h, Ano61i, Ano62f, Ano62g, Ano62h, Ano63f, Ano63g, Ano63h, Ano63i, Ano66s, Ano66t, Ano66u, Ano66v, Ano66w, Ano66x, Ano67w, Ano67x, Ano67y, Ano67z, Ano67v, Ano67-27]. **Pulse** [Dod63, Gar64, LS64, PL83, SFH65, Sko58, GFS71, Shi73]. **Pulse-Slimming** [Dod63]. **Pulsed** [CCM65, Key70]. **Pulses** [Hem74]. **pump** [BR09b]. **pump-scheduling** [BR09b]. **Pumped** [SCHL66, HA71, SLHM67]. **purchasing** [YGR14]. **Pure** [MN67a, Sho04]. **Pure-Tone** [MN67a]. **Purpose** [Tay81, ATL+88, DAUS91, Gra69, LH84]. **pursuit** [LQRS04]. **Pyrolytic** [Kle64]. **Pythagorean** [Dub83, FS90, MM83].

**Q** [BCK13, ABB+13, BSJ+13, CCD+13, CP13, CKL+13, CHT+13, EO13, EWS+13, MP88a, MP88b, OWG+13, PMLA88, PM88, RIB+13, SCG+13, IBM13a, IBM13c]. **Q-Coder** [MP88a, MP88b, PM88, PMLA88]. **Qbox** [Gyg08]. **QCD** [BCK13]. **QCDOC** [BCC+05]. **QCDSP** [BCC+05]. **QR** [EG00]. **QS22** [VLB+09]. **QSAR** [PPG+01]. **quadratic** [Ger73]. **quadrature** [MR72]. **quadratures** [MY65]. **quadrics** [O'C89]. **Quality** [Cle83, CEY84, MJS70, MCH+82, BTWY92, CT06, CPCC18, ESM16, HBC+99, OEN+16, SHC+72, Sta97]. **quantification** [Gil60, MWEJ05, Mon82b]. **Quantifying** [NQ20, QGT13]. **Quantitative** [BWK20, KM74, BNN+09, MS07, PWFB91]. **Quantities** [El 74, Agi74]. **Quantization** [GS70, LBT99]. **Quantum** [Azb88, CGR88, FS88, Gar88, Gia66, GMW80, Heb64, HHH04, HMK01, SB64, Whe88, WS64, WA79, ALH95, BHM04, CRAG18, Gou89, Joz04, Pri66, Sho04, Smo04, VBC+08]. **Quarter** [HCTS81, JS81, HBP+81]. **quartz** [KM93, Rat68]. **Quasi** [BEH+89, EHK+89, SBG+71]. **Quasi-elastic** [BEH+89, EHK+89]. **quasi-steady-state** [SBG+71]. **Quasidynamic** [Cha62]. **Quasimaximum** [Sta73]. **quasiperiodic** [HM89]. **qubits** [Woo04]. **Queens** [SS87b]. **Quenched** [LF64]. **Quenching** [Boe69]. **Query** [ADST78a, SFT78, ADST78b, BYY98, NMTP14]. **querying** [EWBR09]. **Question** [LPM+12, Pla76, BCD+17, KPB+12, TOKN18]. **Question-Answering** [Pla76, BCD+17]. **Questions** [Ver88, Fre04, PBCC12]. **Queue** [Cal81, Cha74, GS75, Low74, BZ06a, Sta75]. **Queueing** [CHW75a, CHW75b, CMS85, HWC75, Lam77b, LS75b, Sau81, Sch63, BGK62, SMS80]. **Queues** [Cha75b, SS82]. **Queuing** [RK74, RK75, BK61, Lam77a, MHI01, Mat03, Moo72]. **Quickly** [BD96]. **Qx** [SM98]. **Qx-coder** [SM98].

**R** [HRWZ87]. **R-fields** [HRWZ87]. **Radar** [van77, MMJ69]. **Radially** [BBT83, PH81]. **Radiant** [NGMW57]. **Radiant-Energy** [NGMW57]. **Radiation** [HD69, Hir77, Dav69, TMF+08]. **Radiative** [HC78]. **radical** [MD12b]. **Radii** [Hut74]. **Radio** [CCM65, SH57a, CS03]. **Radio-Interference** [SH57a]. **Radioactive** [VGC79]. **Radioisotopes** [Spr61]. **Radiotracer** [BC60c]. **RAID** [HDBR08]. **railroad** [VJA07]. **railroads** [RC09]. **raindrop** [AKKJ72]. **raise** [YCJ+17]. **RAM** [NHKI03]. **Raman** [RSSS82]. **RAMs** [FT80]. **Random** [DG84, EL83, Erd88, Her65, LH57, LST80, ND57, Pet57, SM71, WT77, CTT91, Don74, DMR+81, FR01, LBB+13, MDB+02, ND00, RBB+08, WLEF89, LH00, ND00]. **Random-Access** [LH57, ND57, Pet57, CTT91, FR01, MDB+02, ND00, ND00, LH00]. **Random-Pattern** [EL83]. **Random-walk** [SM71]. **randomization** [RS94]. **Randomized** [KR87]. **randomness** [Pic91]. **Range** [Kuz70, MPD86, GYK99, Gra69, Jaq03, KDG15, MY65]. **ranking** [GLK+12]. **Ranks** [FR60]. **Rapid** [ATW06, BMF+16, BJ67, Hua79, KKS+73, MS67, GON+06, Gra71, MC87]. **rapid-data-rate** [Gra71]. **Rapid-response** [BMF+16]. **Rapid-turnaround** [ATW06]. **Rapidly** [Jam89]. **RAS** [AFM+02, CAD+09, Del08, FCS+04, MAF+99]. **Raster** [MLGD84]. **Rate** [KS79, KO65b, GRH+08, Gra71, Irv91, MRG99, RHC73, Sri96, TLM83, WRG99, ZMM+96]. **rates** [Dat93, MHI01]. **Rating** [SR19, VTC09]. **ratio** [Thi88]. **rational** [Tue68]. **Rationale** [BJW72, MS05]. **Ratios** [Che72, Gec74, SS76]. **Raw** [Kin61, GAB+08]. **Ray** [COC61, HMR82, Hua79, War93, BM93,

CNH73, Col69b, HS71, KWT+11, ORT+96, RF78, Seg68, Spi93, Sri96, SN98, Tan96, WNBP91, Zie98, Arc93, GHP+93, GC93, JS00, LL93, SF93, See93, SMVK90, SRO93, SS93, SA00, WSK+93, Wil93]. **ray-tracing** [WNBP91]. **Rayleigh** [Poh79]. **Rays** [ZS96, Zie96]. **Re** [MJS70, Kri82]. **Re-Emission** [MJS70]. **re-order** [Kri82]. **reach** [CPvR00]. **Reaction** [Pan78, MMV+01]. **Reactions** [BLR84, HBR85, Lun79, HBR86, SLZL18]. **Reactive** [AS78, Kuo92, JL90, RKL88b]. **reactivities** [MMV+01]. **Read** [Cli90, FMP61, Has66, JT66, KJMS67, MPST66, Sie63, TK64, ILH03, TFL+98]. **Read-back** [Sie63]. **Read-Only** [Has66, TK64]. **read/write** [ILH03]. **Readability** [DRSM15]. **Readback** [TT75]. **Reader** [CK63, AAH68, Bar68, Hen68]. **Reading** [Ost84, Wal58]. **Reading/Writing** [Ost84]. **Readout** [ABPS66, Bro72]. **reads** [LPM+12]. **Real** [Bev69, BFRT13, DR82, HLS81, Her75, Jam81, LPMDG14, OO81, PSD+17, Soh76, SSB+12, ASR07, BISN+12, CGM+15b, EGH+86, HKA+13, KZP03, KCH+09, NMH+07, ODL+09, Osb93]. **Real-Time** [DR82, HLS81, Her75, Jam81, OO81, Soh76, Bev69, BFRT13, LPMDG14, PSD+17, SSB+12, ASR07, BISN+12, CGM+15b, EGH+86, HKA+13, KZP03, KCH+09, NMH+07, ODL+09, Osb93]. **realization** [Bei92, Gil60]. **realm** [OYHSB14]. **reasoning** [Di 88, MDH+12, NS92]. **Reassembly** [Str81]. **Receiver** [KT73, VSF65, RFB+03]. **Receiving** [Raa76]. **Recently** [Ano62f, Ano62g, Ano62h, Ano63f, Ano63g, Ano63h, Ano63i, Ano66s, Ano66t, Ano66u, Ano66v, Ano66w, Ano66x, Ano67n, Ano67o, Ano67p, Ano67q, Ano67r, Ano67s, Ano67w, Ano67x, Ano67y, Ano67z, Ano67v, Ano67-27, Ano94c, Ano94d, Ano94e, Ano94f, Ano94g, Ano95d, Ano95e, Ano95f]. **Recessed** [OG80]. **recipe** [DL02]. **Recirculating** [Sch63]. **Recognition** [AAH68, Bon62, DFM+88, Dav58, Dic60, GHKO57, KT66, Kur87, MD65, Mer88, WR83, ACC+15, BHP17, BHW+17, CNP+17, DDMS92, GMNE63, HM71, KL63, LJV+07, MC87, SP17, Tap82, YAH+96, YG81]. **recombinant** [NBF+00]. **recommendation** [HRZ14]. **Recommendations** [WZ78]. **recommender** [VVHL16]. **Reconfigurable** [Elm84, KZP03, MN97, VRA+09]. **Reconfiguration** [CHY92]. **Reconstruction** [PL81, Sta67, LHJ69]. **recorded** [BD74]. **Recording** [Blu79a, CM74, FK62, Gre79, Hoa58, Hoa61, Ku63, KC66b, Lor70, Pat75, Pol78, Sch85, Sea58, Sie63, SM66, SW74, TT75, Tan74, ABR71, AR98, ABB+08, BP88, BE03, CBH+05, Hoa00, How89, Hsi99, KT70, Kob71, NDM+04, SHSY90, SHSY00, TFL+98]. **recordings** [WSCK17]. **Records** [CLW80, GA68, Sha12]. **Recovery** [DMP59, Lew80, Pat80, SLC09, SLP+20, AAF+09, BGS13, GBJ+08, Gri69, OHK+07, PWW13]. **Rectangular** [Coo82, MS60b, PH74, WWMS79, Jon72]. **Rectification** [MG62]. **Recurrence** [Kog74]. **recurrent** [SP17]. **Recursion** [Gus97, EG00, GJ00]. **Recursive** [Goz94, Her72, HWC75, Pis74, Ris72, Str68]. **Redefining** [RMM20]. **redistribution** [TKK+92]. **Redox** [FLB+19]. **reduce** [CFS+19]. **Reduced** [BBH+95, Kri82]. **Reducing** [CHMW07, WF87, GB93]. **Reduction** [ADH70, AdH00b, Bla63, CM80, DG84, DGB78, FC79, GT80, Kob70, She59a, TLR85, Vil82, BZ06a, Bev69, FDS+13, GWB+17, Gre59, Hei80, LL99, TW69]. **Redundancy** [BR82, Fle58, LV62, Skl76, SMD80, BBI94, Gla97, Irv89, Irv01]. **Redundant** [FT80, HBB+07, MLMP+12, MWW+07]. **Reed** [BP75, Bla84a, Bla84b]. **Reengineering** [GE02, GW18]. **reentry**

[MMJ69]. **Reference** [Eas75, Eas78, VDG19, KGT88]. **References** [FGS75, Lom75, BGW91]. **refill** [SLYR72]. **Refinement** [MR87]. **Reflectance** [PFS+70]. **reflection** [HS71, MS89, Rab69, vHv+89]. **Reflections** [Gol87, MJJ69]. **Reflective** [SW98, CU98, RDD+98, SGY+98, SST+98, SS00, YL98]. **Reflectivity** [Heb64, PW68]. **Reflector** [NGMW57]. **reflow** [Mah93, Mil69, Mil00]. **Refractive** [PL81, PC64, WL73, BGO03]. **regarding** [Tu90]. **Regenerative** [HS85, LS75a, LS75b, SS82, LS77]. **Regime** [Gef88, BFG+06, SWC+95]. **Region** [MWN63, Sha58a, Bra72b, Les71]. **Regional** [Lew83]. **Regions** [RF78, GHH+17]. **Register** [Bea74, CT76, BMK+05, Gus76a, Gus76b]. **register-renaming** [BMK+05]. **Registering** [RWC80]. **Registration** [DMWW77, Dav80, Pri94, RG09]. **Regression** [Lew78a]. **Regular** [Ano01n]. **Regulation** [BDMW81, DPR86]. **regulations** [CNG09]. **Regulatory** [Pea09]. **reinforcement** [NBM+19]. **Reinventing** [JWZ+09, ODA+08]. **Related** [RP67, SARG80, Smi77, WB70, FL89, Gri99, JS00, Kel89, KFSZ92, MNS69, SNM69, VMAB18, WL73]. **Relation** [Ben59, MJS70, Mic78, WKF+12]. **Relational** [ADST78a, BDH83, Hal76, LN79, ADST78b, Fag77, vv86a]. **Relations** [Las63, RP66, EM65, Lew75]. **Relationship** [CA84]. **Relationships** [DG84, CCBLM12, MDJV08]. **Relative** [van88]. **Relaxation** [Mas62, NB61a, NB61b, Red57, JZ91, TWRW89]. **Relay** [GW57a, GW57b, Moo60, Koc59]. **Relaying** [Hor76]. **release** [DN97, TWM+14]. **releases** [MVI+07]. **Reliability** [DW58, FCS+04, Fle58, FL59, FGH+06, HBB99, HCTS81, LV62, NL69, Ohb84, OG80, Sta02, ABC+99a, Buc99b, CGLL93, CAK+15, Ibe03, LH84, Luc99, MSSM07, MCH+82, WBS+18, YCB05]. **reliable** [ACD+15, CDC96]. **relief** [Cha69]. **reluctance** [OCR+98]. **remanent** [BD74]. **Remarks** [FL67, Sta67]. **Remote** [Dav79, KW76, VSS+09]. **Remotely** [HF78, Pri94]. **Removal** [Whi72, Dat98b]. **renaming** [BMK+05]. **renderer** [DAUS91]. **Renewal** [FL59]. **Rent** [LFR05, VLKW14]. **Reorganization** [BF77, Paz75]. **repair** [BM93, WWA+98]. **Replacement** [FLW78, CHMW07]. **Replacing** [MM83]. **reply** [Ber76a, Wie76]. **report** [GMR10, KWB+15, Var89]. **reported** [Pon17]. **Representation** [Far87, Gro76, Hol78, Pic87, AO97, BW81b, GLS86, PMS+17]. **representations** [FTY83, MN90, Oht95]. **representative** [KB06]. **Representing** [FJSS89]. **reprint** [Lan96]. **reproduced** [MS89]. **request** [KJS09, Pla76]. **requests** [Oha10]. **required** [GE02]. **Requirements** [Cro79, GYK99, MR76b, Agn02, JS89, LFR05, LSZ+10, MNWH20, RBB+02, SPP97]. **requires** [KSA+04]. **Requiring** [Car60, WR83]. **Res** [ACG+87, Ano93c, Ber76a, DCB77, Lan96, Sta75, Wie76]. **Research** [Age04, Age05, Age08, Ana80, BYY98, Che06, Che08, Coo82, Gar00, Mar62, NRD+09, Nor58, Ros03, TFJ+96, Tsu80, WH94, AG06, Ano62e, BF69, Far98, GDLS14, Jee58, LH03, MDH+12, McC69, Nic92, OMA+96, SXYP12, CMS85, DR08, LH03]. **Reservoir** [ET86, RBL+09]. **Residual** [Cas60, Fre62, KDBT60, SC88, Ano71]. **resilience** [BSK+08, KEKP20, QGT13, SKK+08]. **resiliency** [EDGL+13]. **Resilient** [SHV13, BGS13, IS20, PWW13, VAB+13]. **Resin** [MS60a, GA88]. **Resist** [Gil84, KP80, See93, CH82, Duk93, HMM82, Ito01]. **resist-patterned** [Duk93]. **Resistance** [HA58, IM57, JJ64, Lit62, Ros78, Rut59, Rut64, Sak79, SS88, KMB+08]. **resistance-change** [KMB+08]. **Resistive**

[ABB+85, BCD+85, CS85, Gru79, LM85, LeB62, PC85, RP67, SD85, Twa85, WWMS79, DKA+05, JAC+19]. **Resistivity** [KDBT60, SC88]. **Resistor** [CP63, Ove70, Kah71, KM68, RHC73]. **Resistor-Coupled** [CP63]. **Resistors** [KL80]. **Resists** [MW80a, BLDM97, HHSW01, Ito97, Ito00, MAG+01]. **Resolution** [BJS80, Bro88, DC82, Gar86, Hoa58, JWL82, KKK61, Kra81, LY83, SW98, Sie63, Bat00, CHdTG92, LPPT86, LL98, LMW+01, MBB+01, PGN88, SST+98, ST17, TPC+13, UBK+88]. **Resolved** [BLLS79]. **Resonance** [DV64, SOC59, SG64, Tit63, Meh89, Var89]. **Resonant** [Fan64, Pre66, Roe66]. **resonator** [KM93]. **Resource** [ADG+05, FBG12, MBA+12, RKMY02, Sau81, YSH12, BM96, CCFSZ12, HS11, KdAC+15, MC09, MN97, SGK04]. **resourced** [GHH+17]. **Resources** [KW76, MWL+14]. **Respect** [AS87]. **responder** [SS20]. **Response** [ALL77, Ano20d, Ber64, Cha75a, ELZ79, Ree69, Rei66, RR69, SY73, SWD74, vS57, BMF+16, HS11, JC00, KT70, SS20, TYM+14]. **responses** [BS06]. **responsibilities** [DYK10]. **REST** [Oha10]. **Restricted** [Fra79, Fra80a]. **Restructuring** [LSH76, Hei94]. **result** [Lam77a]. **Results** [FC63, RS67, BS71b, Fla91, FL89, KN91b, SPP+05]. **retail** [MHR+15, RM09]. **retention** [NCM+01]. **Rethinking** [ABD+14]. **Retrieval** [JM64, SY73, CBK+98, PSD+17]. **retrospective** [WCT06]. **reuse** [BSRM09, WMK+07]. **revenue** [AYA14]. **Reverberation** [MN67a]. **Reversal** [CDH64, DP59, Hop61, Mid62]. **reverse** [PLK09]. **reverse-acceleration** [PLK09]. **Reversibility** [Ben73, Zul01]. **Reversible** [Ben88, Ben00]. **Review** [Bar62, BRB+01, CH84, MW67, NHKI03, OO81, PC85, RR83, SC81, Bag94, BWK20, DM01, Duk90, FL89, Lax67, Sta89b, van89]. **Reviews** [Str62]. **revision** [BBSW97]. **Revisited** [SS88, Shu94]. **Rework** [Doo83]. **Rewritable** [AFF96]. **Reynolds** [Mic59]. **rf** [DAC+03, HNS+03, KM00, GMP90, KP79, KM70, Log70, LMD70, MU77, Maz70, Pen69, Pen79, PDLM67, SK69, SJ70]. **RF-sputtered** [MU77]. **rf/analog** [HNS+03]. **RFID** [RM09]. **Rheology** [Was77, FGMPK05]. **rhodamine** [HA71]. **Rib** [Ham78]. **Rib-Supported** [Ham78]. **Ribbon** [ABB+85, Bay78, BCD+85, CS85, Hel79, LM85, PC85, SD85, Twa85]. **Rich** [KEJ87]. **Righi** [Pri58a]. **Righi-Leduc** [Pri58a]. **Ring** [BS85, Fan61, TK64, HHA93, OCB+90, WSK+93]. **ring-disk** [HHA93]. **Rings** [CGR88, Str83]. **Rio** [TPC+13]. **RISC** [BGM90, FAJ+94, Gro90, HM90, Mar90, MHR90, OG90, RB90, War90, Aus90, BCJ+96, BS95, CMR+90, CM90, CM00, WD94]. **Rise** [Lin67]. **Risk** [GSAB93, LSS14, RM10, AWK20, BKN10, BMF+16, CKE+10, DB20, DJK14, EPP10, FM10, HS14, HE10, KOP14, KEKP20, MR14, MS07, RAR+14, SBD+10, Yas07, vKCD+10]. **Risk-based** [LSS14, MS07]. **risk-metric** [FM10]. **Risk-pooling** [GSAB93]. **risks** [BC00, ITS+15, Jen10, SSK+16, SP14]. **Ritz** [BS72]. **river** [EWBR09, KCH+09]. **RKKY** [Kuz70]. **RKKY-Type** [Kuz70]. **RNA** [BD62]. **Roadrunner** [KGBB09]. **roads** [BCSE89]. **Robin** [Tak87, WC75]. **robotics** [Kis96]. **robots** [Mey81]. **Robust** [WLB+15, ATW+08, NCM+01]. **rock** [Mon82b]. **Role** [Ast58, AAC+06, BJ06a, Far98, GMX14, Tur69, Van97]. **roles** [DYK10, KLRS96]. **Room** [BN63, JWSP06]. **Room-Temperature** [BN63, JWSP06]. **rooms** [Fro71]. **Root** [Kog59, Mir69, Dan66, Pon17]. **root-cause** [Pon17]. **root-locus** [Dan66]. **Roots** [Che72, Jam89, MM83]. **Rosetta** [RQBW08]. **rotated** [Rat68]. **Rotating** [BT78, FT77, Gre79, DR93, HHA93].

**Rotating-Head** [FT77]. **Rotating-Head/Tape** [FT77]. **rotation** [Kel89]. **Rotational** [She59b, Les71]. **Rough** [GH86]. **Round** [Tak87, WC75, EC71]. **Round-Robin** [Tak87, WC75]. **route** [SG94b]. **router** [HTH+09, PVDF95]. **routes** [SS20]. **Routing** [Fra83, Hai85, Lin84, HHSR96, KJS09]. **Row** [McA83]. **Row-By-Row** [McA83]. **Rowe** [RP66]. **RP3** [BCR91, CJ91, KN91a]. **RSP** [MP82]. **Ruby** [SLLP64]. **Rule** [EP86, Dor62, Tib93]. **Rule-Based** [EP86, Tib93]. **Rules** [Pet77, LS77, MC87, MR72, vv86a]. **Run** [Fra70, KL97, WGS04]. **Run-control** [KL97, WGS04]. **Run-Length-Limited** [Fra70]. **Runge** [War63]. **running** [TWX+10]. **Runtime** [CLP+13a, FDS+13, EO13, KRD+14].

**S** [ABC+99b, ABB+99, CP99, DSM+99, GPE99, MAF+99, RGP+97, RKW99, SWC+97, SG99, WMH+97, GP81, CS99, DGL+97, ECD+99, Gre97, HBL+99, JL99, KBM+99, KL97, Mau97, RHM+99, SSM97, SK99, SCC+97, SMK+99, TMB+99, Van97, WL97, Web00, WB70, YS99, ESW+95, GLOS92]. **S/390** [ABC+99b, ABB+99, CP99, DSM+99, GPE99, MAF+99, RGP+97, RKW99, SWC+97, SG99, WMH+97, CS99, DGL+97, ECD+99, Gre97, HBL+99, JL99, KBM+99, KL97, Mau97, RHM+99, SSM97, SK99, SCC+97, SMK+99, TMB+99, Van97, WL97, Web00, YS99]. **Safe** [COC61, Gau77b]. **SAFEPRO** [OHM+85]. **Safety** [HT16, BW16, EBH+16, WSE+16, YT16]. **SAGE** [AHJ+57]. **Sales** [BCC+12, TWM+14]. **Sales-force** [BCC+12]. **Salesman** [HHJW84, Ray69]. **saliency** [ATC+15]. **Salute** [FvGGM90]. **Samarium** [SS61]. **same** [BWB+20]. **Sampled** [GHK67, KST58, Sta67]. **Sampled-Data** [GHK67]. **Samples** [DO74]. **sampling** [Sch96b, Wie90]. **Samuel** [WM92]. **SAN** [DHC20]. **SANS** [DBC+06]. **Satellite** [Ano66j, Bla65, CR76, MG62, PL77, RS79, ESS+20]. **satellite-derived** [ESS+20]. **satisfying** [RMM03]. **Saturation** [SM66, TT75]. **Sb** [BS64, LMPP69]. **SBC** [CGLL93, Cor93, GLCW93, Mah93, RBWH93]. **scalability** [AAB+10, BZ06a, WYTO04]. **Scalable** [AHK+18, EFR+05, HJW+16, KHZ+08, SJW+16, SXW+13, SBB+09, SHL+20, WPL+12, ACFS16, CGM+15b, Gyg08, Has98, HSS+10, IS20, KMM+16, NMH+07, RBB+08, VBE94]. **Scalar** [ACG+86, ACG+87, Gsc16]. **Scale** [BSS82, BBH+67, CD85, CP77, Mic78, Mon82a, ODA+08, TLR85, AG06, APOI92, BKF+16, DLJ+08, Duk93, Dür94, EMM+18, ETWO08, FGG+13, GGK+13, HdTR06, HBT+16, KJS09, LSW13, NMV+09, RBB+02, RBB+11, SCC+15, Sof13, TSH92, VNT16, ZSY+13, CAS+91]. **scale-out** [AG06, FGG+13]. **Scaled** [Lev77, OKH+02]. **Scaled-Up** [Lev77]. **scales** [HE10]. **Scaling** [ABB+08, Buc99b, DT08, FRE+08, Agn02, AAC+06, CFW82, Fra02, HND+06, MDB+02, Now02, SWC+95, TMF+95, Tau02, WNV+02, Ano06b]. **scan** [BTP+90, CNSS12]. **scan-initialization** [CNSS12]. **Scanlaser** [MP67]. **Scanned** [McA83]. **Scanner** [Bra80, Cla79, DSW82, Kan78]. **Scanning** [AMGC86, APS86, Ano86c, BMC86, BR00, CW86, DHTW86, DV74, DPR86, FF86, Fin86, Gar86, GH86, Gom86, HBR85, KJ86, KWB88, MHK+11, Pet80, Poh86, SB86, WKB+86, vv86b, All00, BHRS72, BNT86, DAB+97, Dür94, Far82, HBR86, KKT+95, Poh95, Sto91]. **Scatterers** [Lan88, Lan57, Lan96, Lan00b]. **Scattering** [Dav69, FT64, Hun59, Kra81, Pen79, Poh79, RSSS82, Spe69, Tie61, BEH+89, CJ78a, Cop00a, EHK+89, Haa70, JS00]. **scenario**

[NML+20]. **scenarios** [LPA+15]. **SCEPTRE** [Sed67]. **scheduled** [MVI+07]. **Schedules** [FL75, LF77]. **Scheduling** [AS74, FL76, GAC85, Her75, LS76a, Nor58, Tak87, Wit85, WC75, BCE+07, Bla94, BR09b, CSW73, FW83, FN95, GR90, HS91, LMHM96, VJA07, War90]. **Schema** [CA84]. **Scheme** [Gra80, Hop59, Lom75, Pat80, PRY65, RS79, AC84, BSSZ76, BHM04, ESA02, Mir72, TMS+01, Vor71]. **Schemes** [CA84, Kob70, RP70, Yas85, Yas87, AW82, EHLSW01]. **Scholars** [Gar00]. **Schottky** [AA71, DS70, Mid70a, Wol70]. **Schottky-Barrier** [DS70, Mid70a, Wol70]. **Schweitzer** [Sit87]. **Science** [CCD+13, Che06, Che08, DHTW86, Gom87, Goo58, Hor93, KN81, Lip92a, Mit94, ODK+99, PMS+17, RB92, Sor79, Sor00]. **science-1960** [Sor79]. **Sciences** [Kov06, Opr03, Wie58, WH94, CDS+19, McC69, Pul03]. **Scientific** [Ano58f, Ast58, CD85, GS87, dG58, ABB+13, Dun57a, EWS+13, KFH+06, KSA+04, SPP+05]. **scientists** [GR92]. **Scintillation** [Spr63]. **SCISM** [VBE94]. **scopes** [SLC09]. **Scorecards** [HS14]. **scoring** [HE10, WKF+12]. **scrambler** [BBI94]. **screening** [YCB05]. **script** [Tap82]. **SCSI** [BBF+04]. **Scylla** [HHH04]. **SDH** [Cla03]. **SDH/SONET** [Cla03]. **SDRAM** [VLT+12]. **Se** [FA70, Vur70, Kus70]. **Seamless** [MBK+15]. **seamlessly** [AAM+07]. **Search** [CCFB+12, GS74, SS87b, CBK+98, CHG04, DMG+17, GYK99, Rai69, ST17, SS86, WML+16]. **searching** [Luh57]. **SEC** [Hsi70]. **SEC-DED** [Hsi70]. **Second** [Bog79, SM62, Tri58, HPW+02, WBH+04]. **second-level** [HPW+02, WBH+04]. **Second-Order** [SM62, Tri58]. **secondary** [CHL+11, DP68, Irv01, Spo94]. **Section** [Ano67u, Car81, MMJ69]. **sectional** [TTI98]. **sections** [HAMC+04, Les71]. **Sector** [Kov06]. **Secure** [BBGE+14, BBK+16, BBB+20, ACD+15, BHH19, KKT09, KMM+16, WMK20, RBL+18]. **secured** [BMM+20, HSS+10]. **securely** [BC18]. **Securing** [DHC20, KAD+16]. **Security** [AAB+16, BCG+09, BGM+16, HT16, HG14, Rao16, RCP+16, Viv14, AAJ14, And10, BKF+16, BCH+16, BBC+09, FKOW16, HLZ+09, KKB+09a, KMO+14, OYHSB14, PP09, SHL07, SSK+16, DHC20]. **Segment** [Ber76a, WW75, Wie76, Bou97]. **Segmentation** [HM71, BSRG17, Dan82]. **Segments** [Lew83]. **Seismic** [Gaz78, GRSW86, PLS20]. **selected** [DP13, How89]. **Selection** [BHR77, HHM66, Sea58, TLR85, Sar97, WML+16]. **Selective** [GBBM90, RS79, GSAP17]. **Selectric** [Wil85]. **Self** [EL83, FE75, GRT74, HBL+99, HBL+02, HO75b, OCB+90, RWC80, Sea57, SWD74, TDM+87, TH64, Whe88, BRB+07, HSL+10, HMP90, KS90, RB90, Sar91b, Shi73, Tag09, Vor71, DBC+06]. **Self-Acting** [SWD74]. **Self-Adapting** [DBC+06]. **Self-Aligned** [TDM+87]. **self-approximate-optimal** [HSL+10]. **Self-Clocking** [HO75b, Sea57]. **Self-Directional** [GRT74]. **self-focusing** [Shi73]. **Self-Improving** [FE75]. **self-isolation** [Vor71]. **Self-Magnetic** [TH64]. **Self-Registering** [RWC80]. **self-service** [Tag09]. **Self-Synthesized** [Whe88]. **Self-Test** [EL83, HMP90, KS90, RB90, Sar91b]. **Self-testing** [OCB+90]. **Self-timed** [HBL+99, HBL+02]. **selfboot** [WMK20]. **seller** [Sav69]. **Semantic** [SW86, Alf89, SCC+15, WN92]. **Semantics** [FLDC86, Luc81, AR87, SS87a]. **SEMD** [ZHP+18]. **Semi** [OG80]. **Semi-Recessed** [OG80]. **Semiconducting** [Pea69]. **Semiconduction** [Swa57]. **Semiconductor** [Aic84, Att92, BHV85, BKP82, BCGS81, CDD82, CH84, FLCB85, FF86, HMOS81, HMO81, Han57, Har81, HCBA82, Hoh78, Hor62, KH88, KMCY82, LB85, Mar64b,

PH79, RTL69, RHM63, RWL81, Yu61, Aas70, AHW+99, BNT86, BRB+07, BCGS00, CNS+99, KM68, LFF90, LLF+92, LRMT95, LD72, Mar79, MCH+82, ORT+96, Pri73, Ros99, Tan96, TMF+08, Tib93, TWF90, Vin81, Vur70, WL73]. **semiconductor-related** [WL73]. **Semiconductors** [Adl70, Bar69, CFG64, ET70, Fri69, Gun64, Gun69, HM60, KN81, Leh64, Met70, Pri58b, SH69, THv70, Whi70, Zar57, Ano70b, BZ06b, Kit89, Koh98, Lew73, TWRW89]. **Semiempirical** [ZHP+18]. **semilinear** [Ger73]. **Semimetals** [CFG64, MM64]. **Semipermanent** [FMP61]. **SEMM** [MS96, Tan08]. **SEMM-2** [Tan08]. **Senior** [Don00, Pic18, San12]. **Sense** [Gra80]. **Sensed** [HF78, Pri94]. **Senses** [Bla88]. **Sensing** [Dav79, THL85, RBB+11, SKC+10]. **sensitive** [BCC+16, MC87, VNT16]. **Sensitivities** [Sta83]. **Sensitivity** [Bud67, GOJN77, Ho75a, VCP80, JC00, PTRC16, Sch71]. **Sensitometry** [SSL73]. **Sensor** [Ber76b, SvNH13, Vin81, WP11, RBB+11]. **Sensors** [KW76, Ibe03]. **sensory** [Mey81]. **sentence** [AKB+17, MMUS88]. **sentences** [VPD88]. **separated** [FW67]. **separating** [Bar82]. **Separation** [FL74, Pli66, TC63]. **SEQUEL** [CAE+76]. **Sequence** [Eas86, Fra70, Bir01, FRPG01, Goz94, Mas97]. **Sequence-State** [Fra70]. **Sequences** [BBD63, Mil83, LS73, Ris72]. **Sequential** [But88a, Cha75b, Eic65, Jel69, LS77, WT77]. **Serial** [KSW74, Zab79, EG00, ESW+95, FMP+03, JMP96]. **Series** [But88a, LS76b, BFRT13, OOL+12, Yet89]. **Server** [CP99, Cha75b, Cho75, DSM+99, Des02, DGL+97, ECD+99, RHM+99, SC75, SSM97, SCC+97, SWC+97, SG99, VLT+12, WMH+97, BIK+05, CRM02, GWB+17, Gre97, GW18, IFB+11, Kum98, LRV+09, NCM+01, SA98, SN02, SKS+11, SBC+12, WHK+09, WNW+10, ABB+91, Kis03]. **Server-class** [VLT+12]. **Servers** [RGP+97, AAM+07, BBK+16, BEKK00, FKK+03, KPT+02, KEL+00, Moo72, NMH+07, PGS+98, ABC+99b]. **Service** [Ada84, DJL+16, RBL+18, SBD+10, Tag09, ABD+16, BNN+09, BNSG09, BGK62, EBH+16, HRF+17, HRS07, Irv91, JQB+09, KJS09, KL97, KSB07, LRV+09, MBT19, MWL+14, SS82, SIKdL16, VWE02, VMS+14, BBD+17]. **Serviceability** [CMPR64, HCTS81, CAK+15, FCS+04]. **Services** [BR17, GRB+16, Hau96, Pul07, Tag09, Tak87, WC75, AAC+05, ABH+19, BB09, DMG+17, Elg11, GLM+96, HSS+10, ISV16, KFH+06, KMM+16, KAA+18, LRV+09, RP14, RWB+10, RDL19, ST17, TOKN18, VSS+09, VRA+09, WAB+09, Yar12, CJJ+16, ODA+08, UDP+12]. **Servo** [CD78, Hoa61, Osw74, Hoa00, Ono93]. **Servo-Access** [Hoa61, Hoa00]. **Set** [Bry75, CCM65, Gha75a, Ser82, VBE94, Mic72]. **Sets** [Eas86, DH03]. **Several** [BMS80, Cas60]. **severe** [TPC+13]. **sexiphenyl** [HKvG+11]. **Shallow** [FPS66, PF66, TDM+87, Tit63]. **Shannon** [Koc59]. **Shape** [WTS+11, GSAP17]. **shape-selective** [GSAP17]. **shaped** [AG72]. **shapers** [BH95]. **shapes** [Oht95]. **Shaping** [EKR87]. **Shared** [Cve87a, GHW70, GA84, MBJ+97, SSL73, Ano71, AUW+09, Lat73, Rei69]. **Shared-cache** [MBJ+97]. **Shared-Memory** [Cve87a]. **Sharing** [Bar73, Chi60a, Con58, Con60, Mar59, SAB+07, Cre81, FN95, FL69, Gra71]. **Shark** [Has98]. **Shear** [CS65a]. **Sheaths** [Pen79]. **Sheet** [Fie65]. **Shells** [BGT74]. **shelves** [MHR+15]. **Shenzhen** [CXZ+17]. **Shewhart** [Yas85]. **Shielded** [CPL+74]. **Shielding** [Spr63, Yan71]. **Shift** [BTW62, CT76, Fuj92, Gus76a, Gus76b]. **Shift-Register** [CT76, Gus76a, Gus76b]. **Shifts** [SAL63, TY64, ZZ69]. **Shock**

[BS69, Lan60, FSG+73, PL73]. **shocks** [MM75b]. **shooting** [CP72]. **shop** [RP14]. **Short** [DY89, GAC85, Jam89, SL67, GWRS90, Shi73, SSB+12]. **Short-coherence-length** [DY89]. **Short-Term** [GAC85, SSB+12]. **Shortcut** [HT69]. **shortest** [HW72, HT69]. **Shubnikov** [Bro66]. **Shutter** [COC61]. **Shuttle** [Skl76]. **Si** [GDR70, CFH64, Jon65, KG80, KEJ87, KACS95, LFC95, Mey90, Mey00a, Pan78, Pes71, PRY65, RF78, SSFF11, Tu90, WTS+11]. **Si-Fe** [Pes71]. **Si-Rich** [KEJ87]. **Si-SiO** [KG80]. **Si/SiGe** [LFC95]. **SiC** [SHTP11]. **Side** [Sha58b, MY65]. **Sideband** [CDH64]. **Sierra** [Ano20f, BBE+20, DRB+20, Lie20, SGS+20, TTM+20]. **SiGe** [DAC+03, FMP+03, HNS+03, JGD+08, LFC95]. **Sigma** [OB09]. **Signal** [Ber85, Coo82, DR82, GCPVG85, HW87, JH80, PSH80, Shi85, TT75, Tsu80, UMK+85, Bra68, Cha88, DKR+90, Mey00b, MP82, MZS+03, PAZ72, SPR+95, VWPB90]. **signal-processing** [SPR+95]. **Signals** [Cha67, KLS66, Mul67, VSF65, Boh73, CN71, Hei90]. **Signature** [HL77, Lew80, Lew83, DWW90]. **significance** [TR77]. **Significant** [OO81]. **significantly** [BWB+20]. **Silicide** [KEJ87, TDM+87, Tu90]. **Silicides** [MCAW95]. **Silicon** [Ano06b, CSY79, CK79, CGN72, DO74, DJ70, DA77, FT64, FFH64, GK60, GBC65, HND+06, IJV19, JD66, JD67, Ker64, LL83, Leh64, Lev64, LD74, Lip92a, Mar64b, Mey00b, Moh70, Pet79, Pet80, Pli66, PK61, Rut64, SW98, SST+98, SCYK78, SBdF64, TY64, WKW60, YS64, ATW+08, BBH82, CG71, DFF+15, EB99, FMS+92, GI88, GOVC71, GBBM90, GLG+99, HC69, Hei90, Hes99, HST06, IFB+11, JGD+08, KMK68, KAB+05, KAD+08, KOT99, Lar80, MFPJ71, MPCF82, Ngu99, OR92, OS99, PW68, PSW+07, PM72, SAT+08, SRH+18, Tu90, WNV+02]. **silicon-based** [Ngu99]. **silicon-carrier** [ATW+08]. **Silicon-Dioxide** [Moh70]. **silicon-dioxide-based** [WNV+02]. **silicon-gate** [BBH82]. **silicon-on-insulator** [IFB+11, SRH+18]. **silicon-silicide** [Tu90]. **Silver** [JC63, MFS+11, WTS+11]. **SimAPI** [HKLM97]. **SIMD** [CBB+05, SKP+15]. **Similar** [Hau67]. **similarity** [FRPG01]. **Simple** [Dod63, GMT57a, GMT57b, Knu90, OG87, Emm97, Fre04, JL90]. **Simplex** [Dan60, Tom72]. **simplification** [MD12b, MBB+18]. **Simulate** [NM65]. **Simulated** [CCP85, DKN87]. **simulating** [Oht95, OIM+13]. **Simulation** [ADG+92a, BBHS84, BF69, CD78, DS65, EHHP67, GHP+85, GHKO57, GC81, HS85, HW81, Hui90, IS83a, IS83b, KGCS85, Kra81, KP80, LL83, LB85, LS75a, LS75b, LCH74, MJ64, MME+97, Par66, SBT87, Sti79, TGL+12, VSF65, AKRS04, ABM+01, BH11, BGL07, CH06, Dan66, DT08, DLJ+08, Duk93, EWBR09, ETWO08, GZE+05, HKLM97, Ham99, Hei80, JZ91, KL97, KKM02, KKB+09b, KWH+12, KLE71, LS77, NDM+04, PBC+06, PZGL91, SMP+04, SS82, Sta89a, SvBC+04, TMF+08, Tib93, Van97, VMG99]. **Simulation/evaluation** [MME+97]. **Simulations** [Cle81, EKS+04, BS91, CA01, DKA+05, ESHM95, FRE+08, HdTR06, PSP06, ZEH+08, ZHP+18]. **Simulator** [BHV85, ST75, BJW72, vBBE+02, LH84, SBP+03, TAE+07, CR84]. **Simultaneous** [Ano05c, Bre72, Sau81, ABB+15, Bra72a, LPPT86, MMM+05]. **Single** [BGR82, Boy60, BS64, Cam57, Dav77, Fre62, GRH+08, GMW80, Hal76, HCS80, LM85, LS64, Lik88, Mar60a, Mee67, MRG99, RBC78, RWC80, Wor06, BH89, CDM89, Cla03, CH82, DTH92, HMM82, MRH89, Tan08, WGS04]. **Single-Chip** [BGR82, Cla03, DTH92]. **Single-Crystal** [Boy60, Fre62, Mee67, BH89]. **Single-Cycle**

[RBC78]. **Single-domain** [Wor06]. **single-event-effect** [Tan08]. **Single-event-upset** [GRH+08]. **Single-Flux-Quantum** [GMW80]. **single-grain** [CDM89]. **Single-pass** [MRG99]. **Single-Step** [HCS80, CH82, HMM82]. **Single-Stylus** [LM85]. **singly** [Rat68]. **Singular** [FBHJ04, Rob67]. **Sinusoidal** [BF63]. **SiO** [CFH64, CL64, DYHS78, KG80, KLBP64, MJS70, MU77, OG80, RF78, SJ70, SARG80, YDHS78]. **SiON** [BGO03]. **SIP** [WNW+10]. **site** [RBB+02]. **sites** [Fre72]. **situ** [Ahn66, DR93, MFS+11, ODL+09, Ros00, Sek93]. **Situational** [BPG+16]. **Six** [CIE+03]. **Size** [FK60, Mer88, Seg62, Smi60, War63, AKKJ72, ALH95, Bou97, DDMS92, FS82, Hat72, Lam77b, Pes71, Yas07]. **size-biased** [Yas07]. **Sizes** [Bry75]. **Skin** [BSRG17, WWMS79]. **sky** [SJZ+15]. **Skylab** [CI76]. **Slabs** [CS65b, Mee67]. **SLAN** [BHP83]. **SLAN-4** [BHP83]. **SLDNF** [CHdTG92]. **Slider** [SM63, TT74, BCT89, BHHO59, Dec90, Gro59, Mic59]. **Slimming** [Dod63]. **slip** [EC71]. **slow** [Gra71]. **Slowdown** [CW77]. **SLT** [BA69, TS69]. **SM** [SKLC20]. **Small** [ABPS66, Bra68, FWW88, Gae79, Gef88, HLS81, Len58, Lew83, LBH+75, Sta89c, VRL10, BS71a, CCJH81, DKR12, Har71, Lew73]. **small-amplitude** [BS71a]. **Small-area** [Sta89c]. **Small-Computer** [Len58]. **Small-signal** [Bra68]. **smart** [Elg11, HSL+10, RWP16, TYSS19]. **Smarter** [ABD+14, CNP+15, DLN14, HPW11, Pal14, RS14, WP11, BDMN14, DGH+14, GMR10, GDLS14, HMP+11, JWW+11, SFH+16, SKC+10, YMR14, ZBG+10, HEH+10, Jen10, MVCW10, MI10]. **smectic** [CJ78a]. **SMoLCS** [AR87]. **SMS** [WZC+10]. **SMT** [Ano05c, MMM+05]. **SN** [SG77, HHA93, Hor98]. **Sn-Pb** [HHA93, Hor98]. **SNA** [FP83]. **SNC** [JSS13]. **SnTe** [CSE66, MDJ+70]. **SnTe-MnTe** [MDJ+70]. **SOA** [CFH+09]. **SoC** [DL02]. **Social** [BEJ+14, RDL19, BDMN14, DGH+14, EEM15, KSSC+13, MDMN10, RVT+13, SXW+13, YCJ+17]. **sockets** [BEE+02, CRM02, NMF10]. **sockets-based** [BEE+02]. **SoCs** [PZK+03]. **Soft** [BSK+08, MS96, SKK+08, ZS96, BH80, Del08, KCOW08, ORT+96, RBK+08, Sri96, Tan96, ZMM+96, ZCM+96, van89, MBB+01]. **Soft-error** [BSK+08, MS96, SKK+08, Sri96, ZMM+96]. **soft-magnetic** [van89]. **SoftRDMA** [NMF10]. **Software** [AFP+01, Ada84, BHP83, BBG+14, Car81, CBD+09, DR82, DOJ+14, FHL+14, KFW+14, LBC+14, MSV14, MP88b, Ohb84, SMC+14, SH84, Tay84, VMH+83, ABC+99b, AAB+14, ABB+03, AAS+14, AHH+14, BKN10, BFH10, BGJ+17, CHH+01, CDD+10, DYK10, GMR10, GLM+96, JWS+09, JML+18, KRD+14, KM20, LH03, Mar12, MOG+19, MP88a, OEN+16, Pig88, PAB+05, RP14, RIB+13, VRL10, VH81, WMK+07, WTT+14, WBT+10, WA15, DBC+06]. **Software-Cache** [VMH+83, VH81]. **SOI** [FAD+07, FCE+15, LBB+13, Nin02, PZK+03, Sha02]. **Solar** [BV78, CSY79, DHM75, HC78, PCDW78, SCYK78, KLHW16]. **Solar-Grade** [CSY79]. **Solder** [FHL+82, GLCW93, LCB93, Spr61, KLS+05, CGLL93, Cor93, Mah93, RBWH93]. **Soldering** [GS82a, SPP72]. **solders** [Hor98, KLS+05]. **Solid** [CGG+64, Chu82, DHSC64, DHSC00, Far87, Kuz70, LY83, PHCR81, SS61, WWK+87, Wyn64, BKB76, Moi91, Nii95]. **Solid-Burst** [Wyn64]. **Solid-State** [SS61, Nii95]. **Solidification** [CSY79]. **Solids** [BH79, Pri60, FGW81]. **SoLoMo** [CDL+14]. **Solomon** [Bla84a, Bla84b]. **Solubility** [BS77, MLSS84]. **soluble** [SPP72]. **Solution** [BDMW81, Bil70, BGT74, Bog79, CHBH85, CS65b, Dub72, FPS66, FK62, Her66,

HWC75, Kog74, Ku63, Luk75, PF66, Sau81, Sch84, SLLP64, VDG19, BSHM01, BBE+20, Bil72, BH80, CHG04, Dan66, KBA07, KRC68, Lee07, Mas97, MDN+18, Mic59, Sug59, VSS+09, Whi72]. **Solution-grown** [FPS66, PF66]. **Solutions** [Ano19i, BT78, Hau96, Kuz70, SLA+15, Swi62, Bra72a, DGH+14, DP13, DP68, FCP+05, HHA93, JKB+13, Jen10, Mir61, RBL+18, TTM+20]. **Solvation** [Cle81]. **Solvent** [Cle81]. **solvents** [Yan71]. **Solver** [Coo84]. **Solvers** [ET86]. **Solving** [ADST78a, Bre72, GR58, Tuc60b, ADST78b, Mic72, WYF+03]. **Somatosensory** [UC62]. **Some** [AF68, Ano59n, AFR62, BTH62, Bon64, BS71b, CK79, Coo62, FL67, FP83, GS70, Gor63, HBL62, Ins76, JN82, KT66, KLS66, Kol67, Kuh60, Laf80, Lei62, LR65b, Ode87, Poh86, Poh95, RK74, RP78, RS67, Rus04, RS59b, Sam59, Sam67, Sam00, SB64, Yas87, ZY72, Cra98, Emm97, FL89, GBBM90, Kit89, Lew75, Vie86, YHA71, Gro59, Lee07]. **SONET** [Cla03]. **SOP** [KAB+05]. **Sort** [Tod78a, TW85]. **sort-merge** [TW85]. **Sorter** [MTW83]. **sorting** [ZY72]. **Sound** [Adl64, Bei74, Pri65]. **Source** [GS80, Arc93, BBE+20, BCF+07, DSRC98, LH03, PAZ72, SR71, WSK+93]. **source-synchronous** [BCF+07]. **Source/Drain** [GS80]. **Sources** [MN67a, KBJ+18, LD72, SSY12]. **Space** [Che64, CC76b, HC69, HP84b, Hud76, Mag73, MS60a, San83b, Skl76, TY64, Nef90, SKC+10, Woo04]. **Space-Charge** [TY64]. **Space-Charge-Limited** [Mag73, MS60a, HC69]. **Space-Division** [HP84b]. **Spaceflight** [Jam81]. **spacetime** [Tof04]. **Spacing** [Cha73b, TT75]. **sparse** [Gup97, PS91, Tol97, Tom72]. **sparse-matrix** [Gup97, Tol97]. **Spatial** [Fan64, FF73, Ho66, Lan57, Lan88, Lan96, Lan00b, SGY+98, WPH69, YL98]. **spatially** [HdTR06]. **SPEC95** [CP97]. **Special** [Ano67u, PBCC12]. **Specific** [HKM+86, MDJ+70]. **Specification** [BHP83, LN79, MR87]. **specifications** [MS89]. **Specified** [Pat70]. **Specimens** [Keh65]. **Speckle** [AL76, Gab70]. **Spectra** [Bro62, Hua79, Jon70, MJJ69, SG64, WA79, WC69]. **Spectral** [BLLS79, HW81, Bar86, Bra72b, Tue68]. **spectro** [SA00]. **spectro-microscopy** [SA00]. **Spectrochemical** [ÅC64]. **Spectrometer** [Lev66, HHF69]. **Spectrometry** [SFD77, Spo94]. **spectromicroscopy** [CHL+11]. **spectrophotometric** [Gra69]. **spectroscopies** [FNRF89]. **Spectroscopy** [CW78, Gar86, GFHW82, KJ86, RF78, THv70, ARM+01, Hun71, JKG69, SKB+11, SF93, Sek93, SN98]. **Spectrum** [Wel61, Yet89]. **speculative** [OWG+13]. **Speech** [DFM+88, EKMW64, LJV+07, Mer88, BHP17, MC87, SP17, TOKN18]. **speech-based** [TOKN18]. **Speed** [AFR62, BHWZ63, CD78, Car60, CEY84, Dav82, DB76, Gre79, Har63, Hop59, KJMS67, LV67, Lew83, MM75a, MPST66, Pre66, Wei79, Woo75, ZL87, BJM+06, BCF+07, BGK+82, CNL+19, DKR+90, FXB+10, FMP+03, HVK+90, HDW+07, Ism00, KB06, Lin81, MKW+05, MPHC90, Nob95b, SGS+20, Tho70, Ung72, VW78, Wie90, ZG71]. **Speeds** [TW74]. **Spelling** [FZ88]. **Sphere** [NM65, Sat63, Dav69]. **spike** [TYM+14]. **Spin** [All00, Bro62, Haa70, Hor57, Mas62, Sun06, Was77, BZ06b, JWSP06, Kel89, Nes98, TFL+98]. **spin-dependent** [Nes98]. **Spin-disorder** [Haa70]. **Spin-polarized** [All00]. **spin-valve** [TFL+98]. **spinels** [Haa70]. **spines** [TMW+17]. **Spinning** [CSS83]. **Spintronics** [WCT06, ŽFE06]. **Splatter** [Zab77]. **Splines** [Ins76, Dim78]. **Split** [PK61]. **Split-p** [PK61]. **Spoken** [KT66, ARS+17]. **spread** [BMF+16]. **spring** [BW72]. **spring-driven** [BW72]. **Springs** [Hau67]. **Sputter** [CW78, MSG72, Ros99, JL90].

**sputter-deposition** [JL90]. **Sputter-etching** [MSG72]. **Sputtered** [Flu67, Log70, LMD70, MJS70, SK69, Jon72, MU77, Pen69]. **Sputtering** [CGHK77, KP79, KS79, KM70, Maz70, PDLM67, SJ70, KM00]. **SQL** [KBA07]. **SQL-based** [KBA07]. **Square** [Che72, HBC70, Jam89, MM83]. **Squares** [Cio86, Goz94]. **Squarylium** [Lew78b, Mer78]. **Squeezable** [Han86]. **SQUID** [KKT+95]. **Sr** [KBS+99, BEH+89, EHK+89]. **SRAM** [Fre96, MAB+03, PC07]. **Stability** [Blu79a, Bra64, CHBH85, CTT66, Gil79, GS84, HA00, Ode87, Pis74, van88, vv86b, Bra68, FGMPK05]. **Stabilization** [KLBP64]. **Stable** [Hut74, Gri04, LO72]. **Stack** [Jel69, BK75, CBV08, GGK+13, JSM+18, RIB+13, Shi72]. **stacked** [KBS+99]. **stacked-capacitor** [KBS+99]. **stacking** [DWA+08, SAT+08]. **stacks** [GNF06, OKH+02, SGS+09]. **staffing** [HRS07]. **Stage** [BT67, Kar74, BBS+03, Sch91]. **Staggered** [Bra94]. **Staging** [GLS74]. **Stand** [Don80]. **Stand-Alone** [Don80]. **Standard** [KBK+97, RS85, AHM+07, GHL+04, NFI+08, Cop94]. **Standard-cell-based** [KBK+97]. **standards** [HMP+11, RWP16, SP14, WP11]. **standards-based** [WP11]. **Start** [Mil83]. **Start-Up** [Mil83]. **State** [Bar80, CH84, Fra70, LY83, PHCR81, SS61, van73a, BD74, BGL+92, HBW70, Hun71, ILH03, KM73, Nii95, PL73, SBG+71]. **State-Of-The-Art** [CH84]. **Stateless** [VDO14]. **Statements** [MR87]. **States** [Ahu79, Erd88, Gar86, KJ86, Key61b, Lit62, CSH+89, HJS98, Rus04, Sho04, Swi62, WSCK17, Irv93]. **Static** [Cha62, Cor84, Mid62, CTT91]. **Stationary** [LS76b, Pai72, Boh73]. **Statistical** [BNW99, How89, HRS07, KMO64, LS76b, Osb93, Pri58b, TAR84, Yas87, BTWY92, Fer70, KSSC+13, Luh57]. **Statistics** [SAR81]. **Status** [SP90, Bar62, SKB+11]. **STB** [Kle64]. **Steadily** [Gun66b]. **Steady** [BGT74, BT78, ILH03, KM73, van73a, PL73, SBG+71]. **Steady-state** [ILH03]. **stealthy** [SJW+16]. **Steam** [DJ70, Pli66]. **Steel** [Keh65, DKRS07, Yan07]. **steelmaking** [LMHM96]. **steepest** [Lan66]. **Steering** [Wal57, GKMP04]. **Steiner** [Hal60]. **STEM** [UBK+88]. **Step** [HCS80, LM80, War63, CH82, Gla97, HMM82, SHL+20, SHTP11]. **Step-Size** [War63]. **stepper** [BDS+97]. **Stepping** [Fre67, BSSZ76]. **Steps** [KWB88, ABM88, GI88]. **stewardship** [OB09]. **STI** [SNA02]. **STI-to-PCI** [SNA02]. **stiff** [LO72]. **Stimulated** [BN63, SB64, SCHL66, SL66, SLHM67, SAL63]. **STM** [ARM+01, ALH95, CWC95, MPD86, RCH+86, Vie86]. **STM-excited** [ARM+01]. **STM/STS** [ALH95]. **Stochastic** [AP69, Ast67b, LS76a, PS86, el 69]. **stock** [Her72, NBF+16]. **stop** [ESS+20, Mer04]. **stopping** [LS77]. **Storage** [AKK+67, BF77, BGM+67, BM96, CT76, Cho74, Cio86, DR08, Eas86, Fal70, FB78, FC79, FW08, GLS67, GA84, GFHW82, Hoa61, JMP96, Kan74, Lom75, Lom76, Lom80, MS75, Mul74, Pat80, Pet57, Win70, van72, van73a, ABE+02, ADS72, AAB+14, ABB+12a, ABB+00b, BAB+18, BS03, BBC+08, Bro72, BKS+08, BGJ+17, CPT+08, CMR+90, CAC+13, CDC96, CHJ+18, DM03, EÖH10, FGH+06, GBJ+08, GAB+08, Gri69, GJ00, HKA+13, HYA03, Hoa00, HCK+05, ILH03, IS20, JL99, JS72, KAB+12, MDJV08, MTF+95, MA96, MC87, NFI+08, ODA+08, Okl03, OCT68, PSA+08, Pat89, Poh95, vdP72, RCFN+08, SGY+98, SLC09, SMC+14, SG94a, Sou96, Ste81, Sur15, TB00, Tue76, VDD+00, WSK+93, van73b]. **Storage-Channel** [Cio86]. **Storage-class** [FW08, BKS+08, Sur15]. **storage-hosted** [CPT+08]. **Store** [Ahu80, CM80, Has66, JT66, MPST66, SL76, BZ06a, MHR+15].

**Store-And-Forward** [SL76]. **Stored** [EKMW64]. **Stores** [TK64]. **Storing** [vv86a]. **STORK** [dTGHC92]. **Straight** [Tay79]. **Strain** [CGLL93, KS01, Seg62, Smi60, SST69, AAC+06, WGC93]. **Strategic** [Nun09, PKXK07, KRTN+12, RAR+14, WCK+07]. **Strategies** [CFL73, Her75, WN92, BBD+02, TGL+12, TKG89]. **Strategy** [DR08, MM82, CHG04, HKR+97, MAF+99, TFL82, WAB+05]. **Stream** [Bur75, HKA+13, SM71]. **streaming** [WLKS98, ZSY+13]. **Streams** [HAG+13, SS76, KCML13, VMAB18]. **Strength** [CM80, Keh65, Smi77, Cop94]. **Stress** [CS65a, CN79, CEHL78, FMS+92, Fre62, LR65a, SM62, Tan74, BBF+05, Cha69, Fuj92, HRS+95, Ibe03, You90]. **Stress-induced** [FMS+92, HRS+95]. **Stress-Insensitive** [LR65a]. **Stretch** [Buc62, Str62]. **stretching** [LC83]. **String** [Eas75, GS74, BW81b]. **Strings** [Eas78, KGT88]. **Strip** [ALL77, LC83]. **Stripes** [CH76]. **stripping** [HHA93]. **Strips** [DKAC67]. **Strong** [KT73, OYHSB14]. **Strongly** [FWW88]. **strontium** [Pen69]. **Structural** [SWF+09, Win70, ACM+89, Cor93]. **Structural-Information** [Win70]. **Structure** [Adl70, BW81a, BKM80a, BB60, CH74, DJ70, GSVE83, HK64, Lan86, McC64, MY67a, MY68, OHSP76, Slo66, SAL63, WTP64, AIH+98, BEK+02, CGH+17, CBB+04, DGL+97, EHLSW01, FNRF89, GOVC71, Haa70, Kit89, PS91, RQBW08, SNA02, TMS+01, Won90, YR91, ZVW+11, ZBL+72, van89]. **structure-prediction** [EHLSW01]. **Structured** [BBHS84, Cow87, KBP+12, MW82, Kel73, McN94, RK15]. **Structures** [CFG64, EP86, FFH64, FWW88, Ham78, Hoa58, KW83, Wei65, BGK+82, BFH+93, CJ78a, CPTW98, FLP90, FHPR01, Gri04, Gus03, HHB+89, HS71, KB06, Lud00, MMV+01, SLYR72, SHTP11, TMF+08, Tu90]. **Structuring** [Urs75]. **STS** [ALH95]. **student** [WA15]. **students** [ITS+15]. **studied** [Lud00, Ros00, SN98]. **Studies** [BC60c, BA69, Bru78, DHTW86, DA77, FL59, Lun79, MP67, Sam59, Sam67, SLHM67, Spo94, BEH+89, CSH+89, EHK+89, FNRF89, GDLS14, HMO81, HF91, JS00, LFC95, Mat95, MMV+01, Sam00, TWRW89]. **Study** [Ada80, BBS78, BP84, BFT79, BT84, CEHL78, CK63, Dic60, Fan61, FT77, Fuj92, Gha75b, Gre79, Hor62, HBR85, KW83, Lev77, Lye77, O'H78, PFS+70, Spe69, SS87b, TDM+87, Tri58, AO97, BGW91, BHHO59, CSW73, CWC95, CJ78a, DCC+17, DP68, Dus71, Gro59, HHA93, HBR86, KIF+89, LB07, Mic59, Okt69, QS67, RR69, SKK14, SF93, SXYP12, WLH+17, WS72, YTF+11]. **Stuffer** [Hel79]. **Stylus** [LM85]. **Styrene** [DS65]. **subassemblies** [TJHK03]. **Subclasses** [MD65]. **subdued** [Okt71]. **Subharmonic** [Net60, Las61]. **Subject** [Ano92h, Ano93f, Ano93g, Ano94t, Ano94u, Ano95l, Ano97j, Ano98l, Ano99i, Ano00j, Ano01o, Ano02b, Ano03b, Ano05d, Ano06d, Ano07b, Ano08c]. **subjected** [Bau72, KS01]. **Submicrometer** [CH76, TT75, BK76]. **Submicron** [JVP+90, TDM+87, BGK+82, EKTT90, FKOP90, RG90]. **Submicron-gate-length** [JVP+90]. **submodular** [DH03]. **submonolayer** [HKvG+11]. **Subnanosecond** [DB79, Dha68]. **subnetworks** [SS82]. **suboptimally** [Dur70]. **subpixel** [Pri94]. **Subroutines** [AC86, RV89]. **subscribe** [SCW10]. **subscripts** [HL72]. **Subsequent** [DJ70]. **subset** [Nob95b]. **subsidence** [Gam72]. **subsoil** [Gam72]. **substituted** [Sui75]. **Substrate** [Log70, MU77, ADG+92b, DKA+05, TKK+92]. **Substrates** [KM74, GSG+90, GWRS90, KFSZ92, LGBV17, SGS+09]. **Substructure** [KP63, MHS62]. **Subsurface** [Fre72]. **Subsystem**

[BS84a, CDG83, DSW63, FLS78, MTS84, Mil84, Pat85, WCB+86, AFFS98, BSK+08, BBC+12b, CBB+04, CCD+09, CW91, GCS+12, HBL+99, HBL+02, ICO71, JDBP10, MSB+04, MWS09, McN94, MLMP+12, MCG+15, OHK+07, OBB+05, OWG+13, SHR+09, SBC+02, WMB+15]. **Subsystems** [HPWW81, GBRJ05, LGF+03, SSD+15, WMK+07, WYTO04]. **subtraction** [CNH73]. **success** [DL02]. **Successes** [Lai08]. **successful** [vKCD+10]. **suicide** [VMAB18]. **suicide-related** [VMAB18]. **Suitable** [JH80, MS89]. **suite** [CP97, CM98]. **Sulfate** [Tri58]. **sulfonic** [HHA93]. **Sulfur** [BS77]. **Summary** [Gli69]. **Summit** [AHK+18, Ano20f, BBE+20, CFP20, Lie20, LSS+20, SGS+20, TTM+20, WSJ+19]. **Sums** [Dub83, MM83]. **Sunlight** [Hov78]. **Supercomputer** [MNR86, ABB+13, AAC+05, ADG+05, BGH+05, BBK+08, CNC+08, CBC+05, CHT+13, DLJ+08, EFR+05, Han20, Pic91, PBK96, TTM+20]. **Supercomputers** [Ano20f, BBE+20, Lie20, PZGL91, SGS+20]. **Superconducting** [AW62, AOR62, BBG60, CJT62, Col62, Cro57, Dou62, Dui59, EGS60, GL62, Jon60, JH80, KDBT60, Kro58, Kur57, Lit62, Mas62, Ree59, SM62, ACM+89, BPL+89, BEH+89, BH89, CSH+89, EHK+89, GSG+90, WSK+93]. **Superconductivity** [BTH62, Coo62, HBL62, Mar62, Mat62a, Men62, SSN+62, ABK89, Ano62e, Bar62, BCSE89, Eme89, Kat89, KIF+89, Pet89, Ano89]. **Superconductor** [DSSS64, Mei62, AC84]. **Superconductors** [GM62, Goo62, LeB62, Map62, Mor62, Tin62, DY89, FNRF89, FL89, Gou89, HHB+89, KC89, Kel89, Meh89, Mor89, Sch89, Var89]. **Superconformal** [MWEJ05]. **Supercurrent** [Gar57]. **Superimposed** [Coo62]. **Superlattice** [ET70, BA70, Pri73]. **superlattices** [MSG+01]. **Supermarket** [Bra80, DSW82]. **Superplastic** [Fie65, RK72]. **superscalar** [BGW+04]. **Supplier** [DKR12, ABH+19]. **supplies** [BR09b, Cov92]. **supply** [BBSW97, DKR12, GCFW07, NQ20, NNGV19, SKK14, SP14]. **supply-chain** [DKR12]. **supplying** [Yar12]. **Support** [DR82, AFP+01, ABC+99b, AYA14, AEH+04, BS06, BCR91, CGM+15a, CDG+10, DMG+17, DCC+17, DOJ+14, FGK+07, GDLS14, JWW+11, KBJ+18, KS90, KBK+97, LGW+15, LPMDG14, ST17, SKC09, TBS09, VWE02, VMS+14]. **Supported** [Ham78, HKvG+11]. **Supporting** [BHH19, DLW86, EEM15, Kum98]. **suppression** [Bus71]. **Surface** [AMGC86, AS78, ABM88, CFH64, DV64, DHTW86, DM64, FT64, Far87, GH86, Goo62, HBR85, KS66, Leh64, Mar64b, Mei62, Mor79, ODK+99, TY64, Tu90, WSW83, WS64, YS64, YAJ90, DR93, HBR86, LV94, MFPJ71, OS99, SRD94, SF93, TZZ+11]. **Surfaces** [Bru78, Chu82, CM74, Dem78, DJ75, DB76, FF86, GH86, HSM84, IM57, Jon65, Lud78, Pan78, PCDW78, Pol78, Pri60, Sch62a, Sou64, ALH95, BNT86, DF15, EM94, EC71, GI88, Kep75, KJSG+88, MSG72, RK72, SA00, SHTP11]. **surgery** [TFJ+96]. **Surplus** [El 74, Agi74]. **surprise** [SMSC14]. **Surveillance** [RMR94]. **Survey** [Hei76, IM57, Met70, Rue79, WET+10]. **Survival** [Bar75]. **Suspend** [HS82]. **Suspension** [CHBH85]. **Suspensions** [SH63]. **Sustainable** [YT16]. **SW** [KKS02]. **SW4** [PLS20]. **Sweep** [KST58]. **Sweep-Position** [KST58]. **sweeps** [EKR87]. **Swelling** [BP84]. **Swinging** [Hea76]. **Switch** [ABCR65, Con58, DWGC85, LV67, Mar59, PRY65, Sea58, BJM+06, Dha68, DMR+81, EB91, Eng03, GLOS92, HAMC+04]. **Switch-Type** [DWGC85]. **Switchable** [Rab69, RHC73]. **Switched** [Hop61]. **Switches** [Chi60a, Con60, Kar74, Pet79].

**Switching** [CP63, DC73a, DW58, DPW60, Die62, Eic65, HP84b, Kan74, KP59, Net60, Pea69, RTM65, Roe66, She59b, SLLP64, TW74, Thr65, Cor69, DCB77, DPW00, May60, Rey69, RR69, RW59, RHC73]. **Switching/Memory** [Pea69]. **switchover** [MWW+07]. **SXGA** [CAW+98, SS00]. **Syllog** [FGP+85]. **Symbol** [Kur87]. **Symbolic** [FLKA84, Sur69]. **Symmetric** [Dub72, Key61b, Ost84, PS86, Bra94, MSB+04, RSS91, Sho04]. **Symmetrical** [Wal57]. **Symmetrical-Transistor** [Wal57]. **Symmetries** [AS87, Bra94]. **Symmetry** [But88b, Pen88, Wee79, HM89]. **Symposium** [Ano70b]. **symptoms** [Pon17]. **Synchronization** [ARV64, Cha67, PR71, GHW+20, NG17]. **Synchronous** [Fra80a, BCF+07, CN71]. **Synchrotron** [JS00, Arc93]. **syndrome** [BC00]. **synergistic** [FAD+07]. **synergy** [JWS+09, NQ20]. **Syntax** [Mou86, Bro85]. **Syntax-Driven** [Mou86]. **Synthesis** [BMW83, BHD+05, Bud67, Chi60b, DJBT81, DBG+84, EKMW64, HP66, HO75b, Hud63, Kau81, May60, Rem67, WW75, BOS+95, Ber76a, CT06, DBG+00, DSW71, Gus76a, Gus76b, MSG+01, RW59, SKB+96, Wie76]. **Synthesized** [Whe88]. **Synthetic** [van77]. **Sysplex** [GHW+20, DP13, DEH+12, GPE99, RKW99, SKE+18]. **System** [ACG+87, AST67a, AEGP67, AS74, AHM+07, ABG+09, BEK+02, Bar75, BJS80, BBC+12a, BCF+07, BAV+09, BCD+85, BGM+67, BT67, BS84b, Bro78, Buc62, BDH76, CdLS92, Cha87, COC61, Cha74, Cha75b, CCD+09, CAC+13, CFH64, CDW75, CLOR87, CAD+09, Com83, CI76, CD85, CPZ63, CDH64, CW91, DFM+88, DTH92, DBG+84, DMWW77, Dav80, DR08, DGG+92, Del08, DMP59, DSW71, EHHP67, ELZ79, ELMR77, FLW78, FLKA84, Fle58, FLR77, FGK+07, FL67, FN71, FGM+83, GGRW91, GLP76, GL87, GRT74, GMT57a, GMT57b, Hai85, Haj91, Hal76, HDW+07, HY84, HTH+09, Hen68, Hoa61, Hop61, HP84b, JWS+09, Kan74, KST58, KKB+09b, KBG+09, Lat73, Leh78, LH57, LH00, Lev64, LS76b, LW77, Lin84, LBH+75, LN79, Luh58b, MWS09, MC09, MDJ+70, MPS77, MDR+07, May85, Maz70, MP61, MW82]. **System** [Mon82a, NHH91, OHK+07, PH79, PL83, PPS82, Pla76, PSW+07, Pri07, PS09, RHM+99, RFC+07, RH75, SWF+09, Sar91b, SHR+09, SKC09, Sea57, Sha58a, Shi85, SBDT+09, SY73, SV91, Sow84, SBC+12, Str62, SW67, SLP+20, TSNF88, Tay84, TAE+07, Tit61, Tod78b, TBB+09, TAR84, TSC91, TBS09, WMK+07, WLPL+80, Whe88, WHK+09, Wre83, WC75, Zab79, ZST+07, AHK+18, APRS16, AEZ84, AYA14, AKRS04, AUW+09, ADG+92b, ABD+18, ADH+07, ALS81, AHH+14, BCD+17, Bar78, Bar68, BHRS72, BBD+02, BMF+16, BMPS91, BSD+20, BNN+09, BKM+69, BBD+98, BC18, BH80, BKRF02, BBC+08, BCC+01, Bro72, BCR91, BMT+90, BGJ+17, CJ83, CP97, CTD+16, CDM92, Cor69, CBD+09, Cre81, DBG+00, DBB+02, DeM91, DMG+17, DT08, DBC+05, DCC+17, DAB+97, DGL+97, DEH+12, EGH+86, FKL+08, FW08, GBC+05, GDB16, Gra69]. **system** [Gra71, Gri69, Has98, HZG+16, Hoa00, HDK+11, HCG+13, JSS13, JDBP10, JML+18, JC00, JWW+11, KMC+11, KGT88, Kis96, KAB+05, KKM02, KCH+09, Kon69, KSB07, KTD20, KHZ+08, LNT08, LSF84, LSZ+10, LMPP69, MMS05, MBJ+97, MSB+04, Man90, Mat89, Mey81, Mol69, MTB+90, MVI+07, NCB03, OMA+96, OCT68, PMS+08, PBC+06, PR71, RAG11, RRMD17, Rei69, RBK+08, RMM20, RD12, RMM03, RIB+13, SGY+98, SMP+04, SG95, SMC+14, SKT+05, Sta75, Stu70, TW85, TMS98, TDF+02, Tib93, Tol97, TPF+91, VAB+05, VTC09, WZC+10, WMH+97, YAH+96, YG81, ADG+92a, ACG+86, ACF+80, ABB64, ABB00a, AHJ+57, Aus90, BLM+92, BGM90, BEM+92, BM84,

BGM+67, BBMP92, BRB92, BDS+97, Cal70, CMPR64, CMR+90, CTS+92, CDM92, CMW92, CDG83, Cov92, DHK+92, DGG+92, EGS+85, FL67, FAJ+94, GR92, GZM92, Gro90]. **System** [GFS71, Gum83, HHM70, HM90, HOWP92, KS90, KLM+91, Lip92b, Mar90, MHR90, OG90, Pad81, Pad83, Pat80, RB90, Sam64, SSW91, Sta90, War90, WD94, Wil85, WCW82, WCK+07]. **system-level** [RBK+08]. **system-on-a-chip** [BBD+02, DBB+02, NCB03]. **system-on-package** [KAB+05]. **system-wide** [KSB07]. **System/** [BGM+67, FL67]. **System/2000** [Wil85]. **System/3090** [SSW91]. **System/360** [AST67a, AEGP67, ABB64, ABB00a, Cal70, CMPR64, Pad81, Sam64]. **System/370** [ACG+87, FN71, ACG+86, CDG83, Gum83, Pad83, Sta90]. **System/390** [DTH92, KLM+91, CMW92, GR92]. **System/400** [BLM+92]. **System/6000** [Aus90, CMR+90, FAJ+94, HM90, Mar90, MHR90, War90, WD94, BGM90, Gro90, OG90, RB90]. **System/7** [HHM70]. **System/9000** [CW91, GGRW91, Haj91, Sar91b, SV91, TSC91, ADG+92a, BBMP92, BRB92, CTS+92, Cov92, DGG+92, GZM92, HOWP92, BEM+92, CDM92, DHK+92, Lip92b]. **Systematic** [SLZL18, WA79]. **Systematics** [UC62]. **systemic** [MBK+15]. **Systems** [Age04, Age05, AG06, Age08, Bal05, BHP83, CdLS92, CFL73, Cha75a, Cho75, CLW80, Cle81, CC76b, DFS98, DR08, Des02, Des04, DLW86, ES92, FGC92, GLOS92, Gha75b, GS74, GHK67, GA84, HW12, Hal60, HLS81, Hau67, HTH+09, HS82, Hov78, HCTS81, IS83b, Jam81, KP79, KSW74, Kob70, Kuh88, LS76a, Lei62, LD74, Nun09, OO81, Par66, Pen88, Pet76, Pri07, RK74, Roe66, Rot66b, SH57b, SH57c, SY92, SH84, Sur15, Swa60, TW62, Tay81, ZST+07, ABE+02, ABK89, AO97, AO01, AAB+16, Ano01c, AC84, AAB+05, AAM+07, AHHN11, BBMR19, BSJ+13, Bil72, BFH10, BK61, BHH03, BFG+99, BJ06a, BKP82, CSW73, CCJH81, CDC96, CDG+10, CMS85, DSS+92, Dur70, ESM16, EÖH10, Fer70, Fla91, FGH+06, FN95, FNY+10, GZM92, GM72, dTGHC92, Han20]. **systems** [HG14, IS83a, IMC+10, IJV19, Jee58, JL90, KBM+99, KL70b, KT70, Kob71, Koe18, KBC+03, LDJ+10, LQRS04, LJV+07, LRH+02, MLWC20, MDJV08, Mar12, MBF+07, MCH+82, MN97, Mos61, NAB+15, NAN+18, PLK09, PK88, PBK+09, PPG+01, PMW06, Pon17, PAB+05, QGT13, RQBW08, RFB+03, RH90, RW59, Sar91b, SRL+11, SAA+18, SPP72, SSMGD10, SBP+03, STW+08, SSN+15, SHL+20, SR19, SCW10, SDS+18, Ste01, SN15, SV92, TWX+10, Tue76, VAB+13, VLP+05, VVHL16, VLB+09, Wal86, WNW+10, ZHP+18, ABD+92, CNV+15, Pic18].

**T** [BCSE89, FNRF89, FL89, HHB+89, KC89, Kat89, Kel89, KIF+89, Meh89, Mor89, VAB+05]. **T1** [Irv91]. **T1-rate** [Irv91]. **T10** [NFI+08]. **Table** [Ano57w, Ano57x, Ano57y, Ano57z, Ano58r, Ano58s, Ano58t, Ano58u, Ano12l, Ano12i, Ano12j, Ano12k, Ano13c, Ano13d, Ano14k, Ano14l, Ano14m, Ano14n, Ano15l, Ano15i, Ano15j, Ano15k, Ano16e, Ano16f, Ano16g, Ano16h, Ano17d, Ano17e, Ano17f, Ano18e, Ano18f, Ano18g, Ano18h, Ano19k, Ano19l, Ano19m, Ano19n, Ano20i, Ano20g, Ano20h, Kin61, CGS61, Nob95b]. **table-based** [Nob95b]. **Tables** [Cle65b, MY67b, Mye72]. **tabulating** [KSH+08]. **tackle** [KM20]. **Tactile** [DWGC85]. **Tagging** [Tar63]. **tagline** [RAMD19]. **Tailoring** [Fer75, SRD94]. **Tails** [CCE+88]. **taking** [HST06]. **taming** [ZBBB17]. **tandem** [BCH+16]. **Tantalum** [SM62]. **Tape** [BBKW86, BS70, CDS+86, DM03, FT77, Gre79, HPWW81, Kis03, LS75b, Pat85, SH57b, SH57c, Sko58, WCB+86, ABB+08, Bau72, BP88, BE03, BS03, CIE+03, EÖH10, FCH70, HYA03,

ILH03, ICO71, Jaq03, Led71]. **tape-head** [Led71]. **tape-recording** [ABB+08]. **tapered** [GZM92]. **Tapes** [BTW62, CTT66, PH74, TW74, Voi65, BD74]. **targeted** [PSD+17]. **Task** [Kan74, BGH+05]. **tasks** [AKB+17, BHW+17, EBB+20, Sar91a]. **taxonomy** [CCF+10]. **TCAD** [LMW+01]. **TCNQ** [Lew78b, Mer78, SGT78]. **TCP** [Bou97, NMF10]. **TDI** [Sch91, WYS92]. **Te** [Sui75]. **Te-substituted** [Sui75]. **Teaching** [NBM+19, KdAC+15]. **teams** [DYK10, EEM15]. **Technical** [Ano57k, Ano57l, Ano57m, Ano57n, Ano58j, Ano58k, Ano58l, Ano58m, Ano59f, Ano59g, Ano59h, Ano59i, Ano60i, Ano60j, Ano60k, Ano60l, Ano61f, Ano61g, Ano61h, Ano61i, Ano62f, Ano62g, Ano62h, Ano63f, Ano63g, Ano63h, Ano63i, Ano66s, Ano66t, Ano66u, Ano66v, Ano66w, Ano66x, Ano67w, Ano67x, Ano67y, Ano67z, Ano67v, Ano67-27, Bax58, DR08, Sam81, DCC+17, GHN04, Mar12]. **Technique** [BLLS79, HMW74, Han57, HWC75, MD65, Nus77, PH65, RHM63, RP66, Skl76, Wes78, van77, APOI92, EKTT90, FW67, HHA93, Hun71, KMK68, KO69a, LPPT86, Sit71]. **Techniques** [ÅC64, Aic84, Ber64, Bla59, Bla79, Bon64, BBH+67, BCRW82, Cha73b, GSVE83, Ken61a, Laf80, Llo67, LKL+81, MG62, Ode87, Par80, Smi57, SS87b, SSTF77, Tar63, Tro00b, Bag94, GRH+08, GCFW07, Hei80, JS00, KBF+92, LKFU05, MTF+95, McC69, NDM+04, OR92, Okt69, PBCC12, ST17, Sar91b, SWC+97, SLYR72, SPP+05, TGL+12, TG91, ZBBB17]. **Technological** [OO81]. **Technologies** [Att92, BNS15, CRH12, Cor18, GS80, Gon99, MT84, NNF15, Ser82, SW83, AEG+20, BGLM09, BKS+08, DAC+03, HNS+03, Law02, Rit13, Tag09, MVCW10]. **Technologist** [Mey03]. **Technology** [All81, Ana80, Ano19g, Ano19i, Ano20e, ABB+85, BSS82, Bal05, BMC86, BPS+96, BGK+80, BHWW77, BHWZ63, CKK+88, Che06, Che08, DHSC64, DHSC00, DR08, Des04, Don00, Eic18, Elm84, EHMW81, FHVZ80, Fle95, GHLW84, HW12, Hor93, Hor00, IK00, IBP+05, KGCS85, Kos15, KT84, Kua95, LMT84, LAG+84, LCB93, Lip92a, LSH79, Mat80, McG81, McG92, MTS84, Mey03, Mit94, NK81, Nun09, Pat18, PC85, PPS82, Pri07, RWL81, Sak79, STCR84, SGESR10, Tro80, Tsu80, vM66, ADG+95, ABB+00b, AFF96, ABD+92, BK76, BRB+01, BPS81, BWB+18, BWB+20, BE03, BCK+05, BKRF02, BR82, BGL+92, BL98, CDD82, Car81, CNG09, CIE+03, CDM92, CBC+18, CM90, CM00, CGN72, CCW+02, CCE+20, DWA+08, DEG+01, EK08, Eng03, FRS+18, FN71, FHSD06, FCE+15, FW08, GGRW91, GWRS90, HHSR96, HRC+08]. **technology** [How92, Isa00, IFB+11, JMM+96, KBM+99, KAB+05, KYY+08, KBC+03, Kuo92, Lar80, MAB+03, Mey00b, OR92, OB09, PSA+08, PMV15, PZK+03, PSW+07, PBK96, RBB+08, RB92, RGPP95, SHWK+90, SAT+08, ST17, SI09, Sha02, SvNH13, SPP97, SHSY90, SHSY00, Sta02, SRH+18, SKE+18, SHM+12, The00, TB00, VRA+09, WR00, WBS+18, YT16, AFP+01, SAPT01, TFR+01]. **Technology-migratable** [BPS+96]. **telco** [CDL+14]. **telecom** [MDMN10]. **telecommunications** [Mey00b, VAB+05]. **teleconferencing** [BBD+98]. **Telephone** [ABCR65, BM63, Hop61]. **Telephony** [Dav58]. **teleportation** [BHM04]. **teleported** [Per04]. **TelePOVM** [BHM04]. **Telescope** [Hud76]. **television** [AFFS98, SA98]. **TEM** [Wee72]. **Temperature** [Ano89, Bre60, BN63, CFH64, ESM16, GM62, GS84, GMT57a, GMT57b, Ker64, Lin67, Mee67, ODR70, Sie70, SST69, Swe62, van88, Bea90, CNC+95, Eme89, Fuj92, JWSP06, Kah71, Mey90, Mey00a, Okt69, Pai72, Pet89, SHWK+90, SN02, Sch89]. **Temperatures** [CS85, Cre58]. **template**

[TYSS19]. **temporal** [AEG+20]. **tenant** [KMM+16]. **Tennis** [BHP17]. **Tensor** [Ho66]. **terabyte** [CIE+03]. **Terascale** [FKL+08]. **Terephthalate** [Blu79a]. **Term** [FR60, GAC85, BBC+08, SSB+12]. **Terminal** [Cha75a, Sak79, BA69, Kon69]. **Terminals** [San83b, TL70]. **termination** [Lan66]. **Terms** [Esa62, Pli66]. **terrace** [SHTP11]. **Terrestrial** [ZS96, Zie96, Zie98]. **Test** [CW83, Doo83, EL80, EL83, GGKK96, OH74, Sch67, SW67, VTMB+90, BKP82, CPTW98, Fuj92, HBB+05, HMP90, HKR+97, KS90, KB06, LSF84, MTB+90, RB90, RH90, SWF+09, Sar91b, WLEF89, Won90]. **Test-Pattern** [EL80]. **testability** [Sta90]. **tester** [FKOP90]. **Testing** [BDWZ83, HO96, PW83, TC84, BTP+90, CAS+91, DDZ+07, FCH70, GWRS90, JPTW92, MKW+05, MPHC90, ORT+96, OCB+90, VWPB90, ZMM+96]. **tests** [Ibe03]. **Text** [Kin61, TSNF88, AAA+17, GGH+13, Irv89]. **text-oriented** [GGH+13]. **texts** [AC92]. **Textual** [CCFSZ12, MFL+12]. **TFT** [JPTW92, KSK98]. **TFT/LCD** [JPTW92, KSK98]. **th** [Kog59]. **Thallium** [GL62]. **Their** [Arm65, DG84, RS59a, Tro80, AO97, CCF+10, HK64, HA00, HBR85, HBR86, Jam89, Kum92, Lan60, Lud78, Sch96b]. **Theorem** [Dor60, Ode64, RS66, Shu94]. **theorems** [Mor73, Var19]. **Theoretical** [BT84, Coo62, FK62, Ken61b, Ku63, MP67, SB64, SM66, TC63, Wat60a, Wat60b, Gro59, Okt71, RR69]. **Theories** [Jon72, KJP11]. **Theory** [ARV64, Ast67b, BW81a, BBS78, BLR84, Bog79, DC73a, Dou62, FP73, Gar86, Gun69, HP63, Ho73, Hor57, IM57, Jon98, KO67, KP59, Lor70, LR65b, Mag73, Nes98, NB61a, Pip79, Pri59, Red57, RK75, RVV88, SS59a, Slo66, Tu75, Ung72, Ver88, Yas87, ZG65, Aas70, Bar62, Cha77, DCB77, EHLSW01, Gil60, GLS86, HBW70, KM73, MN03, MHI01, Mat03, May60, Mor73, Pai69, Pip81, Pri70, Riv87, Sch89, Str68, Wee72, WG19]. **Thermal** [BB82, CJT62, CN79, CS85, DS77, Jan69, Key65, Key70, Key71, LM85, LS64, Mah93, PC85, PW83, Rei66, San83a, SFD77, Str59, Twa85, WGC93, Bea90, BAV+09, BRB92, BSRM09, CGLL93, FGMPK05, GLCW93, HOWP92, Ibe03, ILH03, KLM+91, KS01, LD72, PHCM05, SCI05, VDP94, You90]. **Thermal-mechanical** [WGC93]. **thermal-to-plasma** [VDP94]. **Thermally** [Hem74, SGS+09, SST69]. **Thermally-Activated** [SST69]. **Thermionic** [VWJK11]. **Thermodynamic** [Jon60, Map62]. **Thermodynamics** [SI09, YHA71]. **Thermoelastic** [SMVK90]. **Thermoforming** [Fie65]. **Thermogravimetry** [DGB78]. **Thermomagnetic** [Hut74]. **Thermomechanical** [SJMBK08]. **thermoplastic** [ABR71]. **Thermostrictive** [KC66b]. **Thiacarbocyanine** [SCHL66]. **Thick** [JT66, MPST66]. **Thick-Film** [JT66]. **Thickness** [CC76a, PC64, HD73, PW68]. **Thin** [Bag94, BBG60, BBT79, Boy60, Cha62, CCH+96, CPTW98, DP59, DPW60, Die62, EGS60, FK60, Gar86, GM63, HM60, HCBA82, How92, JMM+96, JD67, Klo87, Kue90, KG63, Kum65, KM74, Lin67, McG92, MMT60, Mid62, Mid65, Mid66, MW67, Mid70b, NM65, Ove70, PGS+98, PDLM67, RSSS82, RK66, Ree59, SLK+97, Seg62, SBdF64, SSTF77, TY64, APOI92, AR98, BFH+93, CNS+99, DPW00, DM01, Fuj92, HBC+99, HRS+95, KC89, KFYU92, Kuo92, KOT99, LL98, LS72, MFPJ71, SHSY90, SHSY00, SGS+09, TSH92, TCCH98, Tho94, TTI98, TKK+92, WL73, WWA+98, You90, van89]. **Thin-Film** [HM60, HCBA82, JMM+96, PGS+98, SLK+97, AR98, DM01, Fuj92, HRS+95, KC89, SGS+09, Tho94, TKK+92, van89].

**Thin-Film-Transistor** [McG92, CPTW98, How92, APOI92, KFYU92, Kuo92, KOT99, LL98, TCCH98, TTI98, WWA+98]. **thin-film-transistor-driven** [TSH92]. **Thin-film-transistor/liquid** [How92, APOI92]. **Thin-Layer** [Kue90]. **thin-line** [BFH+93]. **Things** [JS14]. **Thinking** [EMM+18]. **Thomas** [TFJ+96, WH94]. **THOR** [TWX+10]. **thoughts** [Poh95]. **thousand** [VDD+00]. **thread** [SKSP06]. **Threat** [WTT+14, HJW+16]. **threats** [CLH+16]. **Three** [AW76, BJS80, BMPS91, BRR79, CW85, Cov92, Far83, FHL+82, Gro76, HF78, Kar74, KAD+08, KW83, Sav70, TLS+06, Wym57, vKCD+10, ABG+95, Ano62d, Ano63e, BKB76, BS91, DSW71, MS89, Nef90, Sho04, Sto91, Tu90]. **Three-Beam** [BJS80]. **three-body** [BKB76]. **Three-Dimensional** [AW76, BRR79, CW85, Far83, Gro76, KW83, Wym57, BMPS91, KAD+08, TLS+06, ABG+95, BS91, MS89, Nef90, Sto91, Tu90]. **Three-Level** [FHL+82, DSW71]. **Three-loop** [Cov92]. **Three-Stage** [Kar74]. **Threshold** [Las63, MG63b, WS75]. **Thresholding** [WR83, Bar68]. **Through-silicon** [JGD+08, ATW+08, SAT+08]. **Through-The-Case** [Keh65]. **Through-The-Pins** [PW83]. **throughput** [DSRC98, NNMJ01, PGN88]. **Thyratron** [KK59]. **thyristor** [JS72]. **thyristors** [RR69]. **Ti** [HBL62]. **Ti-Mo** [HBL62]. **tickets** [AAA+17]. **Tiger** [Has98]. **tightly** [MDMN10, PBK+09]. **tile** [HM89]. **Time** [Bar73, BLLS79, BM68, BL86a, DR82, Esa62, GHW70, Gor65, Gri90, HLS81, Her75, Jam81, Laf80, MTW83, Net60, OO81, Ree69, SSL73, SY73, Sko58, Soh76, Thr65, Yet89, AKKJ72, ASR07, Ano71, Bev69, BFRT13, BISN+12, BL86b, CGM+15b, Coo90, Cre81, DSS+92, DL02, EGH+86, FN95, Fro71, FL69, Gra71, GHW+20, HKA+13, Kan15, Kar73, KZP03, KCH+09, LPMDG14, MDR+07, NMH+07, ODL+09, OOL+12, Osb93, PSD+17, Rei69, RR69, RMM03, RHC73, SMC+14, SSB+12]. **time-dependent** [AKKJ72]. **Time-Division** [Thr65]. **Time-Domain** [Gor65]. **time-of-day** [DSS+92]. **Time-optimal** [BM68]. **Time-Resolved** [BLLS79]. **time-series** [BFRT13, OOL+12]. **Time-Shared** [GHW70, SSL73, Ano71, Rei69]. **Time-Sharing** [Bar73, Cre81, FN95, FL69, Gra71]. **timed** [HBL+99, HBL+02]. **TIMEDIAG** [Wil97]. **TIMEDIAG/GENRAND** [Wil97]. **timers** [Mat98]. **Times** [Cha75a, FS88, Her65, Str81, BGK62, SS82]. **Timing** [HSC82, TAR84, BS95, BHD+05, MTB+90]. **Tin** [KDBT60, KT84, SM62]. **TiO** [KBS+99, CKG+99]. **Tips** [Fin86, Dus71, VDD+00]. **Tires** [SKK14]. **tissue** [PSP06]. **tissue-patterning** [PSP06]. **Titanate** [Cam57, DH57, Pen69]. **Titanium** [CKG+99, TDM+87]. **Tl** [BPL+89]. **Tl-Ca-Ba-Cu-O** [BPL+89]. **TOBEY** [Bla94]. **Today** [KGCS85]. **toggle** [Wor06]. **Token** [BS85, Str83, OCB+90]. **Token-Access** [Str83]. **Token-Passing** [BS85]. **token-ring** [OCB+90]. **Tolerance** [PL83, CTS+92, NBF+16, Sch96a, SG99, Sta89b, Sta89c, TSC91]. **tolerances** [SJ89]. **tolerancing** [JS89, SJ89]. **Tolerant** [Aic84, Com83, BKRF02, Cov92, SHL+20, CR84]. **Tomographic** [PL81]. **Tone** [MN67a, HHSW01]. **Tool** [Elm84, ABL+84, ACM01, Bal91, BDS+97, GHP+93, Jee58, Osb93, PS91, SLC+97, SPS+06, TWX+10]. **toolkit** [BDH+19, KKL+14, MD12b]. **Tools** [KGCS85, IBM13c, BH11, BDHH+09, DBB+02, MLWC20, MSW+05, Moi91, Tan08]. **Top** [Tod78b, Man90, SON+91]. **TOP-1** [SON+91]. **top-down** [Man90]. **Topic** [Ano93h]. **Topical** [MT84]. **topography** [HS71, Seg68]. **Topological**

[Gun69, NS92, VLKW14, Aas70, RW59]. **topologies** [ST89]. **Topology** [Kuh60, Dic91, MWL+14]. **Torque** [Abb66]. **Torsional** [Pet80, Sat63]. **torus** [ABC+05, Adl87]. **TOSCA** [BBG+14]. **total** [Rab69]. **Touchless** [SIKdL16]. **Toxicity** [RL70]. **Trace** [Hei94, BGW91, SLC+97, BCCK92]. **Trace-directed** [Hei94]. **trace-driven** [BGW91]. **traceability** [LZZ+16]. **Traces** [FR60, APRS16, HHR99]. **Tracing** [BDHH+09, WNBP91]. **Track** [Hoa61, KMH82, Hoa00]. **Track-Density** [Hoa61, Hoa00]. **tracking** [RSS+15, RMR94]. **Tradeoff** [BDMW81]. **traditional** [HG14, SNP06]. **Traffic** [Cha67, HF91, Kar74, BSY+15, OIM+13]. **training** [CGM+15a, CFP20]. **Trajectories** [BJ67, Lev66, Tay79, CPvR00]. **Transaction** [Woo87, OYHSB14]. **Transactional** [LGW+15, OWG+13]. **Transactions** [AGH+16]. **transceivers** [TJHK03]. **transcription** [HKD06]. **Transducer** [Abb66, BCRT74, Bra75, TT75]. **Transfer** [CH74, CS85, FB78, Gom86, Gra80, Hud63, Kau81, Lik88, PC85, Rem67, Roe66, Sch62a, SS78, Sea57, Twa85, Bou97, DH69, DG93, HCL72, IMC+10, Led71, MKJM93, PMS+08, RK72, Sun06, Var89]. **Transform** [AC86, Bla79, Dan66, Har71, Kri82, Mas97, Bra94, Kri82]. **Transformation** [BNS15, FL76, MLWC20, NNF15, SR63, CRH12, CDS+19, HMP+11, KRTN+12, MBB+20, OB09, Sha12, UDP+12, Vay12, WBT+10, San12]. **Transformations** [DJBT81, DDDKW12, Ros00, Sar97]. **Transformer** [TK64]. **Transforming** [GAB+08, SHM+12, WAB+09]. **Transforms** [AS87, Coo82, Nus76b, Nus77, Lew75, Nus76a, NQ78]. **Transient** [AGAP63, BH82, Gru79, HS61, vS57, BGL66, SG71]. **Transients** [Loy79]. **Transistor** [CW85, Cre58, Dun57b, FFH64, Ken61a, KO69b, KO70, KGCS85, LV67, MM75a, McG92, Rut57, Str59, Wal57, vS57, BGL66, CPTW98, DMR+81, FAFL91, Fuj92, GAOD71, HRG80, HS71, KM73, KFYU92, Kuo92, KOT99, LL98, SLYR72, TSH92, TCCH98, TTI98, Won02, WWA+98, ZCK71]. **transistor/liquid** [APOI92, How92]. **Transistors** [DS70, Gau77b, Gau77a, Gil79, KMO64, Mag73, Rei66, RS59b, Wol70, CDS73, CDS00, Dha68, DM01, FLB+19, GOVC71, HF90, MTH71, TWF90]. **Transition** [AW62, AOR62, BBT60, BBG60, BFT79, Dui59, Fre70, KMB+08, Ree59, RM70, Tri58, TT74, SN98]. **transition-metal** [SN98]. **Transition-metal-oxide-based** [KMB+08]. **Transitions** [Cle81, DH57, LeB62, SM62, Whi70, MP81, VDP94]. **Translating** [MS89]. **Translation** [CERS76, KLS66]. **translational** [EKR87]. **Translator** [DO86]. **transliteration** [AFCB94]. **Transmission** [Ber64, CDH64, Cro70, God74, Gru79, GC81, GM63, HO75b, Hop59, Hop61, Kob70, Mul67, RP70, Roe66, SFH65, WF83, WC75, Bra68, CN71, DKR+90, DSRC98, HRW69, Hip70, Ho73, HS71, Irv91, Lan60, Mel60b, MHK+11, PR71, RWP16, Ros00, Tho70, TTI98, Wee72]. **Transmission-Line** [Ber64, Wee72]. **Transmitter** [Sha58b]. **Transmitters** [CN74]. **Transparent** [DO74, PC64]. **transparently** [Irv01]. **Transport** [BS64, FWW88, FP83, Fre70, HK64, Kle64, MNR86, NBRB70, Pen88, Pri73, Sch62a, Tof88, WCB+86, Von70, AF99, ALH95, BZ06b, CP72, KLE71, LG88, LDSA02, RT99]. **transportation** [BSY+15, BCE+07]. **Transverse** [Mag73]. **Transversely** [Che64, CS65a]. **Trap** [Boe69]. **Trap-Controlled** [Boe69]. **Trapped** [Cro57, DYHS78, RRB+01]. **Trapped-Flux** [Cro57]. **trapping** [Shi73]. **Traps** [YDHS78, RG90]. **trauma** [FSG+73]. **Travel** [DWGC85]. **Traveling** [HHJW84, Ray69]. **traveling-salesman** [Ray69]. **Travelling** [Gun66b]. **Traversal**

[BL86a, BL86b]. **Treasury** [HS14]. **treating** [Lei61]. **Treatment** [Jon60, MD12a, OMA+96]. **Tree** [HY84, CHG04, LT95]. **Trees** [Luk74, Rio60, Rot60a, Ris73, RW59, Rot60b]. **Trefftz** [BS72]. **Trends** [GGK+13, LAG+84]. **Tri** [Tri58]. **Tri-Glycine** [Tri58]. **triangulation** [Kep75]. **triazine** [GA88]. **trigonometric** [Fil70]. **Trihydride** [Pan78]. **Trimmed** [Far87]. **Trimmed-Surface** [Far87]. **triplate** [HRW69]. **Triple** [Hal60, LV62, CJM96]. **Triple-Modular** [LV62]. **triplet** [Hun71]. **trouble** [RWB+10]. **Troubleshooting** [CFP20, MWX+17]. **True** [LBB+13, AKE+92]. **TrueNorth** [MYKK+17]. **trust** [ABH+19]. **trustable** [SR19]. **Trusted** [BCG+09]. **TTL** [DTTK95]. **TTL-compatible** [DTTK95]. **Tube** [LD74]. **Tubes** [HMR82]. **tunable** [HDK+11]. **Tungstate** [MVB62]. **Tungsten** [KEJ87, PCDW78, VWJK11, YAJ90]. **Tuning** [Log70, SHCS05, AAB+10]. **Tunnel** [AFR62, BKM80a, BMWL80, CSE66, CPZ63, DPR86, Esa62, Gef88, IBC64, Lik88, Mar60b, MT64, NM62, Rut64, Ano06c, BC00, GP06a, JWSP06, Mos61]. **Tunnel-Diode** [AFR62]. **Tunnel-Diode-Coupled** [MT64]. **Tunnel-Distance** [DPR86]. **Tunneling** [AMGC86, APS86, Ano86c, BMC86, BL86a, But88a, CW86, CP86, DHTW86, EBd+86, FF86, Fin86, FS88, Gar86, GH86, Gom86, Han86, HBR85, KJ86, KWB88, Lan86, Poh86, PR59b, SB86, SSN+62, THv70, WKB+86, vv86b, BNT86, BR00, BL86b, Dür94, HBR86, LBT99, Sto91]. **tunnelling** [ZG71]. **Tunnels** [Mar79]. **Turán** [MR72]. **turbulence** [BS91, FKL+08]. **turnaround** [ATW06]. **Tutorial** [Str83]. **tutoring** [SN15]. **TV** [CIJ+10]. **Twisted** [HL83, LJ92]. **Twisted-Pair** [HL83]. **Twitter** [MNWH20, SPB+17, VMAB18]. **Two** [Ano60h, BBH+67, BH79, Cal81, CA84, FL59, GON+06, Gar64, Gau77a, GHP+85, Hau67, HA58, KO69b, KO70, Le 62, LC80, Loy79, OHM+85, Pat89, RS67, Rut57, She59a, Sta67, TSC91, WRG99, Zwe65, Ano66g, Ano66h, Ano66i, Ano67j, Ano67k, Ano67l, Ano67m, Boh73, BS91, Fra89, Gla97, Her72, KM68, LKY80, LGBV17, Nef90, RS66, Sav69, Sta73, Van97]. **Two-Collector** [Rut57]. **two-cycle** [Van97]. **Two-Degree-of-Freedom** [Hau67]. **Two-Dimensional** [Gau77a, GHP+85, KO69b, KO70, LC80, OHM+85, Zwe65, BS91, Her72, KM68]. **Two-level** [GON+06, Pat89]. **Two-Parameter** [FL59, Sta73]. **Two-pass** [WRG99]. **two-phased** [LGBV17]. **Two-Photon** [BH79, Gar64, Loy79]. **Two-Point** [RS67, RS66]. **Two-Queue** [Cal81]. **two-seller** [Sav69]. **two-step** [Gla97]. **two-user** [LKY80]. **Two-Way** [She59a]. **Type** [CEHL78, CW91, DWGC85, FP69, GGRW91, Haj91, KO69b, Kuz70, NHH91, PL79, Sar91b, SV91, TSC91, CTS+92, CH82, FA70, GSG+90, HMM82, MN67b, MKW+12, Vur70, WS72]. **type-piece** [WS72]. **typed** [Bei92]. **Types** [Cas60]. **Typewriter** [ABB+85, BR81, May85]. **Typing** [MKW+12].

**U** [KMC+11]. **U-Compare** [KMC+11]. **U.S.** [BHP17]. **UHV** [CW86]. **ULSI** [AHW+99, CNS+99]. **Ultra** [ZG71, RH90]. **ultra-high-frequency** [RH90]. **Ultra-high-speed** [ZG71]. **Ultrafast** [JWL82]. **ultrahigh** [Mey90, Mey00a, PSA+08]. **ultrahigh-density** [PSA+08]. **ultrahigh-vacuum** [Mey90]. **ultrahigh-vacuum/chemical** [Mey90]. **Ultralow** [HZB+06, MAB+03, GAOD71]. **ultralow-capacitance** [GAOD71]. **Ultralow-power** [MAB+03]. **Ultralow-voltage** [HZB+06]. **Ultrasmall**

[Lik88]. **Ultrasonic** [Mor62, PL81, CMR72, Dus71, Far82]. **Ultrathin** [Buc99a, Luc99, RF78, ABC+99a, GLG+99, LBT99, MFS+11]. **Umpire** [BMD+20]. **Unbounded** [Low74]. **unbuffered** [HF91]. **uncertainty** [KKL+14, WAC+16]. **Uncovering** [CLH+16, HvKI+09]. **under-resourced** [GHH+17]. **Underdamped** [RVV88]. **underdetermined** [PPG+01]. **Understanding** [AWK20, Emm97, HCG+13, LHS+17, LL98, MNWH20, YBF+14, FSG+73, KAF+16, Kit89, PSD+17]. **Underwater** [Bei74, HKA+13]. **Undetected** [HDBR08, SH57b, SH57c]. **undirected** [Ari69]. **unfolding** [ZEH+08]. **Uniaxial** [KG63, Kum65]. **Unification** [BKU88, Bei92]. **Unified** [CAE+76, FBG12, KKL+14, YSH12, CBD+09, MSV14, Nob95b, MBA+12]. **Uniform** [CT76, Gru79, Par60, SHTP11]. **Uninterpreted** [CA84]. **Uninterruptible** [Ste01]. **Unique** [Kum92, CCE+20]. **uniqueness** [Bil72]. **Unit** [FB78, GS82b, OG87, Ser82, WRLA57, AEGP67, BGAJ94, CBB+05, EV93, GWS+04, HFH94, HM90, JO96, MHR90, SSM97, SK99, Tho70]. **United** [Irv93]. **Units** [Tom67, ADS72, HSL+05, SG94a]. **universal** [Bla84a, Bla84b]. **universes** [GRS13]. **University** [Wie58, RCH+86]. **UNIX** [KPT+02]. **Unstable** [BFT79]. **unstructured** [AAA+17]. **unsupervised** [BSRG17]. **unusual** [PL20]. **UP-US** [Kuz70]. **UPC** [Bra80]. **update** [CNSS12]. **upgrade** [MVI+07, PVAK02]. **upon** [HP01]. **upset** [GRH+08]. **upsets** [HRC+08]. **Urban** [BH11, BMS+17, TPTH20]. **URL** [VNT16]. **usable** [BBK+16]. **usage** [CHM+16]. **Use** [Bla63, DW58, DB82, FL69, Hor62, Kon69, LV62, Mas97, Oht95, SSL73, Spr61, Swa57, WN92, BO69, BDHH+09, CWC95, FKK+03, MBF+13, MOG+19, MS05, Oka69, SPP72, Sha12, CASP91]. **Used** [BBT83, DWW90, ESA02, Gor63, HHSW01, HHA93, ILH03, KLS+05, RWM+05, Vie86]. **useful** [PK88]. **usefulness** [KLHW16]. **User** [CN18, Elm84, LG78, Laf80, ASR07, CJK+13, KBJ+18, LKY80, Pon17]. **User-Computer** [LG78, Laf80]. **User-generated** [CN18, KBJ+18]. **User-Reconfigurable** [Elm84]. **user-reported** [Pon17]. **users** [AKNR10, HHC+18, Kum98]. **Using** [ÅC64, AAF+09, BBMR19, Bar80, BBHS84, BHP17, Ber64, BDH83, BCH84, CD78, DG84, FF73, GSVE83, Gha75a, God74, GMS05, HMP+11, Hud63, Jel69, Kog57, Kog58b, Kog58a, Kog59, Kra81, LB85, Mar64a, MHR+15, MPST66, NGMW57, Nus76b, PLHJ70, RS85, RWC80, Rut59, Sam59, Sam67, Sch80, SS61, SLLP64, SW86, Spr63, Tod78a, Tod78b, Ull65, Voi65, VRA+09, YCJ+17, Zwe65, vS57, AKB+17, AGZ94b, AGZ94c, AEG+02, ADG+92b, Bag94, BDMN14, BNW99, BKRF02, BSRG17, CLP+13b, CDD+10, CFP20, CNC+08, CNP+15, CHG04, DKAC67, DB01, DR93, DAUS91, DMR+81, EHLSW01, FKL+08, Fla91, Gam72, GAJ+16, GHW+20, dTGHC92, Gus03, HMOS81, HMO81, HDK+11, IS20, JWSP06, KCML13, KLMV19, KWT+11, KACS95, LB07, LQRS04, LCL+98, MTF+95, MYKK+17, MHI01, Mat03, MN97, MNWH20, MKW+12]. **using** [MBK+15, NFS+17, NRA+07, Nii95, NSOO98, NBM+19, PL20, RRMD17, RG90, RG09, Sam00, SP17, SHCV19, SXW+13, SvNH13, TMS98, TYSS19, TAE+07, Tib93, Wil97, YBF+14, Yas07, YMR14]. **utilities** [SLK+16, TCP+16]. **utility** [KAF+16]. **utilization** [ADG+05, VLB+09]. **utilizing** [Vin81]. **UV** [Lin76].

**V** [CFG64, Fuj92, Gun64, HBB99, KSF90]. **V256** [JZ91, SWB+91]. **Vacuum** [Ahn66, Cas60, CP86, Ham78, O'H78, AF68,

Mey00a]. **Vacuum-Deposited** [Ahn66, O'H78, AF68]. **vacuum/chemical** [Mey90, Mey00a]. **Validation** [ST75, WZ78, Wes78, CBD+09, DSW71, SBP+03, IBM13c, ZHP+18]. **Valley** [Adl64]. **Value** [Lom80, Pim76, RS67, BS71b, CP72, Don69, HS11, Mat03, RM09, RS66, RMM03, WCK+07, UDP+12]. **Value-Oriented** [Lom80]. **valued** [Di 88, GA68]. **Values** [Lom76, NBM+19, OD17]. **Valve** [SW98, SST+98, SS00, TFL+98]. **valves** [CU98, RDD+98]. **VAMFO** [PW68]. **Vapor** [AO60, BC60b, BC60a, BC60c, GBC65, GM60, IM60, KEJ87, LD74, Mar60a, Mar60b, OMAW60, Bea90, CNC+95, CNS+99, GMP90, Mey90, Mey00a, Ngu99, Tis90, YAJ90]. **Vapor-Grown** [AO60, BC60b, BC60a, BC60c, IM60, OMAW60]. **Vapor-Phase** [GBC65, Tis90]. **vapour** [SR71]. **variability** [BFG+06]. **Variable** [AO60, FLCB85, Ins77, NW64, BGK62, Gus97, MRG99, OCR+98, PW68, WRG99]. **variable-bit-rate** [MRG99, WRG99]. **variable-reluctance** [OCR+98]. **Variables** [BJMO80, Lat73]. **Variance** [Hei80]. **Variation** [AW62, BBT60, Bre60, FB78, Lan88, Lan57, Lan96, Lan00b, WN92]. **Variational** [Hoh78]. **Variations** [Sta85b, Twa77]. **Various** [Fle58, LL83]. **Vatican** [MBC+96]. **vault** [SHL07]. **VCL** [VRA+09]. **VCSELs** [KACS95]. **VDL** [Luc81]. **Vector** [ACG+86, MNR86, OG87, SV91, ACG+87, Dic91, Gsc16, RSS91, SdS89, Tol97, AC86, GRSW86, RV89]. **vector-scalar** [Gsc16]. **Vectorgrams** [Pic87]. **Vectorization** [LKFU05, JN82]. **vectorized** [WNBP91]. **vectorizing** [SK86]. **Vectors** [OG87, CW58]. **vehicle** [DXZS13]. **vehicles** [KMO+14, MMJ69]. **Velocities** [Mid66]. **Velocity** [Adl64, Gun69, PW67, Aas70]. **Venice** [Gam72, SCRV78]. **VEPC** [GCPVG85]. **Verification** [CLOR87, CM98, DB69, HL77, Lew80, Lew83, MM82, Mon82a, WAB+05, BGW+04, BS95, GMS05, GBRJ05, HAMC+04, KKS02, KMA+20, KKM02, KWH+12, KBG+09, KAB+12, KSL95, LRH+02, RT99, SBF+97, SHR+09, SRL+11, SLA+15, SAA+18, Sou96, TAE+07, TFL82, Van97, VMG99, VLP+05, Wil97, WMH+97]. **verifying** [SNA02]. **Verity** [KSL95]. **Versatile** [DHSC64, DHSC00, FGC92, IJV19]. **Version** [Aus90, CMR+90, Kru84]. **versus** [HG14, Mat03, RS94, RC17, Swa60]. **Vertical** [Ost84]. **Vertically** [OKH+02]. **Very** [KJMS67, Mer88, Kum98, Pat73]. **Very-High-Speed** [KJMS67]. **Very-Large-Size-Dictionary** [Mer88]. **Vestigial** [CDH64]. **Vestigial-Sideband** [CDH64]. **VHF** [CCM65]. **VI** [CFG64]. **via** [BMF+16, CJH+15, CGLL93, GLCW93, GJ00, KMH82, MBT19, Nus76a, PSD+17, WNBP91]. **Vias** [LHW81, ATW+08, JGD+08, SAT+08]. **Vibrating** [BP75, Hau67, Rat68]. **vibration** [AL76]. **Vice** [Don00, Pic18, San12, Age04, Age05, Age08, Bal05, Che06, Che08, DR08, Des02, Des04, Mey03, Nun09, Pea09, Pri07, PS09, Pul07, Viv14]. **Vicinity** [FK62, Ku63, RE71]. **Victim** [FLMKS06]. **Victor** [SWB+91, JZ91]. **Video** [Bar68, BYY98, Kum98, BNW99, GYK99, MRG99, SA98, SCC+15, WLKS98]. **Video-server** [Kum98, SA98]. **View** [AMG+87, Coh87, CRDI07, LR97, MBK+15, Riv87]. **Virtual** [Bar75, CFL73, Dub72, Gha75b, Gum83, Kis03, LQRS04, AAM+07, BCG+09, Hat72, JWZ+09, KKM02, SSMGD10, Tue76, VDO14, JS89]. **Virtual-Memory** [Bar75]. **virtualization** [AAF+09, AAB+05, AA18, ABB+15, GKT17, MBA+12, SAB+07]. **virtualized** [BGS13]. **Viscoelastic** [Bau72, BP88]. **visibility** [BCH+16]. **vision** [AKG+19, Kis96, ODL+09]. **Visual** [ATC+15, BSY+15, BL15, Far91, FAFL91, LSW13, BHW+17, GSC12, Kan15,

KMGD19, SS15]. **Visualization** [DeM91, OOL+12, PMW06, WNBP91, Bal91, BBPS91, BMPS91, DAUS91, DRSM15, EWBR09, KN91a, KN91b, Moi91, MNWH20, PB89, PWFB91, Sto91, TG91, YBF+14]. **visualizations** [EEM15]. **Visualizing** [SZ91, WT91, YR91]. **visually** [AKNR10]. **Viterbi** [Nob95b]. **VLIW** [MME+97]. **VLSI** [AEZ84, ATL+88, BFH+93, CT82, CB85, Dan81, DeM91, ESHM95, Elm84, FKOP90, FHL+82, GRS87, GT80, GPL+92, HW87, LKL+81, MCAW95, ML82, MM82, MTW83, RBB+02, RH90, Sar91b, SG95, Sec95, SP90, SMD80, SCM+82, Sta89b, Sta89c, Sta90, SGC+87, TFL82, Tro80, VTMB+90]. **VM** [Bar78, Cre81]. **VM/370** [Bar78, Cre81]. **VMX** [EWT+07]. **Vocabulary** [DFM+88]. **vocational** [CGM+15a]. **Vocoder** [Rot66b]. **Voice** [GCPVG85, KLS66, Cor69, Nob95b]. **voice-band** [Nob95b]. **Voice-Excited** [GCPVG85]. **voiding** [HRS+95]. **VoIP** [ZCLS10]. **Vol** [MHI98, SW98]. **volcanic** [PB89]. **vols** [Ano93c]. **volt** [BBH+95, SWC+95]. **Voltage** [Gau77a, Gef88, MPD86, ON60, Rei66, SS78, WS75, BBH+95, HZB+06, NHKI03]. **Volume** [Ano92a, Ano92h, Ano94a, Ano94b, Ano94t, Ano94u, Ano95a, Ano95l, Ano97j, Ano98a, Ano98l, Ano99a, Ano99i, Ano02a, Ano02b, Ano03a, Ano03b, Ano05a, Ano05d, Ano06a, Ano06d, Ano07a, Ano07b, Ano08a, Ano08c, KN91b, SAT+08, Ano97a, Ano00a, Ano00j, Ano01a, Ano01o]. **voluntary** [LRNS17]. **Voronoi** [MS87, SN87]. **vs** [DG93]. **vulnerabilities** [GDB16].

**W** [FvGGM90, Sta75, Win78]. **Wafer** [KYY+08, Sta85b, GBB+05b]. **Wafer-level** [KYY+08]. **Wafers** [PH79, Sta87, Seg68]. **walk** [LT95, SM71]. **Wall** [DKAC67, Mid66, MW67, PW67, Slo66]. **Walls** [Fre79, MMT60]. **Walsh** [Hor76]. **Wang** [Ber76a, Wie76]. **WARM** [BR82]. **Warning** [Tod78b]. **washout** [AKKJ72]. **Waste** [VGC79, Fre72]. **Water** [LD74, BBMP92, BRB92, BR09b, DGG+92, ESM16, KEKP20, SPP72]. **water-cooled** [BBMP92, BRB92, DGG+92]. **water-soluble** [SPP72]. **Watson** [TFJ+96, WH94, ESI+12, Fer12, LPM+12, Lew12, MIL+18, MMB12, TGL+12, VPV+19]. **Wave** [Bay69, BT84, CS65b, GS82a, GM63, Mir60, WS64, HM89, Mir61, Tur69]. **Waveform** [JZ91]. **Waveform-relaxation** [JZ91]. **Waveforms** [Gaz78]. **wavefront** [LHJ69]. **Wavefunctions** [MY67b]. **waveguide** [BGO03]. **Wavelength** [HHM66, PSH80, RFK+97]. **Waves** [MM64, Lan60]. **Way** [She59a]. **WCDMA** [RFB+03]. **Wear** [BS71a, BS78, Bay78, CEHL78, Pol78, Ros78]. **wearable** [WSCK17]. **Weather** [Low78, TPC+13, TCP+16, TPTH20]. **weather-driven** [TPTH20]. **Weaver** [KRD+14]. **Web** [AKNR10, BBD+98, HSS+10, KFH+06, Oha10, VTC09]. **Web-delivered** [HSS+10]. **Web-enabled** [BBD+98]. **Wedekind** [Ber76a, Wie76]. **Weight** [Hsi70, Ris73]. **Weighted** [Smu57, WLEF89]. **welding** [CMR72]. **wellness** [CPCC18]. **Werner** [Str62]. **Western** [Sti79]. **Wet** [LV94]. **Wet-process** [LV94]. **WF** [YAJ90]. **Which** [Lew83, Ost84, Wyn64]. **while** [MWL+14, RMM03]. **White** [VG74, LS72]. **whole** [LQRS04]. **Whose** [Knu90]. **Wide** [MPD86, Gra69, KSB07, RBB+11]. **Wide-Range** [MPD86, Gra69]. **wideband** [PR71]. **Widely** [Bra72a, FW67]. **Width** [BKM80b, PL83]. **Widths** [FR60, SAL63]. **Wildfire** [NG17]. **wildland** [PKXK07]. **wildlife** [FNS+17]. **WiMAX** [CDD+10]. **window** [Bar86]. **Wire** [Don81, HL83, Lin84, MW80b, CH06, FXB+10, HHSR96]. **wire-speed** [FXB+10]. **Wireability** [KMH82]. **wired** [Mey00b]. **Wireless** [LSZ+10, CS03, JGD+08, KBC+03, Mey00b,

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**X** [Arc93, BM93, COC61, CNH73, CHL+11, Col69b, GHP+93, GC93, HS71, Hua79, JS00, KKS+73, KWT+11, LL93, RSL+70, RF78, SF93, See93, Seg68, SMVK90, SRO93, SS93, Spi93, SN98, SA00, War93, WSK+93, Wil93]. **X-PEEM** [CHL+11]. **X-ray** [Arc93, GHP+93, GC93, JS00, LL93, SF93, See93, SMVK90, SRO93, SS93, SA00, WSK+93, Wil93, COC61, Hua79, War93, BM93, CNH73, Col69b, HS71, KWT+11, RF78, Seg68, Spi93, SN98]. **X-Y** [KKS+73, RSL+70]. **X.21** [WZ78]. **Xe** [BKB76]. **XIVE** [AA18]. **XL** [Sar97]. **XMCD** [YTF+11].

**YBa** [BH89, CDM89, MRH89, vHv+89]. **YCu** [GSG+90]. **years** [BS03, Wil93]. **Yevick** [HBW70]. **Yield** [Mei83, SMD80, Sta84b, Sta86, CHL+11, Sta76, SCM+82, Sta89a, Sta00]. **Yields** [Doo83]. **YIG** [GDR70]. **YODA** [GBS+87]. **York** [SHC+72]. **Yorktown** [DO86]. **Young** [KRC68]. **Young-Laplace** [KRC68]. **youth** [YCJ+17].

**Z** [PS09, BBC+12a, CAC+13, Pri07, Sur15, BMM+20, CHJ+18, JSM+18, Mau18, Mau20, MBB+20, RBL+18, VCM+20, vBBE+02, PERW02, SKS+20, WMK+07, WCK+07]. **z/Architecture** [PERW02]. **z/CECSIM** [vBBE+02]. **z/OS** [SKS+20]. **z10** [ABG+09, BAV+09, CCD+09, CAD+09, HTH+09, JWS+09, KKB+09b, KBG+09, MWS09, MC09, SWF+09, SHR+09, SKC09, SBDT+09, TBB+09, TBS09, WHK+09]. **z13** [ACD+15, ABB+15, BHH+15, CCC+15, CAK+15, CJB+15, KDG15, Kos15, MCG+15, SKP+15, SLJ+15, TBG+15, TCK+15, WMB+15, WBW+15, WLB+15]. **z14** [SKE+18, BAB+18, BWB+18, BCS+18, EMM+18, Eic18, JSR+18, KDT18, MBB+18, MDN+18, WHC+18, WBS+18, ZDB+18]. **z15** [Ano20e, BWB+20, BBB+20, KMA+20, KTD20, SRJ+20, SKS+20, SLP+20, WLS+20, WMK20]. **z196** [DEH+12, SBC+12]. **z9** [RFC+07, ADH+07, AHM+07, BCF+07, DDZ+07, HDW+07, MDR+07, OHK+07, PSW+07, TAE+07, ZST+07]. **z900** [AFM+02, BEK+02, BHK+02, vBBE+02, CCW+02, GE02, HPW+02, HBL+02, KKS02, KKM02, PVAK02, SCS+02, SNA02, SAB+02, SBC+02, VWE02]. **z990** [CBB+04, AEH+04, BGW+04, FCS+04, GWS+04, GKMP04, KBF+04, PBC+04, SGK04, SPM04, SvBC+04, WBH+04]. **zAAPs** [WCK+07]. **Zachman** [RD12]. **zBX** [VOW+12]. **zEnterprise** [BBC+12b, GCS+12, GMS+12, KWH+12, YSH12, ABB+12a, ABB+12b, HW12, KAB+12, MLMP+12].

**Zephyr** [AKE+92]. **Zero** [Lan63, MTW83, Pat75, Pet77, BSRM09, HM90]. **zero-emission** [BSRM09]. **Zero-Modulation** [Pat75]. **Zero-Time** [MTW83]. **zHyperLink** [CHJ+18]. **Zigzag** [Fre79]. **zIIPs** [WCK+07]. **Zn** [CCD57, Tit63]. **ZnTe** [MC68]. **Zr** [HBL62]. **zSeries** [ABE+02, BBF+04, BEE+02, HF04, WYTO04].

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1. Table 5 (page 124):

   insert `k <-- 0` after assertion, and also delete `k <-- 0` from Table 6.

2. Table 9 (page 125):

   for `-1:USER!("");`
   substitute `-1:USER!("0");`

   and delete the comment.

3. Table 10 (page 125):

   for `fill(-k, "0")`
   substitute `fill(-k-1, "0")`

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