A Bibliography of Publications about the Fast Multipole Method

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Title word cross-reference

1 [TPKP12]. $15K$ [WGL+98]. 2
[GROZ04, HHL+94, Lab98, Liu86, ON08a, Ref94, VGZB09, WY05, WXQL08]. 3
[BDMN03b, BHR04, BHGR04, CDM98, DDL13, Dar02, GO98, JMC97, NW89, NH97, ON08a, PG94, Pta21, QCG15, Sar03, TCD17, WY05, WLL+07, WZC13, WCZ19, WZC17, WZC21a, WZC21b, iYNK02, YB01, ZY05]. $50/Mflop$ [WSB+97].

$7.3/Mflops$ [KFM99]. 3 [PG96b]. $h=0$

[DNS90]. $H^2$ [HXC21]. $K$ [MG95, CK95b]. $K(x,y) = K(x-y)$ [LX22]. $LU$ [MG07]. $R^n$

[CBN02]. $H_2$ [Bör23]. $N$ [Aar85, Ahu94, APG94, Ahu96, AGPS98, AAL+01, And99, Ano94a, Ano94c, ADB94, ADBGP99, Bag02, Bar86, BAPD96, BAAD+97, BADG00, BAD01, BS97, BN97, BOX00, Bor86, BDS07, BME90, BME93, BEM94, DH86, Dem95, Dem96a, Dem96b, DHM03, FRE+08, FM95, FM96, FQG+92, HTG02, HJ96, IFM09, IHM05, Kat89, KFM99, KFMT00, KMT94, LKM02, Liu94, MIES90, MTES94, MT95, MD12, MG05, MMC99, McD97, NMH06, Oku96, PGB05, Per99, PRL03, SWW94, Sal96, Sha06, SP99, Sin92, SHG95, SHT+95, SRK+12, TMES94, TWY06, TYON12, TYNO12, Ten98, TL14, WPM+02, WS92, WS93, WN14, WSL95, WSH+12, Xu95, Yin15, YF05, Ano94b, CK95a, CK95b, GKS94, GKS98, Gre90b, HNY+09, HN10, HS95, INS+20, KK95, Xue98]. $N \log N$

[AO10, DYP93, ADO11]. $\nu$ [SH07]. $O(\log_2 n)$

[JBL02]. $O(N)$
-Body
[Ano94b, CK95b, GKS94, KK95, BEM94, GKS98, Gre90b, HNY+99, HN90, HS95, 
INS 140, Xue98, AGL99, AAL+01, And99, 
ADB94, Bag02, BADG00, BS97, BN97, 
BOX00, FM96, HTG92, HI96, KFM99, 
KFMT00, SWW94, SH95, SHT+95, Ten98, 
WPM+02, WS93, Xu95, Yin15, YF05, Aar85, 
Alu94, APG94, Alu96, Ano94a, Ano94c, 
ADBGP99, Bar86, BADP96, BAAD+97, 
BAD01, BDO97, BME93, CK95a, 
DHS96, Dem95, Dem96a, Dem96b, DHM03, 
FRE+08, FM95, FQG+92, IFM09, IHH05, 
Kat89, KMT94, LMK02, Liu94, MIES90, 
MTES94, MT95, MGD05, MMC99, 
NM906, Oku96, PGB05, Per99, PRL03, 
Sal96, Sha06, SP99, Sin92, SRK+12, 
TME94, TWY06, TYO12, TYO12, 
TL14, WS92, WN14, WSL95, WSH+12].
- D [HHL+21, NH97, WZ915, BDMN03b, 
CDM98, DDL13, Dar92, DROZ04, GD93, 
JMC97, NW99, Pta21, Sar93, TPKP12, 
WY05, WZC19, WZC+20, WZC21a, 
YB01, ZY05]. - dimensional [Lab98].
- Matrices [Bar93]. - means [MG05].
- Nearest-Neighbors [CK95b]. - SNE 
[MPZ21].
1 [FMI+93, HFKM98, KMT94]. 1.349 
[MFK00]. 10 [WGL+98]. 10th [PA02]. 11th 
[Ano95b]. '12 [Hol12]. '12th [Ano96]. 131 
[Dac10]. 13th [Ano97a]. 14 [BEM94]. 15th 
[AG88, Rod89]. 1990s [Ano90]. 1992 
[Ano92, IEE92b]. 1993 [IEE93]. 1994 
[IEE94a, IEE94c]. 1996 [Ano97b, IEE96c]. 
19th [MBA97]. 1A [OMH+94].
2 [BCAD06, GA96b, MHI07, Spr05]. 2-D 
[GA96b]. 2-Pflops [MHI07]. 20.5Gflops 
[MD12]. 20.5Gflops/W [MD12]. 2003 
[ACM03, CHJN03]. 2009 [ERT12]. 2011 
[LCK11]. 2012 [Hol12]. 20th [Cip00]. 
240-Processor [WWF02]. 25th [Ano95a]. 
29.5 [MKFD02]. 2A [EIM+92]. 2D 
[CCZ97]. 2nd [HOST95, Mak93].
3 [OME+92]. 3-D [WY07a]. 3051-66 
[YB97]. 33rd [IEE92a]. 3D [LO96b].
4 [Ano94a, FM95, FM96, MTES94, MT95, 
TMES94]. 42 [HNY+99].
5 [KFM99, KFM96]. 512 [MHI07]. 
512-core [MHI07]. 512-Gflops [MHI07].
6 [MKF00, MKF01, MKFD02, MFKN03].
8 [MD12]. '88 [KK88]. 8th [BGPW00].

- '90 [IEE90]. '91 [WCI91]. '92 [IEE92b]. '93 
[IEE93]. '94 [IEE94c]. '94e [BEM94]. '96 
[ACM96]. 967 [MB16]. 98 [BGPW00].

= [Ano97b].
A-posteriori [XTH09]. above [GSC01].
Accelerate 
[CS98b, LSCM96, LMK02, TYO12].
Accelerated 
[BCL+92, EB96, SH07, 
WZC+17, WN14, AC17, BHE+94, BHER94, 
EB94, EG01, GD09, GODZ10, GAD13, 
Ham11, JH80, LCM07, MR07, QC15, 
Tak14, WLL+07, WVW01, ZD95].
Accelerating 
[GHRW98, MG09, WC94a].
Acceleration 
[CKE08, HZH+18, LCZ07, 
SWW99, VCM00, BK96, KCF+05, SGD+04].
accelerator 
[ATMK03, MD12].
accomplishments [Ano90].
Accuracy 
[CDCD97, DY98, CB90, GL96, JP89, 
RKRL22].
Accurate 
[SRPD06, AHLP93, Dac06, EG09a, EG13, 
YF97, IEE96a].
HHKP09, HHM19, ZGD+16]. achieves [WGL+98]. Achieving [SSF96]. ACM [IEE02, Kar95]. ACM/IEEE [Kar95, ACM97]. acoustic [AD05, BSL09, BN07, CWK08, GF06b, GF06a, HW10, TCW08, WJYO06, ZGD+16]. acoustic-structure [GF06b, GF06a]. acoustics [FPG05, OLL04]. Acta [Ise97]. Adaptation [McK96]. Adapted [NT96, NT94]. adaption [BLA05]. Adaptive [BT95, BSL09, BS97, BFO99, GE13, GP08, HEGH14, KK95, NFR93, PDL5, SHHG03, SHT+98, ZT07, AC17, BCP08, CGR08, CGR99, CHL06, CFR10, FOCB96, GY08, GL96, GCH+18, HJZ09, LCL+12, LB92a, LCM90, LCM13, PRL03, YBZ04, ZHPS10]. addition [HC08, KSC99]. address [HS95]. Advanced [HM86, WS95, dCGQS06, TY012]. Advances [BLA05, SM05]. advantage [Ano92]. Adventures [CDCD97]. affinities [KSS10]. AFMPB [LCHM10, LCHM13]. after [ZQSW94]. algebra [CB20].

Algebraic [Car09, YTK14, Fo08, PRT92]. Algorithm [AlI+99, BSL09, Bor86, BFO99, CDM98, CSMCxx, Den82, DD95, EB96, JM97, JMBC98, KK95, Lea92, LOR96a, MBS+00, MG11, MPA96, MPZ21, NFR93, OKF14, SLC96, SLC97, WC94b, W93, WN14, YZ09, ZB515, AR91, A99, AP99, AT+12, BH96, Bar86, BJW96, BS97, BCL+92, BP03, BOY94, B93, CGR98, CG04, CC13, CGR99, DRS96, EGHT97, EB94, EG08, EG09a, EG09b, Erg11, EG13, GH08, GDC08, GKD09, GR87, GR88b, HS08, HSA01, HYS21, HC10, HR98, INS+20, JMB09, KM00, KK16, KS98a, LM02, LDB96, LB91, LB92a, LB92b, LZL04, LQZ21, LHL08, LC09, LCQ4, LW+02, MG07, MG09, MCB07, NW98, NK94, NT09, OR89, OLLL03, OLL04, PLY05, PRL03, Rah96, RCW97, Sar03, ST02, SK04, Sud04, TCW08, TC09, WK18, WJYO06, WL96]. algorithm [WCL21, Xue98, YRGS13, YBZ04, Yin06, YB12, ZCG00, ZBS11, ZCL+98, ZB05, ZD05, Lea92, MB16].

Algorithms [AP94, AGPS98, Ano94c, ADBGP99, BF78, Bha97, BN97, Boy92a, CK95a, Ci99a, D500, DGR96, LCE+06, Liu94, MBS+00, MBS15, Pri94, Ten98, BCP08, BHE+94, BHER94, BM93, EBM94, DVM03, ES95, Gre94, K+96, Mak96, PRT92, Pel98, Win95, Yin09]. ALICE [HTG02]. All-to-All [HP95]. almost [FL13]. Alpha [WGL+98]. Alpha/Linux [WGL+98]. Alternative [AD05, CL91]. AMBER [DK93]. AMBERCUBE [DK93]. AMS [RSS96].

Analyse [Ano97b]. analyses [Ham11, WXY+08]. Analysis [AP99, AP00, BH89, ERT12, HAS92, Ho12, JMBC98, LCK11, ST10, VTG91, Ano97b, Car07, Car09, Dar00a, EG13, JMB09, JKCG08, KSC99, NH97, OC03, OLL04, Pel98, RC97, RSS96, SGD+04, S007, Sud04, W005, W07b, W07a]. Analytic [AD04, BSSF96a, LCD14, BSSF96b, DDL13].


Annual [Ano95b, Ano96, Ano97a, IEE92a, Mak93, PA02]. anomalies [ON09a].

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

anterepolation [Sor03]. Appendix [Ano90].

Application [LSCM96, L966, L96a, NH97, SG+04, TCD17, VOD08, WSW+95, DHM03, ESR01, GROZ04, HNO06, LWM+02, SGD+04, TCD20, Y98].

Applications [CK95b, CCKL90, OSW05, RSB19, BHER94, HNY+09, LGG+13, O07, ON08b, PD98, ZY05, dCGQS06, TDBE11].

Applied [BGPW00, HDG+15, RSS96, Ano95b, Ano96, Ano97a, BN07, JdR+18, MB05, OMC08].
Approach [AC94, SHMC97, WC94a, AHLP93, BWS+95, CB20, KAN95, KAN96, PGB05, SHM98, WJGHG96a, YS18].


B [Ano90]. balance [BAAD+97]. Balanced [PD89]. Balancing [SHT+95, Ten98, FG96, MG05, PGdS+15]. Baltimore [IEE96a, IEE02]. Banff [ERT12]. Barnes [AAL+01, Ano94b, BJWS96, BGLM05, GKS94, GKS98, INS+20, MPZ21, SHT+95, WSH+12, ZBS11, ZBS15]. barrier [WHG96b]. barycentric [LX23, WVK21]. Based [AAB+17, CD13, CCFG23, GSS98a, GSS00, MPPA96, YB01, AO10, BLA05, BN98, BHGR05, FMI+93, GROZ04, GKD09, GP08, HKP90, HLL08, HHL+21, HLL+18, KKLZ23, LM02, LDB96, LX3, Liu08, NN12, Sel22, Sn04, Tak14, WL96, WZC+20, WVK21, ZHPS11, ZGD+16]. bases [FBHJ04, TW03]. basis [BLA05, BL97, BN98, BCR01, Bu03, CB02, GH08, GDDC08, GD07a, LCZ07, Yin06]. BE [SGD+04]. Beach [IEE95]. Behaviour [ON09a]. Beltrami [SHMC97, SM97, SMC97]. BEM [Sel22, And08, BN07, FPG05, GF06b, GF06a, HKS05, MB05, NH97, Pta21, Tau03a, WYW05, XWT09, XTH09, XWY+08, hYtWbWL08, YBK+11, ZY05, ZGD+16]. BEM-FEM [MB05]. Beowulf [WWF02]. Best [Cip00]. Between [AAB+17, Pie93, CDM98, RŠZ09]. beyond [ZB14]. Biaisotropic [SHMC97, SHM98]. BIE [Liu08]. biharmonic [GD06]. billion [YBK+11]. binary [PD89]. binding [KSS10]. biomacromolecular [SKT94]. Biomolecular [SRPD06, YBK+11, GCH+18, KP08, LCM07, LCHM10, LCHM13, SKT93]. biomolecules [AO10, FGM11]. Biot [Ros06]. black [FD09, MFK00, WCLD21]. black-box [FD09, WCLD21]. BLAS [CFR08, CFR10]. Blob [DD05]. blobs [HM95]. block [CG04]. block-diagonal [CG04]. blocking [TSM16]. Blue [FRE+08]. BO12 [LB91]. board [ATMK03]. Bodies [BT95]. Body [AGPS98, AAL+01, And99, Ano94b, ADB94, Bag02, BADG00, BS97, BN97, BOX00, CK95b, FM96, GKS94, HP95, HTG02, HJ96, KMF99, KFMT00, KK95, Pie93, SWW94, SHG95, SHT+95, Ten98, WPM+02, WZC+17, WS93, Xu95, Yin15, YF05, Aar85, Ahu94, AP04, Ahu96, Ano94a, Ano94c, ADBGP99, App85, Bar86, BADP96, BAAD+97, BAD01, BDS07, BME90, BME93, BEM94, CK95a, DH86, Dem95, Dem96a, Dem96b, DHM03, EIM+92, EFT+93, FRE+08, FM95, FQG+92, GKS98].
body [WSH12, Xue98, ZBG15]. Bologna [Ano95a]. Boltzmann [BH03, LCHM10, LCHM13, WZC21b]. Book [Gav11]. Born [ADO11, HC10]. Boston [K96]. both [HNY09]. Boulevard [ACM99]. boundaries [Mil08]. Boundary [BH03, Bör23, BR93, Bre04, L396b, L96a, MBA97, OSW06b, SS07, Sel22, W9C17, WMOZ22, WSW95, AP03, Atk97, BSL09, Bes00, BWS95, BHR04, BHR04, Car06, Car07, CW97, CKW08, DMC20, Gas97, GBMN06, Gav11, GOS99, GP08, GD09, GODZ10, GAD13, Ham11, HHL21, KMC09, KCF05, LS05, LOSZ07a, LOSZ07b, LCQF18, LHL08, Lin95, Liu08, Lin09, LC94, Mil08, OSW05, OSW06a, Oi08, OKS09, ON08a, ON09a, ON09b, PN95, QCG15, RS20, R9S09, SGG94, Sat10, SKT93, Sin95, Tak14, TCD17, TCD20, TW03, Tau04, VGZB09, WY05, WY07b, WY07a, WSWL95, XJM08, Yin09, YNK02, YAO18, YAO20, YSM05, BR93].


Broadband [WJYO06, GD09]. Brownian [DHM03]. Building [TD09]. buried [ESRS01, GSC01]. Burton [Sel22].

C [BGLM05]. CA [B95, Ano95b, Ano96, Ano97a, Kar95, Wel91]. Calculate [BVW96, BV96b, BV96a, KMC09]. calculated [DM90, YAO18]. calculates [ATMK03]. Calculating [BFO99, DM90, LCHM10, LCHM13, SKT94].

Calculation [Deh02, HA17, NT96, BH86, BH03, FGM11, KKLZ23, LDB96, OLLL03, RCWY07].

Calculations [BGTT90, Ber95, CDG95, CDG95, CSS10, KS11, PNB94, AI95, CK95, KK16, KS98a, LCM07, PA14, SKT93, WH96a, WJGHG96b, WH96b].

Calderon [NN12]. California [ACM97, Rod89, Ful97, IEE95, PA02]. Canada [IEE97, HB93]. cancer [ES04]. Canonical [LCP93, KM00]. Capacitance [YB01, JC04, NW89]. capacitive [SGD94].

Cardinal [Boy92b]. Carlo [ESRS01].

Carrier [SB98]. Cartesian [CS95, CS98, HF92, HLL97, Le97, SH07].

Case [BGLM05, GROZ04, PPS95, PPS95].

Cauchy [CL12, LDC14]. CE2014 [MBS15].

cell [CC13, CWD08, DKG92a, DKG92c, G989, KN95, LM02, FL13].

cells [AYO20, DKG92c]. Center [ACM99, Hol12, IEE90, Kar95, Pan95, MFK90].


Charge [AC94, CC13, GYO8, KKLZ23, Kan15].

collapse [CC13]. charged [AB95, CPP93, KN95].

Charges [AC94, CDJ07, DC07].

Chebyshev [Boy92a, L95R92]. check [KR92].

Chem [Dac10]. Chemistry [ADG96, Mat95, SPS96, Les96].

Chennai [IEE98].

Chips [MH90]. Chiral [SM97, SM97, SHH98].

Christoffel [BT03].

City [Hol12, RSS96]. Clara [Ful97]. class [PA14].

classical [Gre94, Rok85]. close [ZD05].

closed [BHR04]. closest [CK95a].

Closet [SW94].

Cluster [PNB94, HN10, WGL95, YNS98].

clustering [GM05, SWJ95].

Clusters [ARB94, BP88, HL15, ZBS15, GIS98, GD05, Kon93].

Coarse [GB11, PA14].
coarse-grained [PA14]. Coarse-graining
[GB11]. coated [ZCG00]. COBE
[ZQSW94]. Code [ADB94, Bag02, BH89,
Bar90, BADG00, CDM98, CWA14, IFM09,
SLCL98a, SLCL98b, BADP96, BAAD+97,
BAD01, BCAD06, DMC20, Dub96, GY08,
GDK89, JdR+18, JKCGJ08, JP99, LWM+02,
PD89, PG94, Spr05, Wam99, WSH+12].
Codes [SWW94, WS+W95, NMH06, Pud16,
WSW+95]. Coecients
[GD03, Beb06, FST05, KS11]. Cold
[ZQSW94]. collective [BSvdG+94]. Collision
[BT95, WN14, JdR+18]. collisional
[TYON12]. Collisional
[JMBC98, AiIS+21, KM00]. Combining
[CDGS03, CDGS05, CWD08, DDL13, DM12,
FLZB97a, FLZB97b, GDDC08, PRT92,
ZB95]. Comment [KA96, WJGHG96a].
Comments [SWW94, WSW+95, NMH06, Pud16].
Computing
[KD99, LCP93, MT98, DDL13, DM12,
FLZB97a, FLZB97b, GDDC08, PRT92,
ZB95]. Comment [KA96, WJGHG96a].
Comments [SWW94, WSW+95, NMH06, Pud16].

D [HHL+21, NH97, WZC21b, BDMN03b, BHR04, BHGR04, CDM98, DDL13, Dar02, GROZ04, GP08, GD03, GA96b, JMC97, Lin08, NW99, ON08a, ON08b, PG94, Pta21, QCG15, RS94, Sar03, TCD17, TPK12, VGZB09, WYW05, WY05, WY07a, WLL+07, WXQL08, WZC+17, WZC19, WZC+20, WZC21a, iYNK02, YB01, ZY05]. Dame [IEE96c]. Dangers [BS93]. Dark [ZQSW94]. Data [AAL+01, And99, BGLM05, HJ96, LY14, NPR93, SS99, SHT+95, WPM+02, BADP96, BAAD+97, DR95, KP08, LOSZ07a, RZ09, WS92, YGSR01]. Data-driven [LY14]. Data-Parallel [HJ96, NPR93]. data-sharing [BADP96]. data-sparse [LOSZ07a]. databases [Mak93]. DC [IEE94c]. debugging [RC97]. December [Ano92, IEE98, Kar95, K+96, Rod89]. Decomposition [CK95b, BJWS96, BP03, BCOY93, BCOY94, CvHMS94, CWDO8, LM92, OSW06b, RTA+08, ZT07]. Decoupled [PGdS+15]. deferred [JH08]. deformable [Ros06, ZD05]. della [Ano95a]. Delta [FQG+92]. Dense [CPD17, GSS90b, BGCC06, CG97, PG94]. densities [GY08]. Density [AC94, BS19, LBGS16, PNB94, WWF02, CK20, KAN95, KAN96, MSS20, WJG96a, WJG96b]. dependence [RC97]. dependent [MD98, MSS20]. deployment [FL13]. Derivation [WH94]. derivative [BN07]. derivatives [BSF96b]. Derive [RGK12]. Descent [JMC97, JMBC98, ERS01]. Descent-Fast [JMBC98]. description [HF92]. Design [BGI+99, Lea92, ZBS15, And08]. detect [TD09]. Detection [BT95, ERS01, JdR+18]. Determination [PNB94, Dac06]. Developer [IEE96c]. Development [ATMK03, TDBEE11]. developments [CC15]. Diagonal [Rah96, AP99, CG04, ESM98, KSC99, Rok98]. Diagonalizations [HC08]. Diego [Kar95]. Dielectric [BVW96, MG11, CDJ07, DC07, EG09a, Erg11, JBMC98, WZC21b, ZCG00]. difference [LC14]. different [BME93, BEM94]. Differentiation [DGR96, KLZ+06, TXL19]. Difficulties [BS97]. Diffusion [CM06, KP08, STZ14]. digest [IEE94a, IEE95, IEE96a, IEE97]. DIMACS [Bha97]. dimension [MR07]. Dimensional [JMBC98, LS93, Pri94, SC95, WSW+95, BSL09, BL97, BCR01, CKW08, CC10, CC12, ERS01, ES04, ECL02, ESM98, GH98, GD09, Kro01, Lab98, LCQF18, LGQQ21, NT09, OLLL03, PSS95, PSS95, RRR03, SK04, Tak14, TC09, TG08, WY07b, WSWL95, XJM08, YR98, YB97, YAO20].
Dimensions
[CS98a, LO96a, McK96, Nil04, RRR95, SL91, BPT07, CGR99, CHL06, CCG+06a, CCG+06b, EG01, GR88a, GR87, GH02, GD06, LB92b, MCB07, Rot90, Rot98, Sel22, SKPP95, TSM16, YBZ04, SL97a]. dipolar [CPP93, CFH89, KN95]. Direct [Aar85, CPD17, BME90, BME93, BEM94, FL13, GL96, LHL08, NMH06]. direction [HM95]. Directional [BPT+14, CCFG23]. directions [YAO20]. Dirichlet [BPT+14, CCFG23].

discontinuity [RSBS19]. discretization [BDMN03a, BDMN03b, Dar02, GBMN06]. discretizations [Beb06]. Discretized [VTG91]. dispersions [CG97].
displacement [RSBS19]. distorted [HC10]. Distributed [AC94, Bør23, IEE96b, MB16, FL13, GL96, LHL08, NMH06]. discontinuity [RSBS19]. discretization [BDMN03a, BDMN03b, Dar02, GBMN06]. discretizations [Beb06]. Discretized [VTG91]. dispersions [CG97].
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displacement [RSBS19]. distorted [HC10]. Distributed [AC94, Bør23, IEE96b, MB16, FL13, GL96, LHL08, NMH06]. discontinuity [RSBS19]. discretization [BDMN03a, BDMN03b, Dar02, GBMN06]. discretizations [Beb06]. Discretized [VTG91]. dispersions [CG97].
displacement [RSBS19]. distorted [HC10]. Distributed [AC94, Bør23, IEE96b, MB16, FL13, GL96, LHL08, NMH06]. discontinuity [RSBS19]. discretization [BDMN03a, BDMN03b, Dar02, GBMN06]. discretizations [Beb06]. Discretized [VTG91]. dispersions [CG97].
Electrostatics [SRPD06, BWS+95, FGM11, LCHM10, LCHM13, YBK+11]. Element [Böhr23, BR93, Lj96b, Lj96a, MBA97, Sel22, WZC+17, WMOZ22, WS+95, BSL09, Bebo6, BWS+95, BH03, BHR04, BHGR04, CKW08, DMC20, GP06, GD09, GODZ10, Ham11, HHL+21, KMC09, KCF+05, LS05, LOSZ07a, LOSZ07b, LCFQ18, LHL08, Liu08, Liu09, OSW05, OSW06b, Ofo8, OKS09, PN95, SGG+04, Sa10, SS07, TCD17, TCD20, VV02, VCM00, WY05, WY07b, WY07a, WSWL95, XJM08, YSM05]. Element-Boundary [LJ96a, SGG+04]. elements [BR93, Bre04, FST05, GAD13, HHL+21, Pta21, Ros06].

Elizabeth [IEE97]. elliptic [A+97, Bebo6, FST05, LC14]. elliptical [Ros06]. Elongation [KLM+09]. embedded [RS20, SHM98]. EMC [HU97]. employing [RKRR21]. energetic [BPK85]. energies [DTG96, FGM11]. Energy [HZH+18, BSSF96a, BSSF96b, CC13, CPP93, FOCB96]. energy-conserving [CC13]. Engineering [MBS15, SM05]. Ensemble [LCP93]. entire [LCZ07]. entirely [Sar03]. Equation [CD13, GHWR98, GD03, MG11, Nil04, SC95, Sta95a, WZC19, WMOZ22, AP03, ABD04, BH03, CHL06, CCG+06a, CCG+06b, CC10, CR93, DDL13, Dar02, EG09a, GGM93, GKM96, GR97, GK04, GD06, GD09, GAD13, Kno99, LH08, LC94, MCB07, MNM06, NN12, OLL04, ON08a, ON09a, QCG15, RS97, Rok98, Sta95b, Tak14, WLL+07, WFC08, WZC21a, WZC21b, iYNK02, ZC00, ZKL+07]. Equations [DY98, AHL93, AD05, Atk97, BDMN03a, BDMN03b, Car06, Car07, CCZ97, DI04b, Fu98, Gas97, GBM06, GOS99, GD07b, Hav03, LZL04, LX22, LC14, LC93, NT09, ON08b, ON09a, ON09b, ŘŠŽ90, RO4, Rok85, Rok90, RS94, Tau04, TG08, WV02, WLL+07, WZC+20, Yin09, ZK+19, ZC00].

Equispaced [CCFG23, DR95]. equivalent [RKRR21]. equivalent/check [RKRR21]. Erratum [BEM94, FLZB97a, SL97a]. Error [BH89, CC04, CC05, GKD09, GSS98a, GSS00, KSC99, OC05, PSS95, PSS95, SP97, Da09, Da10, OC03, Pe16, WSK81, Dar00a]. error-controlled [Da09, Da10]. Error-estimates [PSS95]. errors [AP00]. estimates [CC04, CC05, PSS95, PSS95, SP97]. Euler [RS94]. Eulerian [NMDK99]. EuMC [Ano95a]. European [Ano95a]. Evaluate [CDM98]. Evaluated [ZZ93]. Evaluating [Mck96, AB95]. Evaluation [CS98a, Gre87, Gso89, Ros06, AR91, BL97, BN98, BCR01, BPT07, BG94, CG97, CN02, EGHT97, ESM98, GAS97, GG16, Gre88, GR88a, GM94, GH98, HS08, KSC99, KKB+21, MKF01, MMC99, OR89, PRT92, PJJ95, Rei99, RKRR21, SF18, VOD08]. Evaluations [CS98b]. event [BSL11]. event-driven [BSL11]. evolution [SWJ+05]. Ewald [Amio0, BAI91, CL91, DYP93, DNS90, FMM93, KM00, LS93, PG96b, SL97b, SKP95]. exascale [YB12]. Excitation [GIS98]. execution [BDS07, LY14, YF98]. exhibition [Ano95a]. Existence [YSL95]. Expansion [FDvW21, Le97, OC05, Pan95, PSS96, AHL93, OC03, WL96, WXQL08, WCZ+20, WK18].


Extension [AYO20, GYO8, TYO12]. eXtensions [TYO12]. exterior [AP03]. Extraction [YB01, JC04, NW89]. extreme [INS+20, WSH+12]. extreme-scale
Facility [RTZ+96]. FAMUSAMM [EGHT97]. Fur [LSCM96, HW11, KKB+21].

Far-Field [LSCM96, HW11]. Fast [And92, BT95, BL97, BN98, BCR01, BPT07, BK15, BPT+14, BF78, BCP08, BKM09, BVK96, BV96b, BS00, BL98, BL05, BO09, Boy92a, BHR04, BHGR04, BHGR05, CDM98, CDGS03, CDGS05, CL12, CC15, CSMCxx, CCZ97, CS98a, CS98b, CWA14, CB02, CJL+97, CC10, CC12, CCFG23, CPD17, CB11, Da06, Dar97, DY98, Dem95, Dem96a, Dem96b, DD95, DR95, DGR96, EB94, EB96, EMRV92, ESM98, EG13, FOCB96, Gav91, Gav01, GP93, Gre94, GHWR98, GW98, Gue97, GD06, GD07a, GD08, GAD13, GA96a, GA96b, GSH98, HOST95, HAS02, HC10, HA17, HEGH14, JMC97, JMCB98, JBM98, KLZ+06, KMC09, KKF+05, LCD14, LHL08, L0896a, LQ96a, LQ96b, LJ96a, LJ96b, LR95, MJ95, MJ96, MBS+00, Mak04, MG11, MB16, MB05, M0GM95]. Fast [McK96, MP99, MMNB06, NW98, NT96, Nio4, NRP03, OS90, PSN04, PD15, Pri94, QC05, R005, RW94, RS94, SW94, Sch94, Se92, SG97, SHMC97, SM97, SHHG93, SHT+95, SC94, SC95, SLC96, SLC97, Sta95a, SP01, STZ14, T1X19, WC94a, WC99, WM95, WY05, W07b, WX08, WZ97c, W079c, W071b, W0722, WSV+95, WXY+08, XJ108, YR99, Yin09, Y1n15, YNS+09, YAO20, YB01, ZY05, A0LP03, AR91, AG089a, AG089b, AP99, AP00, AP03, AM00, ATMK03, AY020, A1S+21, ATR+12, AC17, B0DM03a, BD0MN03b, BS09, BS97, BS19, BWS+95, BV96a, BS96c, B7CL+92, BCP03, BSFF96a, BSFF96b, BK06, CD07, CC04, CC05, Car09, CER88, CWGH97, DF10, CW08, CCL09, CER99, CBL06, CCC+06b, CRG01, CPP93, CWW98, CRW93, CB20, CFR08, CB09, Dac09, Dac10]. Fast [DMC20, Dar02, DM07, DM12, Dar00a, Dar00b, DH04a, DH04b, DC07, DR96, ESRS01, ES04, Eng11, EG08, EG09a, EG09b, Erg11, EG01, FGM11, FLB97a, FLB97b, FP05, FD09, Fuj98, GDCD98, GBM06, GF06b, GF06a, G988, GY08, G02, G16, GRO04, G0904, G13, G97, G88b, G829, G90, G01, G02, GCH+18, G05, G09, GO902, Ham11, HHKP99, HS08, Hav03, HLL08, HYS11, HW10, HW11, HU97, HR98, H11, HHL+21, HZ09, HLL+18, IY16, KKL23, Kan15, KM00, KSS10, KS11, KKF+21, Kon93, KLM+09, KSS98a, KS98b, KS04, KP05a, KP05b, KP08, KAN95, KAN96, Lab98, L0S07b, LCL+12, LBGS16, LB91, LB92a, LB92b, LB98, LZL04, LCQF18, LQGZ21, LGG+13, LX22, LX23, LC14, LI08, LY14, LC07, LCM07, LCHM10, LCHM13, LWM+02, Mak99, MG07]. Fast [MG09, MR07, MRH14, MS02, NT09, NN12, NH97, OR98, OS95, OS96a, O08, OCK+03, OYK+14, OMC08, OLL03, OLL04, O0F+08, OP07, ON09a, PJY96, PSS94, PSS95, PSS95, PA14, Pta21, Rah96, RR03, RS20, RS90, RRR03, RRRL21, RRRL22, RSS19, RTZ+96, RO04, RTR+08, RS97, RS06, RCW97, SGG+04, Sar03, S093, SL97a, SL97b, ST06, SWW99, SM97, SHMC98, SH107, SKT94, Sin95, SKPO05, SP97, Sta95b, SB96, ST02, SK04, Sud04, Y010, Tak14, TS16, TCD17, TCD20, TN03b, TN04, TC08, TC09, TG08, TD09, VOD08, WK18, W0Y106, WL96, W0Y5, W0Y07, WFC08, WCZ+20, WHG94, WJG96a, WHG96a, WJG96b, WJG96b, WK21, W0SL95, XW09, YR13, hYtWbW08, YR98, YB97, YB03, YB04, Y0606, YBK+11, YBNY12, YB12, YBNY13, Y0NK02, YA01, YSM05]. Fast [ZCG00, Z0T7, ZHPS10, ZHPS11, ZB14, Z19, ZCL+98, ZKL+07, ZGD+16, ZB95, AAB+17, Boy92b, CD13, CB14, CKE08,
Fast-multipole
[Dar97, EG01, Tak14, ZCL+98, FCCM [PA02]. FE [SGD+04]. February [B+95].
FEM [MB95, ferrofluids [HHM19]. FFT [TPKP12]. FFTM [HLL08, LHL08, OLL04].
fiber [WY07a], fiber-reinforced [WY07a]. Field [LSCM96, PA02, ABDO4, BHGR04,
BHGR05, HW11, KKLZ23, KKB+21, MD98, OKS99, WFC08, Xue98].
Field-Programmable [PA02]. Fields
[CK95b, Gre87, SHMC97, SMC97, SB98, YR99, CK95a, CG97, DC07, ESM98, GG16,
Gre88, GR88a, GM94, GH98, HR98, OLL03, Pel98, RKRR01, ST06, SM97, VOD08].
Fifth [Ano92, IEE96b, MC92, IEE98]. Filtering
[BP03, YR98], fine [Bar86]. Finite
[FST05, LJ96b, LJ96a, Beb06, Ich02, LS05, LC07, SGG+04, Sat10, VW02].
Finite-Element [LJ96b]. finite-sized
[Sat10]. First [OKF14, AHLP93]. First-Principles [OKF14]. FISC
[SLCL98a, SLCL98b]. Fitted [AC94].
fitting
[BS19, CK20, LBGS16, MSS20, TWYC06]. Flexibly [YS18]. floating [LKM02].
floating-point [LKM02]. Flow
[PI94, ECL02, Gre90a, GKM96, GK04, NMDK99, Tan03a], Flows [GCG+00, WSW+05,
BCH93, KRO99, Kro01, Kro02]. Fluid
[SWW94, TDBEE11, Bar03, OMH+04, VGZB09, WSWL95]. Fluids
[Ang17, BPK85, L1R+99, ZL14], Fly
[BAD01, BCA06], FM [BN07]. FM-BEM
[BN07]. FMA [LO96b]. FMBEM
[CKW08], FMD [LWM+02]. FMM
[Sel22, CCG+06a, EMV92, HNO06, HJZ09, HZ1+18, MRH14, ON08a, ON08b, ON09b,
PG96b, SGD+04, SB98, YS18, ZHPS10]. FMM/BEM [Sel22], Fock
[KAN96, WJGHG96a, CK20, KAN95].

Fokker [Lem98, Lem04]. Force
[Deh02, BHH6, EIM+92, JP99, KK16, Xue98, YRS13]. force-calculation
[BH86]. Forces [BP88, CDM98, NT96, Pie93, WZC+17, BH03, CKS91, DM90, LDB96].
Forest [MPZ21]. Form
[CJ05, AP99, BCP08, SH07]. Formation
[FM96, FM95, SWJ+05]. forms
[KSC99, Ral96, Rok98]. Formula [CL12]. formulare
[NN12]. Formulation
[AA0+01, JBL02, CB14, CWK08, CCKL09, CFR08, CRR01, DM07, GDB07, Liu08,
OSW06a, Sel22, DM12]. Formulations
[Ano94b, GKS94, MG11, EG09a, GKS98].
Fortran [GDK98]. Foundations
[IEE92a, four [BCR01]. four-dimensional [BCR01].
Fourier [Boy92b, EMT99, Boy92a, CD13, DR95, EB94, EB96, HLL08, HW10, LHL08,
OLL03, OLL04, Sar03, ZHPS11].
Fourier-Based [CD13].
Fourier-series-based [ZHPS11]. FPGAs
[LKM02]. Fractal [PD15]. Fractional
[WHG96a]. fracture [XYW+08, ZBG15].
fracturing [RSBS19]. framework
[TPKP12]. Francisco [B+95]. Fredholm
[AHL93, LX22]. free
[BSL11, BKM09, Car06]. Frequencies
[GHRRW98, DH04b, ZC00]. Frequency
[Nil04, BK96, DH04a, KMC09, QCG15, TSM16, ZC00]. Frontiers
[And08]. Fully
[VTG91, RSBS19]. function [BLA05, BKM09, GDDC08, OLL05, XWT09].
Galactic
[GMK00, galaxies [SWJ+05].
Galaxy [FM96, FM95]. Galerkin
[AHL93, AP03, DMC20, HKS05, OSW05, XWT09].
Gap [AAB+17]. Gauss
[GS98a, GS91].

GADGET [Spr05]. GADGET-2 [Spr05].
Gaussian [BSSF96a, BSSF96b, KS98a, Le 97, Ros06, Sal96]. Gegenbauer [CC05].

General
[LCD14, McD97, BSL11, FG96, LX22].
Generalization [Boy92b]. Generalized
[ADO11, CBN02, GR02, KAN95, KAN96, ST06, SK04, WJHG96a, YR98].

generating [CB20]. Generation
[HL15, Sal96]. geometric [CDF10].

Geometries
[MM95, AC17, KS98b, NW89]. Geometry
[SC94, TW03]. Gflops
[MHI07, WGL + 98].

giant
[RTZ + 96]. gigaflops
[WSB + 97].

GMRES [BGGC06]. Good
[Ten98]. GOTPM
[DKPH04]. GPU
[GE13, Ham11, HL15, HEHG14, KKLZ23, Kan15, MPZ21, WN14, WVK21].

GPU-accelerated
[Ham11, WVK21]. GPU-parallelized
[KKLZ23]. GPUs
[HNY + 09, HN10, YNS + 09, YBK + 11, YBNY12, YBNY13].

gradients
[BSSF96a, LBGS16]. grain
[Bar86]. grained
[PA14]. graining
[BME93, BEM94]. granularities
[GB11].

GRAPE
[Ano94a, CKE08, EIM + 92, EFT + 93, FM95, FM96, KFM99, KFMT00, MIES90, MTES94, MT95, MT98, MKF00, MKF01, MKFD02, MKFN03, Mak04, MHI07, MD12, OME + 92, TMES94, TYNO12, YF05].

GRAPE-2A [EIM + 92]. GRAPE-3 [OME + 92]. GRAPE-4 [Ano94a, FM95, FM96, MTES94, MT95, TMES94].

GRAPE-5 [KFM99, KFMT00]. GRAPE-6 [MKF00, MKF01, MKFD02, MKFN03].

GRAPE-8 [MD12]. GRAPE-DR [MHI07]. graphics
[GD08]. gratings
[Sat10].

gravitating
[TYON12]. Gravitational
[CDM98, SWW94, Wam99, DHM03, MD12, OME + 92, SCM + 90]. Gravity
[BOX00, Xu95]. GreeM
[IFM09]. Green
[BKM09, Tan03b]. Greengard
[Alu94, Alu96, HM95, SB98]. Green’s
[CB14]. Grid
[Ber95, Bor86, Boy92a, HTG02, Bes00, Car06, DM90, RS20, ZGI + 10]. grid-calculated
[DM90]. gridded
[HW11]. Gridless
[AGR88b, AGR88a]. grids
[GOS99, HW10]. ground
[TCW08]. Group
[We91]. groups
[AB95, Kan15]. Guest
[DS00, GW98]. guided
[Sat10].

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

H2Pack
[HXC21]. half
[BSSL9, CB14, SC01, GG16]. half-space
[BSSL9, CB14, GG16]. Halos
[ZQS94].

Hamiltonian
[CDF10]. Hanover
[Mak93]. Hardware
[HZH + 18, ATMK03]. Harmonic
[CA09, GD07b, GOD10]. harmonics
[PJY96, ST02, WL96, YR98].

HARP
[KMT94]. HARP-1
[KMT94]. Hartree
[KAN96, WJHG96a, CK20, KAN95].

Hashed
[WS93]. Haskell
[TL14]. head
[GOD10, KMC09]. head-related
[GOD10, KMC09]. Heat
[WMOZ22]. heavy
[RTZ + 96]. heavy-ion
[RTZ + 96].

Held
[HTA + 97, HM86, AG88, Ano97b, K + 96, Rod89].

Helmholtz
[AP03, BKM09, CD13, CC15, CHL06, CCG + 06a, CCG + 06b, CC10, CC12, DDL13, Dar02, GHRW98, GD03, GD09, GAD13, GS98b, NN12, NI04, OLL04, ON08a, QCG15, RS97, Rok98, Sta95b, Sta95a, TCD17, WV02, WZC19, WC + 20].

Hermite
[KMT94, NMH06]. Heterogeneous
[ADB94, HGD11, INS + 20, LCL + 12].

Hierarchical
[Alu94, AGPS98, BH86, BJWS96, BH88, Deh02, Dem95, Dem96a, HS95, HJ96, SHG95, SHT + 95, EG09b, HNY + 09, HSA91, JPS9, MG05, PG94, Sin92, VCM00, Wam99, WS92, Xue98, YGSR01].

hierarchical-element
[VC00]. High
[ACM97, BGI + 99, BK96, CFR08, CFR10, FHM99, GBMN06, HL15, HZ + 18, HXC21, IIE94b, IEE96b, IEE98, LCK11,
Intercontinental [ZG1’10]. Interfaces [HB93, Kro02]. Interfacial [Kro01]. interior [Mil08]. Intermolecular [Pie93].
International [BR93, BGPW00, ERT12, Hol12, IEE94a, IEE95, IEE96a, IEE96b, IEE97, IEE98, KK88, LCK11, MBA97].
Interpolation [Boy92a, CCFG23, DGR96, KLZ’06, BLA05, GD07a, KKLZ23, LX23, Sar03, Tak14, WVK21].
Interpolation-Based [CCFG23, KKLZ23, Tak14]. Interprocessor [BSvdG+94]. Introduction [DS00, GW98].
Inverse [CDGS03, CDGS05, CPD17, Beb06, BN07, FPG05, HC10, LZZ04, MG09, TCD17, TCD20]. Inverting [GGM01].
Investigations [hYtWbWL08]. inviscid [Kro02]. Invited [HOST95]. involving [AB95, EG09a, Erg11, Lin95]. ion [RT+96].
Karhunen [ST06]. Kernel [CWA14, HXC21, CC15, LX22, LX23, MR07, RKRL22, WCLD22, YS18, YBZL03, YBZ04, Yin06, ZHPS11].
kernel-independent [LX23, MR07, YBZL03, YBZ04, ZHPS11]. Kernels [CCFG23, LCD14, GR02, PSN04, ZX19].
knots [PSN04]. Knoxville [IEE94b]. Kohn [BSSF96b]. Krylov [Car07, GD07a, JH08].
KWIK [DTG96].
Laplace [GGM93, GR97, LHL08, WZC21a]. Laplacian [GGM93]. Large [BADG00, BVW96, BV96b, CDGS03, CDGS05, FLZB97a, FLZB97b, GF06b, GF06a, HOST95, IFM09, OKF14, SRPD06, SLN97, WLMP99, WY07a, ZQSW94, ATR+12, BAAD+97, BWS+95, BV96a, Car09, DYP93, EG08, Erg11, EG13, GD07a, GLS06, GDDC08, HMK98, JD+18, KP08, LCQF18, LGQQ21, LBI+97, LCZ07, LWM+02, PN95, PG96b, TC09, WYW05, WY05, WXY+08].
Large-Scale [BADG00, OKF14, SRPD06, FRD06, GF06a, GF06b, ATR+12, EG08, Erg11, EG13, HMK98, LCQF18, LGQQ21, LCZ07, PN95, WXY+08].
Löve [ST06]. logarithmic [JP89]. Logical [Hex08]. Long [WBN+97]. London [DKG92a]. Long
Pie93, AO10, BAL91, BPK85, Ess95].
Long-Range [Pie93, Ess95]. lossy [GSC01].

Low [GHRW98, DH04a, QCG15, TSM16, TPKP12]. low-communication [TPKP12].

low-frequency [DH04a, TSM16]. LSS [BCAD06]. Luther [ACM99].

M [PG96b]. M2L [KKB+21, TSM16].

macromolecules [BH03, FLZB97a, FLZB97b]. macroscopic [LDB96].
machine [HHKP09, BME90, WS91, ZJ91].
machines [PA02, BCOY93, KP05b, LBC91, Mak93].

Macromolecular [LCE+06, Ske89]. macromolecules [BH03, FLZB97a, FLZB97b]. macroscopic [LDB96].
machine [HHKP09, BME90, WS91, ZJ91].
machines [PA02, BCOY93, KP05b, LBC91, Mak93].

Macromolecular [LCE+06, Ske89]. macromolecules [BH03, FLZB97a, FLZB97b]. macroscopic [LDB96].
machine [HHKP09, BME90, WS91, ZJ91].
machines [PA02, BCOY93, KP05b, LBC91, Mak93].

M [PG96b]. M2L [KKB+21, TSM16].

magnetic [VOD08]. magneto-static [VOD08].
magnetorheological [LJR+99].
magnetostatic [BHGR05]. malignant [ES04]. Many [HP95, PG96a, Pie93, App85, EIM+92, EFT+93, HFKM98, HYS21, INS+20, OME+92, SCM+90]. Many-Body [HP95, Pie93, PG96a, App85, EIM+92, EFT+93, HFKM98, OME+92, SCM+90].

many-core [HYS21, INS+20]. map [GGM93]. MAPLE [McD97, Pie93].

Mapping [BT03, LB92a]. mappings [OR89]. March [Ano95b, Ano96, Ano97a, Ful97, HTA+97].

Martin [ACM99]. Maryland [IEE96a].

Massachusetts [K+96]. Massively [BP88, IFM90, JBL02, KP05b, LO96a, LCP93, MFKN03, LCL+12, LBI+97, MHI07, SRK+12, TIMES94, WSH+12].

Massively-Parallel [MFKN03, MHI07]. matched [GROZ04, GDK09]. materials [GM94, NKV94, Pta21, K+96]. Matern [CWA14]. Mathematical [BCM02, CHJN03, Dar97]. Mathematics [BGPW00, HDG+15, Ano90, RSS96, dCGQS06]. Matrices [Bör23, HXC21, Pan92, CG04, Dar96, XTH09]. Matrix [HXC21, PNB94, SP01, Car06, FG96, WCLD21, XWT09]. matrix-free [Car96]. matrix-vector [XWT09]. Matter [ZQSW94, FRE+08]. Maxwell [DH04b, DY98, GBMN06, GD07b, Hav03, ON09b, ON09b, ON09b, ZC00]. May [AG88, IEE94b]. MD [IEE02, DK93].

means [MG05]. mechanic [SWW99]. mechanical [SGD+04, WY05, WY07a]. mechanical-electrostatic [SGD+04].

mechanics [BCM02, Bat03, hYtWbWL08]. Media [GA96a, GA96b, WZC19, GROZ04, WZC+20, WZC21a, WZC21b]. medium [ZCL+98]. MEG [KCF+05]. MEG/EEG [KCF+05]. Memory [MB16, YB01, BCOY93, DK93, KP05b, LBC91, LMCP92, MLC09, RC97, Sk89]. MEMS [SGD+04]. Mesh [BOX00, DYP93, DKPH04, KMN00]. meshes [HKS05, ZBG15]. meshless [BLA05, YNS*09]. Message [KP08].

Message-passing [KP08]. metamaterials [OMC08]. Meter [WWF02]. Method [Alu94, AAL+01, And92, Ano94b, BT03, BK15, BPT+14, BV96W, BV96b, BL05, BH88, CL12, CC15, CS98b, CCFG23, CPD17, CKB11, EMRV92, FDvW21, GP93, GKS94, Gne97, GA96a, GA96b, GS98b, HOST95, HAS02, HXC21, KLZ+06, LCD14, LSC96, LJ96b, LJ96a, McK6, MB16, MCK96, NT96, Nil04, PD15, RRR05, RW94, Sch94, Sel22, SG97, SCM97, SHHG93, SC94, SC95, Sta95a, SP01, WC94a, WZC+17, WZC19, WMOZ22, Yin15, ZJ91, AGR88a, AGR88b, AP00, AP03, Ami00, ATMK03, AYO20, AHI+21, BDMN03a, BDMN03b, BSLO9, BS19, BG94, BWS*95, BV96a, BL98, BH03, BHR04, BHGR04, BHGR05, BSS96a, BSS96b, BK96, CDJ07, CL91, CO4, CC05, Car09, CWHG97, CDF10, CC297, CWK08, CCLK09, CCG+06b, CRG01, CPP93, CRW93, CB20, CFR08, CB09, Dac06]. method [Dac09, Dac10, DMC20, DYP93, Dar02, DM07, DM12, Dar97, Dar00a, Dar00b, DH04a, DH04b, DC07, DRS96, DKG92a, DKG92c, ESR01, ECL02, FGM11, FOCB96, FLZB97a, FLZB97b,
FD09, Fuj98, FMI*93, GDDC08, GSC01, Gib08, GR02, GG16, GROZ04, GKS98, GG89, GG90, GH02, GP08, GCH18+9, GD05, GD06, GD09, GODZ10, Ham11, HM95, Hav03, HC10, HW10, HW11, HU97, HHL*21, HJZ09, HLL*18, Ich02, JH08, JC04, KKLZ23, Kan15, KM00, KS10, KS11, KKB*21, KL*+99, KMC09, Kro01, KS98b, KS04, KP05b, KN95, KCF*+95, Lab98, LCL+12, LBGS16, LJ98, LCQF18, LGG*+13, LX22, LX23, LHL08, LC14, Liu08, Liu09, LCZ07, LCM07, MI95, MK99, MI95, MR00, MR00, Mil08, MRH14, MMNB06, MSS20, NT94, NH97, OSW05, OSW06a, OF08, OK05, OCK*+03, OYK*+14, OMC08, OFH*+08]. method [OP07, ON09a, PN95, PSPS94, PSPS95, PQ96b, PA14, QCG15, RRR03, RRKRL21, RS97, RS06, SGG*+04, SF18, Sat10, SL97a, SL97b, SM97, SH07, Sin95, SKPP95, SP97, Sta95b, SK04, Sud04, Sy03, Tak14, TSM16, TCD17, TCD20, Tan03b, Tan04, TXX19, TG08, VV02, VOD08, VGZ09, VCM00, WO05, WY07a, WFC08, WCZ*+20, WZC21a, WZC21b, WHG94, WHG96a, WJG*GH96b, WHG96b, WVK21, WSLW95, XJM08, YR98, YB97, YBZL03, YB12, YBYN13, iYK02, YA08, YAO20, YSM05, ZT07, ZHPS10, ZHPS11, ZB14, ZKL*+07, ZGD*+16, ZB95, AAB*+17, CD13, CKE08, CC10, CCI0, CF010, DDL13, FL13, GR97, LCP93, RGK12, SL91, YTK14, Gav11]. Method-Ecient [NT96]. Methods [Aar85, Ah94, AG88, BS93, BS97, BÇ93, BY98, Dem95, Dem96a, FQG*+92, GHRW98, GW98, HEGH14, HJ96, LRW95, MBA97, SRPD06, SHC95, SHT*+95, TDTEE11, VTK91, WSV*+95, YF05, A*+97, BLA05, BHC93, BL97, BG97, BN98, BCR01, Bes00, BDS07, Car07, CBN02, CJL*+97, CWD08, CK00, Eng11, Gas97, GBBM06, GYO8, GCG*+99, Goe99, GE13, GKM96, GK04, GD08, HS95, HGD11, IYK16, Kro09, Kro02, KP05a, KP08, LS05, LOSZ07a, LOSZ07b, LOG12, Lin95, LX17, LY14, MC92, NN12, OSW06b, OI07, Oku96, PJKY96, PG96a, RS20, RRKRL22, RS94, ST06, SKT94, SM05, Sin92, SB96, TD09, YGSR01, aYZ97, YNS*+09, YBNY12, ZX19, MC92]. microlithography [Ful97]. Microlocal [BDMN03a, BDMN03b, Dar02, GBMN06]. micromagnetic [VOD08]. microprocessors [NMH06, MSV92]. Microscopic [HB93]. Microstrip [MI96, MI95, ZCL*+98]. Microwave [A095a, ZC00]. military [A097b]. Miller [Sel22]. million [DKG92a, DKG92c]. million-atom [DKG92c]. MIMID [FQG*+92, LB92a]. mine ESRS01]. Minimal [BF78]. Minimization [OC05]. minimize [AIS*+21]. Minneapolis [HTA*+97, IEE92b]. Minnesota [IEE92b]. MLFMA [SLC96]. MN [HTA*+97]. mode [Sat10]. model [CA09, EO04, FG96, Ham11, IYK16, KO08, LGQZ21, TD09]. modeling [BCM02, NMDK99, NKV4, ZKL*+07]. Models [AC94, HB93, PN95, SGG*+04]. Modern [MPZ21, NMH06, SF18]. Modification [SB98]. Modified [Bar09, BADG00, CHL06, LCQF18, LGQZ21]. module [D9]. Molecular [AC94, BBGT90, BAL91, BGHS90, BP88, CDCD97, Gus98, HGS90, LBC91, LBI*+97, LMCP02, MPA96, OFK14, WLMP09, WS91, ATMK03, AiS*+21, BSL11, BS19, BWS*+95, BS97, BCL*+92, BHE*+94, BHER94, BCOY93, BCOY94, BP93, CvHMS94, DK93, EGHT97, GDK98, GZ07, KM00, LM02, LBGS16, LWM*+02, NKV94, OYK*+14, OP07, PGB05, PA14, SF18, SWW99, Win95, ZB95]. molecular-dynamics [BCL*+92, BP93]. Molecule [Pie93]. molecules [Kan15]. Moment [Gus98, McD97, ZZ93, BN98, CS82]. moment-based [BN98]. Moments [PNB94, Gib08, HHHK09, Kon93].
momentum [GY08, WHG96b]. monostatic [RCWY07]. Monotonic [Bar86]. Monte [ESRS01]. Monterey [Ano95b, Ano96, Ano97a]. Montréal [IEE97]. motion [DHHM03, Kro01].


Multiple [BS93, BSS97, FLZB97a, FLZB97b, KM00, Kro02]. multiplication [WCLD21, XWT09]. multiply [GGM93]. multipoint [PRT92]. Multipolar [LS93].

Multipole [AA9-17, And92, BT03, BK15, BPT+14, Ber95, BWV96, BV96b, BS00, BL05, BFO99, Boy92b, CDM98, CDG93, CDG95, CL12, CD15, CSMCxx, CKE08, CS98b, CC10, CC12, CCFG23, CJ9, CBR91, CP17, CKB11, DDL13, DY98, EB96, EMVR92, FDW21, FL13, GP93, GSS98a, GSS00, GR97, GHRW98, GW98, Gue97, GD03, GA96a, GA96b, GS98a, GSS98b, HOST95, HAS92, HA17, HEGH14, JMC97, JMB98, Kon93, KLZ+06, KK95, Le 97, Lea92, Lem98, LCHD14, Lin95, LSC96, LJ96b, LJ96a, LO96a, LCP93, LWR95, MF96, MBS+00, MG11, MB16, MD97, McK96, MPPA96, NT96, Nil04, NPR93, OC05, Pan95, PN94, PD15, RRR05, RGKM12, RW94, SRPD06, SPS96, SL91, SL97b, Sch94, Sel22, SG97, SM97, SMC97, SHHG93, SHT+95, SC94, SC95].

Multipolo [SLC96, SLC97, Sta95a, SP01, WC94a, WC94b, WLMP99, WZC+17, WZC19, WMOZ22, YR99, Ym15, YTK14, YB01, ZJ91, ZZ93, AHP93, AGR88a, AGR88b, AP99, AP00, AP03, Am00, ATM03, AYO20, AiiS+21, ATR+12, AC17, BDMN03a, BDMN03b, BSL09, BG97, BS19, BWS+95, BV96a, BS97, BCL+92, BHE+94, BHER94, BL98, BHO3, BHGR04, BHGR06, BSSF96a, BSS96b, BK96, CD10, CC04, CC05, Car99, CRR88, CSA95, CWW97, CDF10, CCZ97, CWW08, CDD90, CFFL09, CSG99, CSG+06b, CRG01, CPP93, CS82, CWD08, CRW93, CB20, CFR98, CB09, CK20, Dac06, Dac09, Dac10, DMC20, Dar02, DM07, DM12, Dar97, Dar00a, Dar00b, DH04a, DH04b, DC07, DRS96, DKG92a, DKG92c, ESRS01, ES04, EB94, Eng11, EG08, EG09a, EG09b, Erg11, EG13, EG01, FOCH96, FLZB97a, FLZB97b, FPG05].

Multiple [FD09, Fuj98, GDDC08, Gas97, GBMN06, GF06b, GF06a, Gav11, GSC01, GS98, GW98, GR0, GG16, GROZ04, GKD09, GE13, GB11, GR88b, GG99, GG09, GH02, GCH+18, GD05, GD06, GD08, GD09, GODZ10, GD13, Ham11, HHP09, HS08, Hav03, HYS21, HC10, HW10, HW11, HF92, HU97, HR98, HGD11, HLL+18, IYK16, KKLZ23, Kan15, KM00, KSS10, KS11, KKB+21, KLM+09, KMC09, KS98a, KS98b, KS04, KP05a, KP05b, KP08, KAN95, KAN06, KCF+05, Lab98, LM02, LDB96, LOS07b, LCL+12, LBG16, LB91, LB92a, LB92b, LJ98, LQZ04, LOG12, Lem04, LCQ18, LGQZ21, LGZ+13, LX22, LX23, LC14, Liu08, Liu09, LX17, LY14, LC07, LC10, LCHM10, LCHM13, LW+02, M95, Mak99, MG07, MG09, MD08, MB05, MR07, MRH14, MMNB06, MSS20, NW89].
multipole
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multipole-accelerated
[BHE*94, BHER94, ZD05].
Multipole-Based
[GS99, GSS98b, LHL08, MK99, OLL03, OLL04].
multipole-to-local
[CFR08, YS18].
Multipoles
[And92, AC94, GSS98b, LHL08, MK99, OLL03, OLL04].
Multiprocessor
[SHG95, LMCPP92, Sin92, Ske89].
Multiprocessors
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multiquadrics
[CBN02].
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[NK94].
Multiscale
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Multivariable
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Navier
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Neighbor
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Neumann
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New-version-fast-multipole-method
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Newport
[IEE95].
News
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Node
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Node-Level
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Non-Uniform
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numbers
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Numerical
[CL91, GM94, GKZ07].
Object
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Objects
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Oblique
[SM97, CCKL09].
obstacles
[Mak93].
Oct
[WS93].
Oct-Tree
[WS93].
October
[Ano97b, BB93, IEE92a].
Off
[HL15, DH86].
Off-Loading
[HL15].
One
[Ano94a, MTES94, WWF02, FRE*08, HM95, MR07, SK04, YR98].
one-dimensional
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One-Tflops
[Ano94a, MTES94].
onto
[BB92a, LB92a].
open
[BB11].
Opening
[BB87].
operator
[CB11].
Operators
[BB11].

Optimal opportunities [Ano90], Optical [Fal97], Optimal [DKG92b, HHKP99, BWS+95, BME90, CRG01, MG05, PRL03], optimal-parameter [CRG01], Optimization [BK15, MBS15], Optimizations [DMC20]. Optimizing [PD15, ZBS11, CB20]. Orbitals [Gus98, Le 97, Z93, KS98a]. Order [Bor86, LS93, RRR05, Ahu96, DC07, GH08, GBMN06, GL96, HHL+21, PRL03, Pta21, TWYC06, Tan03a, Tan04], Oregon [ACM99, IEE93]. organic [CKS91]. organization [AO10]. organizations [TD09], Origin [Le 97], orthotropic [ON09b]. Oscillatory [CCFG23, ZX19]. other [ZB95], overlapping [KP05a], overview [SB96].

P [PG96b], PA [ACM96]. Package [HXC21], pair [CK95a]. Pairwise [BP88, CKS91], Palazzo [Ano95a], Panel [An97b, RRR03]. Panels [RRR05]. Paper [HOST95]. Papers [Ano97b, IEE92a]. parabolic [JH08]. paradigms [MMC99]. Parallel [AAL+01, An94b, ADB94, ADBGP99, B+95, BADG96, BPT+14, Bha97, BS97, BP88, CDDCD97, GKS94, GCH+18, HAS02, HTA+97, HP95, HJ96, IFM90, IJM05, JBL02, JKC9G08, Lin94, LO96a, LO96b, LCP93, MFKN03, Mak04, Mat95, MBS15, NPR93, OKF14, Per99, Pri94, SWW94, SP99, Sin95, SHHG93, Ten98, TDBE11, WS93, WMOZ22, WSW+95, Xu95, YB01, Zj91, Bar86, BAD96, BAA+97, BAD01, BCD06, BJS96, BCL+92, BDS07, BCOY94, Car07, CRG01, CWD08, CKB11, Duh96, DP94, Erg11, EG13, GL06, GKS98, GG89, GG90, Hav03, HGS90, K+96, KK95, KP05b, LCL+12, LB92b, LJ98, LBI+97, LC14, Mak93, MI07, MG05, NVK94, OCK+03, RC97, SRK+12, Sta95b, TMES94, WLL+07, WCLD21, WS95b, WS95a, WSL95, WSH+12, YF98, YBZL03, YB013, Mak93, Rod89, TL14, TDBEE11], Parallelism [BGLM05]. Parallelization [LB91, Lea92, TCD20, BCOY93, DK93, EG08, EG09b, HYS21, SWW99]. parallelized [AIS+21, KKLZ23, OME+92]. Parallelizing [CVHS94, Sta95a]. parameter [CRG01]. Parametric [SC94]. Park [RSS96], Part [Dem96a, Dem96b]. Particle [BOX00, DYP93, Gre87, MKF93, Pri94, VGT91,AGR88a, CCR88, CC13, CB09, CKB11, DKPH04, ECL02, FMI+93, GY08, GR87, Gre88, KM00, KK16, K99, KP05a, LGQZ21, LRA+99, PJY95, WY05, WS95b, YGS01]. particle-in-cell [CC13]. Particle-Mesh [BOX00, DKPH04]. particle-particle [PJY95]. particle-reinforced [WY05]. Particles [BP88, HE88, BP93, CPP93, DKG92a, GDK89, Ich02, JdR+18, K093, LDB96, YR13], partition [AY020]. Partitioning [BB87, Ten98, EG09b, MG05], passing [KP08], PPPFFM3D [WCLD21]. PDEs [A+97], PEACH2 [HL15], PEC [GSC01], Peculiar [ZQSW94], pedestrian [CR93], penetrable [ESR01]. Pennsylvania [IEE92a]. Pentium [WBS+97]. Perfect [HAS02]. perfectly [GRO40, GDK90]. Performance [ACM97, BGI+99, BK15, Car07, FHM99, HL15, Hol12, IEE94b, IEE96b, IE98, LCK11, LWM+02, MKF01, NMH06, RC97, SF18, SKT94, WPM+02, CFR08, CFR10, HXC21, IYK16, INS+20, MD12, Sha06, WS97]. Performing [Sar03]. Periodic [CWH97, RO04, RW94, Ami00, BS91, CPP93, CFH99, DKG92, FLZB97a, FLZB97b, GOKO4, HM95, HNO06, KS98a, KS98b, KS04, LDB96, LBG16, LC07, NN12, ON08a, ON08b, ON09a, ON09b, PG96b, SKT93, Sin95, YB97, YA08, YAO20], periodicity [YS18]. Petascale [OYK+14, YBY13]. Pflops [MI07], PGAS [MRH14]. PGAS-FMM [MRH14], Phantom [TYNO12].
[GS98b]. Pipeline [HZH +18]. Pittsburgh [ACM96, IEE92a]. plan [Ano90]. Planar
[GGM01]. Planck [Lem98, Lem04]. plane [GKM96, MD98]. planets [MKFD02]. plasma [AGR88b, JKCGJ08, PG94]. plasmon [GIS98]. plasmonic
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[CK95b, HXC21, LKM02, Rei99]. points [STZ14]. Poisson
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[BPK85]. polarisable [HHKP09]. Polarizability [PNB94]. polyelectrolyte
[FOCB96]. Polygons [BT03]. polyharmonic [BL97, BCR01, BPT07]. polymers [BCOY94]. Polynomial
[DGR96, PRT92, Rei99]. Polynomials [Pan92]. Polytechnic [BR93]. poroelastic
[RSBS19]. Portable
[BK15, BS97, OCK +03, WS95b, WS95a]. Portland [ACM99, IEE93]. posed [HM95]. posteriori
[XTH09]. Potential
[CK95b, Gre87, Gre90a, HA17, SPS96, YR99, CK95a, GB11, Gre88, GR88a, GD07b, HHKP09, HF92, HR98, HHL +21, LCQF18, LQGZ21, Mil08, OLLL03, PA14, Rok85, Tau03a, WXQL08]. Potentials [CJ05, MB16, Mic96, Pie93, DM90, LDB96, SH07]. power
[PRT92]. PPPM [YF05, ZB14]. Practical
[BIN97, Pan95, CAJ09, Mak93]. practice [CK00]. Prager
[GCH +18, LGG +13]. pragmatic [SB96]. Precise
[Ami00]. preconditioned
[BGCG06, GD07a]. Preconditioner
[CDGS03, CDGS05, CDP17, Car06, DDL13, O08, TCD17]. Preconditioners
[MG11, AB04, Car09]. Preconditioning
[NN12, Beb06, FPG05, LZZL04, MG07, MG09, CWYY07]. predictor [TWYC06]. predictor-corrector [TWYC06]. preeminent [YB12]. preprocessing
[SK04]. Prescription [GS98b, CRW93]. presented [Ano97b]. Pressure
[APG94, AGPS98, Ano94a, Ano94c, Dem95, Dem96a, Dem96b, HTG02, MTE94, Yin15, CCLK09, DH86, DHM03, Gre90b, IHM05, Kat89, KS98a, Mil08, Pud16, SSF96, TL14, WXQL08]. Problems
[BB87, EMRV92, GA96b, KK95, LJC96, MG11, MBS15, SW94, SG97, WZC +17, AP00, AD05, ATR +12, BSL09, Bes00, BCP08, BHGR04, BHGR05, BGCG06, CC04, CC05, Car09, EG08, EG09a, Erg11, FST05, Fu98, GDDC08, GLS06, HM95, HNO06, HU97, HHL +21, JH08, Lab98, LCQF18, Lin95, Liu08, MIES90, Okut6, ON08a, ON08b, On09b, Rah96, RSBS19, RO04, SCM +90, TWYC06, WJYO06, WY07b, WSWL95, XY08 +08, XJM08, IYK02, ZY05]. Proceedings
[ACM96, ACM97, AG88, ERT12, Hol12, HM86, IEE02, Kar95, LCK11, Rod89, Ano92, Ano95a, IEE92a, IEE98, KK88, PA02, Wel91, B +95, BGPW00, HB93, HTA +97, IEE90, IEE92b, IE93, IE94b, IE94c, IE96b]. Proceedings. [IEE96c]. process [JdR +18]. processes [Sal96]. Processing
[B +95, HTA +97, BCOY94, Rod89]. Processor
[WWF02, FL13, HYS21, MHI07]. processors [GD08]. produced [Kon93]. products [And08]. Professor [Wil00]. Program
[CD097, YB01, App01, LBI +97, WS95b, Win95]. Programmable
[PA02, HFKM98]. programming [MRH14]. Programs
[BGLM05, RC97]. PROGRAPE [HFKM98]. PROGRAPE-1 [HFKM98]. Progress
[Ano95b, Ano96, Ano97a]. Prolate
[KLZ +06]. Propagation
Scaling [CDCD97, FRE+08, YBNY12, Goe99, KLM+09, SF96, WJGH96b].

Scatterers [HOST95]. Scattering [BVW96, EMRV92, GA96a, GA96b, HAS92, JMC97, JB89, LJ96b, LJ96a, SHMC97, SMC97, SLC97, ZCG00, AP99, AP00, AD05, BN07, BBGC06, CC04, CC05, Car09, CWH08, DH04a, ERSR01, EG08, EG09a, Fuj98, GH08, GSC01, GD05, HC10, HW10, JBM98, Lab98, LC94, MG07, Rah96, RTZ+06, Rok90, SM97, SHM98, TCW08, TC09, WJYO06].

Scheduling [YF98].

Scheme [NMDK99, NMH06, WLL+07].

Schrödinger [ZKL+07]. Schur [MG11].

Schwarz [BT03].

Sci [BEM94]. Science [FHM99, IEE92a].

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CFH89, DYP93, DKG92c, EIM+92, EFT+93, Gre88, Ich92, KS98a, KS98b, KN95, LM02, LBGS16, LB92a, LBI+97, LCM07, LCHM10, LCHM13, PGB05, PG96b, TYON12, YB12, YAO20, ZB95. **Stylistic** [BHGS90, DHM03].

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