A Bibliography of Publications about the Fast Multipole Method

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA
Tel: +1 801 581 5254
FAX: +1 801 581 4148
E-mail: beebe@math.utah.edu, beebe@acm.org, beebe@computer.org (Internet)
WWW URL: http://www.math.utah.edu/~beebe/

24 April 2019
Version 2.133

Title word cross-reference

1 [TPKP12]. $15K$ [WGL+98]. 2 [GROZ04, Lab98, Liu8, ON08a, RS94, VGZB09, WYW05, WXQL08]. 3 [BDMN03b, BHR04, BHGR04, CDM98, DDL13, Dar02, GP08, GD03, JMC97, NW89, NH97, ON08b, PG94, QCG15, Sar03, TCD17, W05, WLL+07, WZC+17, iYNK02, YB01, ZY05]. $50/Mflop$ [WSB+97]. $7.3/Mflops$ [KFM99]. $3$ [PG96b]. $h = 0$ [DNS90]. $K$ [MG05, CK95b]. $LU$ [MG07]. $R$[CBN02]. $N$ [Aar85, Alu94, APG94, Alu96, AGPS98, AAL+01, And99, Ano94a, Ano94c, ADB94, ADBG99, Bag02, Bar86, BADP96, BAAD+97, BADG00, BAD01, BS97, BN97, BOX00, Bor86, BDS07, BME90, BME93, BEM94, DH86, Dem95, Dem96a, Dem96b, DFM03, FEN+08, FM95, FM96, FQG+92, HTG02, HJ96, IFM09, IIM05, Kat89, KFM99, KFMT00, KMT94, LKM02, Liu94, MIES90, MTES94, MT95, MD12, MG05, MMC99, McD97, NMH06, OKu96, PGB05, Per99, PRL03, SWW94, Sal96, Shao6, SP99, Sin92, SHG95, SHT+95, SRK+12, TUES94, TWYC06, TYO12, TYO12, Ten98, TL14, WPM+02, WS92, WS93, WN14, WSWL95, WSH+12, Xu95, Yin15, YF05, Ano94b, CK95a, CK95b, GKS94, GKS98, Gre90b, HNY+09, HN10, HS95, KK95, Xue98]. $N \log N$ [AO10, DYP93, ADO11]. $\nu$ [SH07]. $O((\log N)^2)$ [JBL02]. $O(N)$ [BSL11, Deh02, DTG96, OKF14, Xue98]. $O(N \log N)$ [BH86, FGM11, PJY95]. $r^{-\lambda}$ [CJ05]. $r^{-\nu}$ [SH07]. $r \pm 1_{12}$ [Pan95].
**Body** [Ano94b, CK95b, GKS94, KK95, BEM94, GKS98, Gre90b, HNY+,99, HN10, HS95, Xue98, AGPS98, AAL+,01, And99, AD094, Bag02, BADG00, BS97, BN97, BOX00, FM96, HTG02, HN10, KFM99, KFMT00, SWW94, SHG95, SHT+,95, Ten98, WPM+,02, WS93, Xu95, Yin15, YF05, Aar85, Alu94, APG94, Alu96, Ano94a, Ano94c, ADBGP99, Bar86, BADP96, BAAD+,97, BAD01, BDS07, BME90, BME93, CK95a, DH86, Dem95, Dem96a, Dem96b, DHM03, FRE+,08, FM95, FQG+,92, IFM09, IHI05, Kat89, KMT94, LKM02, Liu94, MIES90, MT95, MTES94, MT+,95, MCF+,96, MHI07, MKM02, Per99, PRL03, Sal96, Sha06, SP99, Sin92, SRK+,12, TMES94, TWYC06, TYON12, TL14, WS92, WN14, WSL95, WSH+,12].

**-dimensional** [Lab98].

**-means** [MG05].

**-Nearest-Neighbors** [CK95b].


3 [OME+,92]. 3-D [FY07a]. 3051-66 [YB97]. 33rd [IEE92a]. 3D [LO96b]. 4 [Ano94a, FM95, FM96, MTE94, MT95, TMES94]. 42 [HNY+,09].

5 [KFM99, KFMT00]. 512 [MHI07]. 512-core [MHI07]. 512-Gflops [MHI07]. 6 [MFK00, MKF01, MKFD02, MFKN03]. 8 [MD12]. '88 [KK88]. 8th [BGW00].


= [Ano97b].

A-posteriori [XTH09]. above [GSC01].

Accelerate [CS98b, LSCM96, LKM02, TYNO12].

Accelerated [BCL+,92, EB96, SH07, WZC+,17, WN14, AC17, BHE+,94, BHER94, EB94, EG01, GD09, GODZ+,10, GAD13, Ham11, JH08, LCM07, MR07, QCG15, Tak14, WLL+,07, ZD05].

Accelerating [GHRW98, MG09, WC94a]. Acceleration [CKE08, LCZ07, SWW99, VCM00, BK96, KCF+,05, SGD+,04]. accelerator [ATM03, MD12]. accomplishments [Ano90].

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

Accurate [SRP06, AHLP93, Dac06, EG09a, EG13, HHKP09, ZD+,16].

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

ACM [IEE02, Kar95]. ACM/IEEE [Kar95, ACM97]. acoustic [AD05, BSL09, BN07, CKW08, GF06b, GF06a, HW10, TCW08, WJYO06, ZD+,16].

acoustic-structure [GF06b, GF06a].

accelerator [ATM03, OLL04]. Acta [Ise97].

Adaptation [McK96]. Adapted [NT96, NT94]. adaptation [BLA05].
Adaptive [BT95, BSL90, BS97, BFO99, GE13, GP08, HEGH14, KK95, NPR93, PD15, SHHG93, SHT+95, Ten98, ZT07, AC17, BCP08, CGR88, CGR99, CHL06, CFR10, FOGB96, GY08, GL96, GCH+18, HJJ09, LCL+12, LB92a, LCHM10, LCHM13, PRL03, YBZ04, ZHPS10].

addition [HC08, KSC99].

address [HS95].

Advanced [HM86, Win95, dCGQS06, TYON12].

Advances [BLA05, SM05].

advantage [Ano92].

Adventures [CDCD97].

anities [KSS10].

AFMPB [LCHM10, LCHM13].

after [ZQSW94].

Algebraic

[Car09, YTK14, Of08, PRT92].

Algorithm

[BS00, Bor86, BFO99, CDM98, CSMCxx, Deh02, DD95, EB96, JMC97, JMMC98, KK95, Lea92, LQ96a, MBS+00, MG11, MPPA96, NPR93, OKF14, SLC96, SLC97, WC94b, WS93, WN14, YR99, ZBS15, AR91, Ahu96, AP99, ATR+12, BH86, Bar86, BJWS96, BS97, BCL+92, BP03, BCOY94, BP93, CGR88, CG04, CC13, CGR99, DRS96, EGHT97, EB94, EG08, EG09a, EG09b, Erg11, EG13, GH08, GDDC08, GKD09, GR87, GR88b, HS08, IAS91, HC10, HR98, JBBC98, KM00, KK16, KS98a, LM02, LDB96, LB01, LB92a, LB92b, LZZ04, LHL08, LC93, LC94, LWW+02, MG07, MG09, MCB07, NW98, NK94, NT09, OR99, OLL03, OLL04, PLY95, PRL03, Rah96, RCWY07, Sar03, ST02, SK04, Sud04, TCW08, TC09, WK18, WY006, WL96, Xue98, YRGS13, YB04, YO96, YB12].

algorithm [ZCG00, ZBS11, ZCL+98, ZB95, ZD05, Lea92, MB16].

Algorithms

[APG94, AGPS98, Ano94e, ADBG99, BF78, Bha97, BN97, Boy92a, CK95a, DS00, DGR96, LCE+06, Liu94, MBS+00, MBS15, Pri94, Ten98, BCP08, BHE+94, BHER04, BME93, BEM94, DMM03, Eas95, Gre94, K+96, Mak93, PRT92, Pel98, Win95, YO99].

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, XWY+08].

Analysis

[AP99, AP00, BH89, ERT12, HAS02, Hol12, JMMC98, LCK11, Sat10, VDG91, Ano97b, Car07, Car09, Dar00a, EG13, JMMB98, JKK08, KSC99, NH97, OC03, OLL04, Pel98, RC97, RSS96, SGD+04, SS07, Sud04, WY05, WY07b, WY07a].

Analytic [ABD04, BBS96a, LCD14, BSS96b, DDL13].

Analytical [Gus98, LBS16, CC13].

analyze [SHM98].

Analyzing [CSM10, JMMC97].

Angeles [AG88, Rod89].

Anger [CC04].

angular [GY08, WHG96b].

Animated [BT95].

Ankara [Ano97b].

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

anomalies [ON09a].

Antennas

[IEE94a, IIEE95, IIEE97, MI95].

anterpolation [Sar03].

Appendix [Ano90].

Application

[LSCM96, LJ06b, LJ96a, NH97, SGG+04, TC17, VD08, WSS+95, DHM03, ESR01, GROZ04, HNO06, LWM+02, SGD+04, YR98].

Applications

[CK95b, CCLK09, OW05, BHER04, HNY+09, LGG+13, OF07, ON05, PD98, ZY05, dCGQS06, TDBE11].

Applied

[BGP00, HDG+15, RSS06, Ano95b, Ano96, Ano97a, BN07, JdR+18, MB05, OMC08].

Approach

[ÁC94, SHMC97, WQ94a, AHLP93, BWS+95, KAN95, KAN96, PGB05, SHM98, WJHG96a, YS18].

Approximate

[Be06, CDGS03, CDGS05, CDG05, CPF05, Rei99, MG09, PRT92, YGR01].

approximating [XZ17].

Approximation

[ADO11, LSCM96, AO10, GP08, ST06].

approximations

[DC07, HW11, Lem04, RŠZ09].

Apr

[Dem95, Dem96a, Dem96b].

April

[PA02, We91].

Aqueous [GP93].

Arbitrary

[LS93, WZC+17, EIM+92, GSC01, GL96, GL96a, GL96b, LH97, SGG+04, TC17, VD08, WSS+95, DHM03, ESR01, GROZ04, HNO06, LWM+02, SGD+04, YR98].

Applications

[CK95b, CCLK09, OW05, BHER04, HNY+09, LGG+13, OF07, ON05, PD98, ZY05, dCGQS06, TDBE11].

Applied

[BGP00, HDG+15, RSS06, Ano95b, Ano96, Ano97a, BN07, JdR+18, MB05, OMC08].

Approach

[ÁC94, SHMC97, WQ94a, AHLP93, BWS+95, KAN95, KAN96, PGB05, SHM98, WJHG96a, YS18].

Approximate

[Be06, CDGS03, CDGS05, CDG05, CPF05, Rei99, MG09, PRT92, YGR01].

approximating [XZ17].

Approximation

[ADO11, LSCM96, AO10, GP08, ST06].

approximations

[DC07, HW11, Lem04, RŠZ09].

Apr

[Dem95, Dem96a, Dem96b].

April

[PA02, We91].

Aqueous [GP93].

Arbitrary

[LS93, WZC+17, EIM+92, GSC01, GL96, GL96a, GL96b, LH97, SGG+04, TC17, VD08, WSS+95, DHM03, ESR01, GROZ04, HNO06, LWM+02, SGD+04, YR98].

Applications

[CK95b, CCLK09, OW05, BHER04, HNY+09, LGG+13, OF07, ON05, PD98, ZY05, dCGQS06, TDBE11].

Applied

[BGP00, HDG+15, RSS06, Ano95b, Ano96, Ano97a, BN07, JdR+18, MB05, OMC08].

Approach

[ÁC94, SHMC97, WQ94a, AHLP93, BWS+95, KAN95, KAN96, PGB05, SHM98, WJHG96a, YS18].

Approximate

[Be06, CDGS03, CDGS05, CDG05, CPF05, Rei99, MG09, PRT92, YGR01].

approximating [XZ17].

Approximation

[ADO11, LSCM96, AO10, GP08, ST06].

approximations

[DC07, HW11, Lem04, RŠZ09].

Apr

[Dem95, Dem96a, Dem96b].

April

[PA02, We91].

Aqueous [GP93].

Arbitrary
BHGR04, Car06, Car07, CWHG97, CWK08, Gas97, GBMN06, Gav11, GOS99, GP08, GD09, GODZ10, GAD13, Ham11, KMC09, KCF+05, LS05, LOSZ07a, LOSZ07b, LCQF18, LHL08, Lin95, Liu08, Liu09, LC94, Mil08, OSW05, OSW06a, O808, OSK09, ON08a, ON09a, ON09b, PN95, QCG15, RŠŽ09, SGG+04, Sat10, SKT93, Sin95, Tak14, TCD17, TW03, Tan04, VZG09, WY05, WY07b, WY07a, WSWL95, XJM08, Yin99, iYNK02, YAO18, YSM05, BR93].

Boundary-Integral [LJ96b].

boundary-value [Lin95].

Bounds [GSS98a, GSS00, WK18].

box [FD09].

breast [ES04].

Breit [JdR +18].

Bridging [AAB +17].

Broadband [WJYO06, GD09].

Brownian [DHM03].

Building [TD09].

buried [ESRS01, GSC01].

C [BGLM05].

CA [B+95, Ano95b, Ano96, Ano97a, Kar95, Wel91].

Calculate [BVW96, BV96b, BV96a, KMC09].

calculated [DM90, YA018].

calculates [ATMK03].

Calculating [BF099, DM90, LCHM10, LCHM13, SKT94].

Calculation [Deh02, HA17, NT96, BH86, BH03, FGM11, LDB96, OLL03, RCWY07].

Calculations [BGGT90, Ber95, CDGS03, CDGS05, KS10, SL11, PN94, CSA95, KK16, S98a, LCM07, PA14, SKT93, WHG96a, WJGH96b, WHCG96b].

Calderon [NN12].

California [ACM97, Rod99, Fu97, IE95, PA02].

Canada [IE97, HB93].

cancer [ES04].

Canonical [LC93, KM00].

Capacitance [YB01, JC04, NW89].

capacitive [SGD+04].

Cardinal [Boy92b].

Carlo [ESRS01].

Carrier [SB98].

Cartesian [CSA95, CS82, HF92, HL+97, Le 97, SH07].

Case [BGLM05, GROZ04, PPS95, PSS95].

Cauchy [CL12, LCD14].

CE2014 [MBS15].

cell [CC13, CWD08, DKG92a, DKG92c, GDK89, KS98b, KN95, LM02, FL13].

cells [DKG92c].

Center [ACM99, Hol12, IE90, Kar95, Pan95, MFK00].

central [EIM+92].

challenge [Bha97].

channels [Gre90a].

characteristic [GDD08].

Characterization [CB09].

Charge [ČA94, CC13, GY08, Kan15].

charge- [CC13].

charged [AB95, CPP93, KN95].

Charges [ČA94, CD07, CD07].

Chebyshev [Boy92a, LRW95].

Chem [Dac10].

Chemistry [ADG96, Mat95, SPS96, Les96].

Chennai [IEE98].

chips [MHI07].

Chiral [SM97, SHM98].

Christoffel [BT03].

cibles [Ano97b].

City [Hol12, RSS96].

Clara [Fu97].

class [PA14].

classical [Gre94, Rok85].

close [ZD05].

closed [BHR04].

closest [CK95a].

Closet [SW94].

Cluster [PN94, HN10, WGL+98, YNS+09].

clustering [MG05, SW+05].

Clusters [ADB94, 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, BAD96, BAAD+97, BAD01, BCAD06, Dub06, GY08, GKD9, JdR+18, JKCG08, JP98, IWM+02, PD98, PG94, Spr05, Wam99, WSH+12].

Codes [SW94, WSW+95, NMH06, Pud16, WSWL95].

Coefficients [GD03, Beb06, FST05, KS11].

Cold [ZQSW94].

collective [BSvdG+94].

Collision [BT95, WN14, JdR+18].

collisional [TYON12].

collisionless [TYON12].

Combined [JMBN98, KM00].

Combining [CDGS03, CDGS05, CWD08, DLL13, DM12, FLZB97a, FLZB97b, GDDC08, PRT92, ZB95].

Comment [KAN96, WJGH96a].

Comments [PG96b].

Communication [HP95, YTK14, BSvdG+94, IYK16, KOP8, SS89, TPK12].

Communications [KP05a].

Companion [HD+15].

Comparison [BN97, CDM98,
EG09a, RŠŽ09, WPM+02, Ess95, SKPP95. competitive [Ano92]. Complement [MG11]. Complex
[CSMxx, MGM95, MBS15, SL096, SL097, SYl03, AC17, BGGC06, CC10, CC12, NW89, Rei99, TW03, ZB95]. complexes [KSS10].

Complexity [JBL02, Pan92, YTK14, Dur00a]. component [CKB11, JKCGJ08]. composite [EG13, GM94]. Composites [SMC97, GH98, WY05, WY07a].

Comput [BEM94]. Computation [Gue97, GD03, GD05, GDZ10, McD97, MSV92, Pie93, YRGS13, ATMK03, AO10, FOCB96].

Computational [Bat03, BGPW00, JBL02, Kat89, Les96, Mat95, MBS15, TDBEE11, Ano95b, Ano96, Ano97a, OMH+94, SM05].

Computationally [KM00]. Computations [ERT12, Pan92, KAN95, KAN96, OKS09, SYl03, VOD08, WJGHG96a, YF98].

Computer [AT87, Ano94a, BGGT90, BP88, CKE08, FM96, HE88, IEE92a, KFMT00, MTFES94, MFKN03, Bar86, EIM+92, EFT+93, FMI+93, FM95, HFKM98, HGS90, KMT94, MIES90, MT95, MHI07, OMH+94, OYK+14, OME+92, SC+M9, TME94].

Computers [FHM99, LCP93, MT98, DK93, LBI+97, NKV94, OCK+03]. Computing [ACM97, B'+95, BGI+99, HTA+97, Hol12, IEE94b, IEE96b, IEE98, LCK11, Mat95, PA02, SHMC97, WWF02, WSW+95, CGL03, CPP93, IYK16, MHI07, MCM99, PRT92, Rod89, SH07, Xue98].

Concise [PJY96]. condition [YAO18]. conditions [CWHG97, SHTK93, Sin95]. Conducting [GA96a, HAS02]. Conduction [RO04].

Conference [ACM96, ACM97, Ano92, Ano95a, B'+95, BR93, HTA+97, Hol12, IEE94b, IEE96c, IEE98, IEE02, Kar95, KK88, LCK11, MC92, MBA97, Rod89, Wei91]. conformal [OR89]. Congress [BGPW00]. congressi [Ano95a].


Constructing [BF78]. construction [HKNF97]. constructions [Pud16]. containing [WYW05]. continued [Dem95]. continuous [FGM11, LBGS16, WJGHG96b].

continuum [BCM02]. Contour [Sch94, VCM00, ZG+16]. control [GKD09]. controlled [Dac09, Dac10].


coordinates [HF92]. Copper [MC92]. core [MHI07]. Corrected [Dac10]. correction [JH08]. corrections [MCBB07]. corrector [TWY06]. correlated [Sa96].

Correlations [ZQSW94]. Cosmological [Bag02, BH88, IMF09, YF05, Spr05].

Coulomb [ADG96, BFG09, CFH89, DNS90, DKG92a, DKG92b, DKG92c, DTG96, GGM01, GH02, HNZ99, HS98, KPS04, SSF96, SM05].

Coulombic [HAI17, PG96b, SK93]. Coupled [LS05, MBS15, PNB94, SGD+04, NMDK99].

Coupling [BDN03a, BDN03b, Dar02, DM07, GBMN06, MB05]. course [BG97].

CPU [HEG14]. crack [JYK02]. cracks [ON08a, WY05]. CRAY [BAAD+97].

creeping [Kro09, Kro01, Kro02]. Cross [Gue97, GP08]. Crystal [MPPA96].

crystals [ON08b]. CS [Dem95, Dem96a, Dem96b]. Cubic [WWF02]. cultura [Ano95a]. Current [CGL03, Les96]. curved [GH08]. curves [STZ14]. Custom [PA02]. cutoff [KLM+09].

cutoffs [DKG92b]. cylinders [CG97, ZCG00]. Cylindrical [SHMC97, SMC97, SM97, SHM98].
D [NH97, BDMN03b, BHR04, BHGR04, CDM98, DDL13, Dar02, GRJZ04, GP08, GD03, GA96b, JMC97, Liu08, NW89, ON08a, ON08b, PG94, QCQG15, RS94, Sar03, TCD17, TPKP12, VGBZ09, WYW05, WY05, WY07a, WLL+07, WXQL08, WZC+17, iYNK02, YB01, ZY05]. Dame [IEE96c].

Dangers [BS93].

Dark [ZQSW94].

Data [AAL+01, And99, BGLM05, HJ96, LY14, NPR93, SS89, SHT+95, WPM+02, BADP96, BAAD+97, DR95, KP08, LOSZ07a, RŚZ09, 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 [BK95, BJWS96, BP03, BCOY93, BCOY94, CvHMS94, CWD08, LM02, OSW06b, RTA+08, ZT07].

Decoupled [PGdS+15], deferred [JH08].

defformable [Ros06, ZD05]. della [Ano95a].

Delta [FGQ+92]. Dense [CPD17, GSS98b, GGGC06, CG97, PG94].

densities [GY08]. Density [AC94, LBGS16, PN94, WWF02, KAN95, KAN96, WJGHG96a, WJGHG96b].

dependence [RC97], dependent [MD98].

deployment [FL13]. Derivation [WHG94].

dervative [BN07], derivatives [BSS96b].

Derive [RGKM12].

Descent [JMC97, JMB98, ESR501].

Descent-Fast [JMB98].

description [HF92]. Design [BG1*99, Lea92, ZBS15, And08].

detect [TD09].

Detection [BT95, ESR801, JdR+18]. Determination [PNB94, Dac06].

Developer [IEE96c].

Development [ATMK03, TDBE11].

developments [CC15].

Diagonal [Rah96, AP99, CG04, ESM98, KSC99, Rok98].

Diagonalizations [HC08].

Diego [Kar95].

Dielectric [BWW96, MG11, CDJ07, DC07, EG09a, Erg11, JMBM98, ZCG00]. difference [LC14].

different [BME93, BEM94].

Differentiation [DGR96, KLZ+06].

Difficulties [BSS97].

Diffusion [CM06, KP08, STZ14].

digest [IEE94a, IEE95, IEE96a, IEE97].

DIMACS [Bha97].

dimension [MR07].

Dimensional [JMB98, LS93, Pri94, SC95, WSW+95].

BSL09, BL97, BCR01, CWW08, CC10, CC12, ERS01, ES04, ECL02, ESM98, GH98, GD09, Kro01, Lab98, LCQF18, NT09, OLLL03, PPS95, PSS95, RRR03, SK04, Tak14, TC09, TG08, WY07b, WSWL95, XJW08, YR98, YB97].

Dimensions [CS98a, LO96a, McK96, Ni04, RRR05, SL91, BPT07, GRR99, CHL06, CCG+06a, CCG+06b, EG01, GR88a, GR97, GH02, GD06, LB92b, MCB07, Rok90, Rok98, SKPP95, TSM16, YBZ04, SL97a]. dipolar [CPP93, CFH89, KN95].

Direct [Aar85, CPD17, BME90, BME93, BEM94, FL13, GL96, LHOL8, NHM06]. direction [HM95].

Directional [BPT+14].

Dirichlet [GGM93, Mi08].

disciplinary [WSH+12].

 discretization [BDMN03a, BDMN03b, Dar02, BGMN06].

discretizations [Beb06]. Discretized [VTG91].

dispersions [CG97].

distorted [HC10].

Distributed [AC94, IEE96b, MB16, SRPD06, YB01, BCOY93, DK93, GB11, HGD11, KP05b, LBC91, LMCP92, MCM09, MRH14].

Distributed-Memory [MB16, DK93, LMCP92].

Distribution [Ahu94, APG94, AGPS98, Ano94c, BAAD+97].

Distribution-Independent [Ahu94, APG94, AGPS98, Ano94c].

divide [CG04]. divide-and-conquer [CG04].

DNA [FOCB96].

domain [BCOY93, BCOY94, CWD08, GP08, LM02, Liu08, LCZ07, Mil08, OSW06b, OFH+08, RŚZ09, VW02]. domains [BHR04, GGM93, GK04].

don’t [Bar90].

doubly [GK04].

doubly-periodic [GK04].

dr [MHI07].

DREAM [OMH+94].
DREAM-1A [OMH⁺94]. Driven
[BSL11, LY14]. Drops [ZD05]. Dual
[CCKL09, LCQF18, Liu08]. Dual-level
[LCQF18]. Dynamic
[HEGH14, BAAD⁺97, CK95a, FG96, MG05].
Dynamical [SWW94, WSWL95].
Dynamics [BGGT90, BHGS90, BP88,
CDDC97, HM86, JBL02, LCP93, MPPA96,
NT96, OKF14, Sch94, TDBEE11, WLMP99,
ATMK03, BSL11, BAL91, BSS97, BCL92,
BHE⁺94, BHER94, BCOY93, BCOY94,
BP93, CvHMS94, DK93, EGHT97, FMI93,
GDK89, GKZ07, HGS90, Ich02, KM00,
KP05a, LM02, LBC91, LBI97, LMCPP92,
LWM⁺02, LRJ⁺99, NVK94, NT94, OMH⁺94,
OY⁺14, OP07, PG05, SF18, Ske89,
VGZB09, VCM00, WS91, Win95, ZB95].
DynamO [BSL11].

Economization [LRW95]. Editor [GW98].
Editors [MBS⁺00, DS00]. EEG [KCF⁺05].
effects [AB95, BPK85]. Efficiency
[HLL⁺18, KK16]. Efficient
[BS97, DH04a, EG08, HS08, NT96, RS06,
SKT93, Ami00, App85, Bar86, BHR04,
CL91, CCZ97, CWD08, EG09b, GR88b,
KM00, Kro01, KS98a, LDB96, OF08, PN95,
TSIM16, WL96, WHG94, YF98, ZGD⁺16].
eigendecomposition [CG04]. Eigensolver
[ZGD⁺16]. Eighth [HTA⁺97]. Elastic
[CCZ97, TC09]. Elasticity [GKM96].
elastodynamic [CB14]. Elastoplastic
[WH07b]. Elastostatic [WZC⁺17, GG16,
GH98, HLL08, Liu08, MB05, iYNK02, ZY05].
elastostatics [OSW05, PN95]. Electric
[Gus98, PN94, ZZ93, AB04, CS82, HF92,
WFC08]. Electrically [Has02, GDDC08].
Electrode [HB93]. Electrode-Electrolyte
[HB93]. Electrolyte [HB93].
Electromagnetic [CSMCxx, EMRY92,
GA96a, GA96b, SLC97, BGCO6, Car09,
ESR01, ES04, GH08, MG07, MD98].
electromagnetics [Ano95b, Ano96, Ano97a,
CJL⁺97, Erg11, Gib08, LZZL04, OMC08].

Electromagnetism
[CDGS03, CDGS05, BDMN03a, BDMN03b,
Car06, Car07, DM07, SY103]. Electron
[GIS98, NH97]. Electronic
[Goe99, Kon93, KS98a, SSF96].

Electrostatic
[CFH89, NT96, Pei98, BAL91, BHGR04,
GHHR05, CC13, CG97, DM90, EGHT97,
FOCB96, GB11, GM94, LCM07, NT94,
OKS09, PA14, SGD⁺04, SSKT94, YAO18].

Electrostatics [SRP06, WBS⁺95, FGM11,
LCH10, LCHM13, YBK⁺11]. Element
[BR93, LJ96b, LJ96a, MBA97, WZC⁺17,
WS⁺95, BSL09, Beb06, WBS⁺95, H03,
BHR04, BHGR04, CWW08, Gav11, GP08,
GD09, GODZ10, Ham11, KMC09, KCF⁺05,
LS05, LOSZ07a, LOSZ07b, LQF18, LHL08,
Liu08, Liu09, OSW05, OSW06b, OF08,
OKS09, PN95, SGG⁺04, Sat10, SS07,
TC17, VW02, VCM00, WY05, WY07b,
WY07a, WSWL95, XJ08, YSM05].

Element-Boundary [LJ96a, SGG⁺04].
elements
[BR93, Bre04, FST05, GAD13, Ros06].

Elizabeth [IEE97]. Elliptic
[A⁺97, Beb06, FST05, LC14]. Elliptical
[Ros06]. Elongation [KLM⁺09]. Embedded
[SHM98]. EMC [HU97]. Energetic
[BPK85]. Energies [DTG96, FGM11].

Energy [BSF96a, BSF96b, CC13, CPP93,
FOCB96]. Energy-conserving [CC13].

Engineering [MBS15, SM05]. Ensemble
[LCP93]. Entire [LCZ07]. Entirely
[Sar03].

Equation [CD13, GHRW98, GD03, MG11,
Ni04, SC95, Sta95a, AP03, AB04, BH03,
CHL06, CCG⁺06a, CCG⁺06b, CC10, CC12,
CR93, DDL13, Dar02, EG09a, GGM93,
GKM96, GR97, GK04, GD06, GD09,
GAD13, Kro09, LHL08, LC94, MCB07,
MMNB06, NN12, OLL04, ON08a, ON09a,
QCG15, RS97, Rok98, Sta95b, Tak14,
WLL⁺07, WFC08, iYNK02, ZC00, ZKL⁺07].

Equations [DY98, AHLP93, AD05, Atdk97,
BDMN03a, BDMN03b, Car06, Car07,
CCZ97, DH04b, Fuj98, Gas97, GBMN06, GOS99, GD07b, Hav03, LZL04, LC14, LC93, NT09, ON08b, ON09a, ON09b, RSZ09, RO04, Rok95, Rok90, RS94, Tan04, TG08, VW02, WLL+07, Yin09, ZX19, ZC00].

**equispaced** [DR95]. **Erratum** [BEM94, FLZB97a, SL97a]. **Error** [BH89, CC04, CC05, GKD09, GSS98a, GSS00, KSC99, OC05, PSPS95, PSS95, SP97, Dac09, Dac10, OC03, Pel98, WK18, Dar00a]. **error-controlled** [Dac09, Dac10]. **Error-estimates** [PSS95]. **errors** [AP00]. **estimates** [CC04, CC05, PSPS95, PSS95, SP97]. **Euler** [RS94]. **Eulerian** [NMDK99]. **EuMC** [Ano95a]. **European** [Ano95a]. **Evaluate** [CDM98]. **Evaluating** [CS98a, CS98b]. **evaluated** [ZZ93]. **Evaluation** [CS98a, CS98b, CWA14, CBN02, EGHT97, ESM98, Gas97, GG16, Gre88, GR88a, GM94, GH98, HS08, KSC99, MKF01, MMC99, OR89, PRT92, PJY95, Rei99, SF18, VOD08]. **Evaluations** [CS98b]. **event** [BSL11]. **event-driven** [BSL11]. **evolution** [SWJ+05]. **Ewald** [Ami00, BAL91, CL91, DYP93, DNS90, FMI+93, KM00, LS93, PG96b, SL97b, SKPP95]. **exascale** [YB12]. **Excitation** [GIS98]. **execution** [BDS07, LY14, YF98]. **exhibition** [Ano95a]. **Existence** [YSM05]. **Expansion** [Le 97, OC05, Pan95, SPS96, AHL93, OC03, WL96, WXQL08, WK18]. **Expansions** [Boy92b, Cj05, McD97, RGKM12, AR91, GB11, Len08, MD08, SH07]. **explicit** [JP89, Pud16]. **exponential** [TWYC06]. **Expressions** [Pan95, CS82]. **extended** [KS11]. **Extending** [CDJ07, DC07]. **Extension** [GY08, TYON12]. **eXtensions** [TYON12]. **exterior** [AP03]. **Extraction** [YB01, JC04, NW89]. **extreme** [WSH+12]. **facilities** [RTZ+96]. **FAMUSAMM** [EGHT97]. **Far** [LSCM96, HW11]. **Far-Field** [LSCM96, HW11]. **Fast** [And92, BT95, BL97, BN98, BCR01, BPT07, BK15, BPT+14, BF78, BCP08, BKM09, BVW96, BV96b, BS00, BL98, BL05, BFO99, Boy92a, BHR04, BHGR04, BHGR05, CDM98, CDGS03, CDGS05, CL12, CC15, CSMCxx, CCZ97, CS98a, CS98b, CWA14, CN02, CJL+97, CC10, CC12, CPD17, CKB11, Dac06, Dar97, DYC98, Dem95, Dem96a, Dem96b, DD95, DR95, DGR06, EB94, EB96, EMRV92, ESM98, EG13, FOCB96, Gas97, Gav11, GSC01, GP93, Gre94, GHRW98, GW98, Gue97, GD06, GD07a, GD08, GD13, GA96a, GA96b, GS98b, HOST95, HAS02, HC10, HA17, HEGH14, JMC97, JMC98, JMB98, KLZ+06, KMC99, KCF+05, LCD14, LHL08, Liu09, LX17, LC93, LSCM96, LJ96b, LJ96a, LO96a, LRW95, MI95, MI96, MBS+00, Mak04, MG11, MB16, MB05, MGM95, McK96]. **Fast** [MPPA96, MMNB06, NW89, NT96, Nil04, NPR93, O87, OKS09, PSN04, PD15, Pri94, QCG15, RRR05, RW94, R94, SWW94, Sch94, SG97, SHMC97, SM97, SHHG93, SHT+95, SC94, SC95, SLC96, SLC97, Sta95a, Sp01, STZ14, WC94a, WC94b, WLMP99, WYW05, WY07b, WXQL08, WZC+17, WS95, WY+08, XM08, Y99, Yin09, Yin15, YNS+09, YB01, ZY05, AHL93, AR91, AGR88a, AGR88b, AP99, AP00, AP03, Ami00, ATMK03, ATR+12, AC17, BDMN03a, BDMN03b, BSL09, BG97, BWS+95, BV96a, BSS97, BCL+92, BP03, BSSF96a, BSSF96b, BK96, CDJ07, CC04, CC05, Car09, CRR88, CWHG97, CDF10, CW08, CCKL09, CG99, CHL06, CCG+06b, CRG01, CPP93, CWD08, CRW93, CFR08, CB09, Dac09, Dar01, Dar02, DM07, DM12, Dar00a, Dar00b, DHO4a, DHO4b, DC07, DRS96, ESR01, ES04]. **fast** [Eng11, EG08, EG09a, EG09b, Erg11, EG01,
FGM11, FLZB97a, FLZB97b, FPG05, FD09, Fuji98, GDDC08, GBMN06, GF06b, GF06a, GIS98, GYO8, GR02, G16, GROZ04, GKD09, GE13, GR87, GR88b, GG88, GG90, GS91, GH02, GCH±18, GD05, GD09, GODZ10, Ham11, HHKP09, HS08, Hav03, HLL08, HW10, HW11, Hu97, HR98, HGD11, HJZ09, HLL±18, IYK16, Kan15, KMK00, KS10, KS11, Kon93, KLM±09, KS98a, KS98b, KSO4, KP05a, KP05b, KP08, KAN95, Kan96, Lab98, LOSZ07b, LCL±12, LBGS16, LB91, LB92a, LB92b, LJ98, LLL04, LCQF18, LGG±13, LC14, Liu08, LY14, LCZ07, LCM07, LCHM10, LCHM13, LW±02, Mak99, MG07, MG09, MR07, MRH14, NT09, NN12, NH97, OR±99, OSM05, OSW06a, O98, OCK±03, OYK±14, OMC08, OLL03, OLL04, OFH±08, OP07, ON09a, PJY96, PSPS94. fast [PSPS95, PSS95, PA14, Rah96, RRR03, RSZ09, RTZ±96, RO04, RTA±08, RS97, RS06, RCWY07, SGG±04, Sar03, Sat10, SL97a, SL97b, ST06, SWW99, SM97, SHM98, SH07, SKK94, Si95, SKPP95, SP97, Sta95b, SB96, ST02, Sk04, Sud04, Sy03, Tak14, TSIM16, TCD17, Tau03b, Tau04, TCW08, TC09, TG98, TD09, VOD98, WK18, WY006, WL96, WY05, WY07a, WLL±07, WFC08, WH94, WJG96a, WHG96a, WJG96b, WH96b, WSWL95, XWT09, YRGS13, hvtWbWLO8, YR98, YB97, YBZL03, YBZ04, Yin06, YBK±11, YBNN12, YB12, YBN13, iYNK2, YAO18, YSM05, ZCG90, ZT07, ZHPS10, ZHPS11, ZB14, ZX19, ZCL±98, ZKL±07, ZGD±16, ZB95, AAB±17, Boy92b, CD13, CB14, CKE08, CFR10, DDL13, EMT99, FL13, GR97, GS98a, Lea92, LCP93, RGKM12, SL91, SLCL98a, SLCL98b, YTK±14].

Fast-multipole
[Dar97, EG01, Tak14, ZCL±98, FCCM [PA02].

Field
[LSCM96, PA02, ABD04, BHGR04, BHGR05, HW11, MD98, OKS09, WFC08, Xue98].

Field-Programmable [PA02]. Fields
[CK95b, Gre87, SHMC97, SM09, SB98, YR99, CK95a, CG97, DC07, ESM98, GG16, Gre88, GR88a, GM94, GH98, HR98, OLL03, Pe98, ST06, SM97, VOD98].

Fifth [An09, IE96b, MC92, IE95]. filtering [BP03, YR98]. fine [Bar86]. fine-grain [Bar86].

Finite
[FST05, LJ96b, LJ96a, Beb06, Ich02, LS05, LCZ07, SGG±04, Sat10, VW02].

Finite-Element [LJ96b]. finite-sized [Sat10]. First [OKF14, AHLP93].

First-Principles [OKF14].

FISC
[SLCL98a, SLCL98b]. Fitted [AC94].

fitting [LBGS16, TWY06].

Flexibly [YS18]. floating [LKM02]. floating-point [LKM02].

Flow [Pri94, ECL02, Gre90a, GKM96, GK04, NM009, Tau03a].

Flows [GCG±99, WSW±95, BCH93, Kro99, Kro01, Kro02]. Fluid [SWW94, TDBEE11, Bat03, OMH±94, VGB09, WSWL95].

fluids [Ang17, BPK85, LR±99, ZB14].

FLY [BAD01, BCA06]. FM [BN07]. FM-BEM [BN07].

FMA [LJ96b].

FMBEM [CW08].

FMD [LW±02]. FMM
[CNG±06a, EM02, HNO06, HJZ09, MRH14, ON08a, ON08b, ON09b, PG96b, SGG±04, SB98, YS18, ZHPS10].

Fock [KAN96, WJG96a, KAN95].

Fokker [Lem98, Lem04].

Force [Deh02, BH86, EIM±92, JP98, KK16, Xue98, YR98].

force-calculation [BH86]. Forces
[BP88, CD98, NT96, Pie93, WZ±17, BH03, CSM91, DM90, LDB96]. Form
[CJ05, AP99, BCP08, SH07].

Formation [FM96, FM95, SW±05]. forms [KSC99, Rah96, Rok98].

Formula [CL12].

formulae [NN12].

Formulation
[AAL±01, JBL02, CB14, CKW08, CKL09, CCR08, CFR10, DM07, GD07b, Liu08, OSW06a, DM12].

Formulations
[Ano94b, GKS94, MG11, EG09a, GKS98].
Fortran [GDK89]. Foundations [IEE92a]. four [BCR01]. four-dimensional [BCR01]. Fourier [Boy92b, EMT99, Boy92a, CD13, DR95, EB94, EB96, HLL08, HW10, LHL08, OLLL03, OLL04, Sar03, ZHPS11].
Fourier-Based [CD13]. Fourier-series-based [ZHPS11]. FPGAs [LKM02]. Fractal [PD15]. Fractional [WHG96a]. fracture [XWY+08, ZBG15]. framework [TPKP12]. Francisco [B+95]. Fredholm [AHL93]. free [BSL11, BKM09, Car06]. Frequencies [GHRW98, DH04b, ZC00]. Frequency [Nil04, BK96, DH04a, KMC09, QCG15, TSIM16, ZC00]. Functional [BCR01, Buh03, CBN02, KMC09, LCZ07, Tau03b, Yin06]. Functional [Boy92b, BL97, BN98, BCR01, Buh03, CBN02, KMC09, LCZ07, Tau03b, Yin06]. Future [EMT99].


GOTPM [DKPH04]. GPU [GE13, Ham11, HL15, HEGH14, Kan15, WN14].


head-related
heavy
heavy-ion
Held
Helmholtz
Hermite
Hermite
Heterogeneous
Hierarchical
hierarchical-element
High
High-Density
High-frequency
High-order
High-Performance
Higher
Highly
Hilton
hyperical-element
homogeneous
homogenisation
host
Hub
Hut
Hybrid
Hydrgal
hyper
hypervystolic
Hypercube
I/O
 ICCAM-98
IEEE
Igniting
Implementation
Implementing
Implications
implicit
imposing
Improve
Improved
incident
implementation
Incomplete
Independent
India
Inexact
Inextensible
Inhomogeneous
Innovation
Institute
Instruction
Integral
I/O
Integral-Equation [MG11, EG09a]. Integrals [BL05, Gus98, ZZ93, BL98]. Integration [DGR96, Oku96, WZC+17, NMH06].

ingebrations [DF10]. Integrator [Per99, SP99, KM00, KMT94]. integrators [FLZB97a, FLZB97b, Sha06]. Intel [FG+92]. Interacting [BP88, BP93]. interaction [GF06b, GF06a, HLL+18, Kan15, YAO18, ZD05]. Interactions [BF099, DD95, GGM01, ATMK03, AO10, BAL91, BPK85, CFH89, CKB11, DKG92a, DKG92b, DKG92c, EGHT97, Ess95, GH02, HJJZ09, NT94, PJY95, SKT93, SKT94, ZHPS10]. interatomic [CS91]. InterCom [BSvdG+94]. Interconnecting [LS05, LOSZ07a, LOSZ07b, OSW06b]. Intercontinental [ZGI+10]. Interfaces [HB93, Kro02]. interfacial [Kro01]. interior [Mi08]. Intermolecular [Pie93]. Interpolation [Boy92a, DGR96, KLZ+06, BLA05, GD06a, Sar03, Tak14]. interpolation-based [Tak14]. Interprocessor [BSvdG+94]. Introduction [DS00, GW08]. Inverse [CDGS03, CDGS05, CPD17, Beb06, BN07, FPG05, HC10, LZZL04, MG09, TCD17]. Inverting [GGM01]. Investigations [hYtWbWL08]. inviscid [Kro02]. Invited [HOST95]. involving [AB95, EG09a, Erg11, Lin95]. ion [RT+96]. ionic [BPK85, CL91, DC07]. irGPU.proton.Net [Kan15]. Irregular [Boy92a, Kan15, YF98]. isotropic [GKM96, GH98]. issue [MC92]. issues [Mak93]. Italy [An95a, MBA97]. iteration [GD07a]. Iterative [GS98b, AD05, FG96, GDDC08, HC10, Mi08].


Lagrangian [NMDK99]. Lake [Hol12]. Landau [Len98, Len04]. language [MRH14]. Laplace [GGM93, GR97, LHL08]. Laplacian [GGM01]. Large [BADG00, BVW96, BV96b, CDGS03, CDGS05, FLZB97a, FLZB97b, GF06b, GF06a, HOST95, IFM09, OKF14, SRPD06, SLC97, WLMP99, WY07a, ZQSW94, ATR+12, BAAD+97, BWS+95, BV96a, Car09, DYP93, EG08, Erg11, EG13, GDDC08, GLS06, GKD89, JdR+18, KP08, LCQF18, LBI+97, LCZ07, LWM+02, PN95, PG96b, TC09, WYW05, WY05, XWY+08]. Large-Scale [BADG00, OKF14, SRPD06, GFO6b, GF06a, ATR+12, EG08, Erg11, EG13, LCFQ18, LCZ07, PN95, XWY+08]. Lattice [LS05, BS04, RO04]. Laugh [Bar90]. Layer [McK96, GKD09]. Layered [GA96a, GA96b, GROZ04]. layers [GROZ04]. Learning [RGKM12, HHKP09]. Leave [Wil10]. Legendre [AR91, Sud04]. lenses [Wan99]. Less [WN14]. LET [HL15]. Letters [MB+00]. Level [BK15, CJK05, AP03, DKG92a, LCQF18]. library [BSvD+94, CKB11, TYNO12]. limited [BDS07]. Line [YR99]. Linear [CPD17, Goe99, Pie93, Pu16, WJG96b, BH03, BGGC06, KLM+09, OSW05, SSF96]. lines [JH08]. link [GDK98]. Linux
[WGL+98]. **Liquid** [MPPA96]. **Liquids** [AT87, CKS91]. **lithography** [YB97]. **Load** [SHT+95, Ten98, BAAD+97, FG96, MG05, PGdS+15]. **Loading** [HL15]. **Local** [BGK12, CFR08, MCBB07, YS18]. **Locality** [SHT+95]. **Loève** [ST06]. **logical** [JP89]. **Logical** [Bor86]. **Loki** [WSB+97]. **London** [DKG92a]. **Long** [Pie93, AO10, BAL91, BPK85, Ess95]. **Long-Range** [Pie93, Ess95]. **lossy** [GSC01]. **Low** [GHRW98, DH04a, QCG15, TSIM16, TPKP12]. **Low-frequency** [DF04a, TSIM16]. **LSS** [BCAD06]. **Luther** [ACM99]. **M** [PG96b]. **M2L** [TSIM16]. **machine** [HHKP09, BME90, WS91, ZJ91]. **Machines** [PA02, BCOY93, KP05b, LBC91, Mak93]. **Macromolecular** [LCE+06, Ske89]. **macromolecules** [BH03, FLZB97a, FLZB97b]. **macroscopic** [LDB96]. **Madras** [IEE98]. **Magnet** [Gus98]. **magneto** [VOD08]. **magneto-static** [VOD08]. **magnetorheological** [LRJ+99]. **magnetostatic** [BHGR05]. **malignant** [ES04]. **Many** [HP95, PG96a, Pie93, App85, EIM+92, EFT+93, HFKM98, OME+92, SCM+99]. **Many-Body** [HP95, Pie93, PG96a, App85, EIM+92, EFT+93, HFKM98, OME+92, SCM+99]. **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, IFM09, JBL02, KP05b, LO96a, LCP93, MFKN03, LCL+12, LBI+97, MIH07, SRK+12, TMS94, WSH+12]. **Massively-Parallel** [MFKN03, MIH07]. **matched** [GROZ04, GKD09]. **materials** [GM94, NKV94, K+96]. **Matérn** [CWA14]. **Mathematical** [BCM02, CHJN03, Dar97]. **Mathematics** [BGPW00, HDG+95, Ano90, RSS96, dCGQS06]. **Matrices** [Pan92, CG04, Dac06, XTH09]. **Matrix** [PNB94, SP01, Car06, FG96, XWT09]. **matrix-free** [Car06]. **matrix-vector** [XWT09]. **Matter** [ZQSW94, FRE+08]. **Maxwell** [DH04a, YB98, GBN06, GD07b, Hav03, ON08b, ON09a, ON09b, ZC00]. **May** [AG88, IEE94b]. **MD** [IEE02, DK93]. **means** [MG05]. **mechanic** [SWW99]. **mechanical** [GD07b, Hav03, ON08a, ON09b, ZC00]. **mechanical-electrostatic** [GD07b]. **mechanical-electrostatic** [GD07b]. **mechanics** [BCM02, DKB97]. **medium** [ZCL+98]. **MEG** [KCF+95]. **MEG/EEG** [KCF+95]. **Memory** [MB16, YB01, BCOY93, DK93, KP05b, LBC91, LMCP92, MMC99, RC97, Ske89]. **MEMS** [SGD+04]. **mesh** [BOX00, DYP93, DKPH04, KM00]. **meshes** [HKS05, ZBG15]. **meshless** [BLA05, YNS+09]. **Message** [KP08]. **Message-passing** [KP08]. **metamaterials** [OMC08]. **Meter** [WWF02]. **Method** [Alu94, AAL+91, And92, Ano94b, BT03, BK15, BPT+14, BVW96, BV96b, BL05, BH88, CL12, CC15, CS98b, CDP17, CKB11, EMRV92, GP93, GKS94, Gue97, GA96a, GA96b, GS98b, HST95, HAS02, KLZ+06, LCD14, LSCM96, LJS96b, LJS96a, MI96, MB16, MK96, NT96, Nil04, PD15, RRR05, RW94, Sch94, SG97, SMC97, SHHG93, SC94, SC95, Sta95a, SP01, WC94a, WZC+17, Yn15, ZJ91, AGR88a, AGR88b, AP00, AP03, Ami00, ATMK03, BDN03a, BDMM03b, BSL90, BG94, BWS+95, BV96a, BL98, BH03, BHR04, BHGR04, BHGR05, BSSF96a, BSSF96b, BK96, CDJ97, CL91, CC04, CC05, Car09, CWHG97, CDF10, CCZ97, CKW08, CCKL09, CCZ+06b, CRG01, CPP93, CRW93, CFR08, CB09, Dac06, Da90, Dac10, DYP93, Dar02, DM07,
DM12, Dar97, Dar00a, Dar00b. **method** [DH04a, DH04b, DC07, DRS96, DKG92a, DKG92c, ERSS01, ECL02, FGM11, FACB96, FZLB97a, FZLB97b, FD09, Fu98, FM+93, GDCO8, GSC01, Gib08, GR02, G16, GROZ04, GKS98, GGR90, GH02, GP08, GCH+18, GD05, GD06, GD09, GODZ10, Ham11, HM95, HC10, HW10, HW11, HU97, HJZ09, HLL+18, Ich02, JD08, JC04, Kan15, KM00, KS11, KLM+09, KMC09, Kro01, KS98b, KS04, KP05b, KN95, KCF+05, Lab08, LCL+12, LBG16, LB18b, LCG+F18, LGG+13, LHL08, LC14, Liu08, Liu09, LCZ07, LCM07, MI95, Mak99, MB05, MR07, Mi08, MRH14, MMBN06, NT94, NH97, OSW05, OSW06a, OS08, OKS09, OCK+03, OYK+14, OMC08, OFH+08, OP07, ON09a, PN95, PSS94, PSS95, PSS95, PG96b, PA14, QC+15, RRR03, RO40, RTA+08, RS97, RS06, SG+04]. **method** [SF18, Sat10, SL97a, SL97b, SM97, SH07, Sin95, SKPP95, SP97, Sta95b, SK04, Sud04, Syl03, Tak14, TSM16, TCD17, Tau03b, Tau04, TG08, VW02, VOD08, VZGB09, VCM00, WY05, WY07a, WFC08, WHG94, WHG96a, WJGHG96b, WHG96b, WSL195, XM08, YR98, YB97, YBZL03, YB12, YBNY12, YF05, A+97, BLA05, BHC93, BL97, BG97, BN98, BCR01, BES00, BDS07, CAB07, CB102, CJL+97, CWD08, CK00, Eng11, Gas97, GBMN06, GY08, GC+99, Goe99, GE13, GKM96, GKO4, GD08, HSG95, HGD11, IYK16, Kro99, Kro02, KP05a, KP08, LS05, LOSZ07a. LOSZ07b, LOG12, Lin95, LX17, LY14, MC92, NN12, OSW06b, OF07, Oku96, PJY96, PG96a, RS94, ST06, SKT94, SM05, Sin92, SB96, TD09, YGSR01, aYZ97, YNS+09, YBNY12, ZI19, MC92]. **microlithography** [Fu97]. **microlocal** [BDMN03a, BDMN03b, Dar92, GBMN06]. **micromagnetic** [VOD08]. **microprocessors** [NMH06, MSV92]. **Microscopic** [HB93]. **Microstrip** [MI96, MI95, ZCL+98]. **Microwave** [An095a, ZC00]. **militaires** [An097b]. **military** [An097b]. **million** [DKG92a, DKG92c]. **million-atom** [DKG92c]. **MIMD** [FQG+92, LB92a]. **mine** [ESRS01]. **Minimal** [BF78]. **Minimization** [OC05]. **Minneapolis** [HTA+97, IEE92b]. **Minnesota** [IEE92b]. **MLFMA** [SLC96]. **MN** [HTA+97]. **model** [Sat10]. **model** [CAJ09, ES04, FG96, Ham11, IYK16, KP08, TD09]. **modeling** [BCM02, NMDK99, NKV94, ZKL+07]. **Models** [AC94, HB93, PN95, SG+04]. **modern** [NMH06, SF18]. **Modification** [SB98]. **Modified** [Bar90, BADG00, CHL06, LCQF18]. **module** [DK93]. **Molecular** [AC94, BGGT90, BAL91, BHGS90, BP88, CDCD97, Gus98, HGS90, LBC91, LB197, LCPP09, MPPA96, OKF14, WLM09, WS91, ATM03, BSL11, BWS+95, BSS97, BCL+92, BHE+94, BER94, BOCY93, BOCY94, BP93, CVHMS94, D93, EGHT97, GDK89, GKM97, KZ00, LM02, LBS16, LWM+02, NKV94, OYK+14, OP07, PGB05, PA14, SF18, SWW99, Win95, ZB95]. **molecular-dynamics** [BCL+92, BP93]. **Molecule** [Pie93]. **molecules** [Kan15]. **Moment** [Gus98, Mc9D7, ZZ93, BN98, CS82]. **moment-based** [BN98]. **Moments** [PN9B4, Gib08, HHKP09, Kon93]. **momentum** [GY08, WHG96b]. **monostatic** [RCW07]. **Monotonic** [bor86]. **Monte**
Monterey
[Ano95b, Ano96, Ano97a]. Montréal
[IEE97].

Mountain [MC92]. mover [CC13, MPI
[IEE96c, BCAD06, LO96b, Per99, SP99].

MPI-2 [BCAD06]. MPSim [LBI +97].

MR [BEM94]. Multi
[AP03, Ang17, BAD01, Liu08, WSH +12].
multi-disciplinary [WSH +12].
multi-domain [Liu08]. Multi-level [AP03].
multi-platform [BAD01]. Multi-scale [Ang17].

Multicomputers [YB01]. Multicore
[HEGH14, ZBS15]. Multidimensional
[CK95b, BCP08, BL98]. multigrid
[Gas97, IHM05, MC92, Of08]. Multilevel
[CSMCxx, GS98b, MG11, SLC96, SLC97, TCW08, TC90, A +97, ATR +12, BDMN03b, DM12, EG08, EG09a, EG09b, Erg11, EG13, GDDC08, GDK09, HSO8, HC10, LZZ04, LC94, MG07, MG09, RCW07, Sar03, WJY006, YRG13].

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

Multipolar [LS93]. Multipole
[ABB +17, And92, BT03, BK15, BPT +14, Ber95, BV97, BV96b, BS00, BL05, BFO99, Boy92b, CDM98, CDG03, CDG05, CL12, CD13, CC15, CSMCxx, CKE08, CS98b, CC10, CC12, CJO5, CFRI0, CPD17, CKB11, DDL13, DYY98, EB96, EMW92, FL13, GP93, GSS98a, GSS00, GR97, GHRW98, GWW98, Gu197, GD03, GA96a, GA96b, Gus98, GS98b, HOST95, HAS02, HA17, HEGH14, JMC97, JMB198, Kon93, KLV +06, KKV5, Le97, Lea92, Lem98, LCD14, Lin05, LSC96, LJ96b, LJ96a, LO96a, LCF93, LRRW95, ML96, MBS +00, MG11, MB16, MD97, MK96, MPA96, NT96, Nl04, NPR93, OC05, Pan95, PN94, PD15, RR05, RGK12, RW94, SRP06, SPS96, SL91, SL97b, Sch94, SG97, SHMC97, SMC97, SHHG93, SHT +95, SC94, SC95, SLC96, SLC97, Sta95a, SP01].

Multipole
[WC94a, WC94b, WLMP99, WZC +17, YR99, Yln15, YTK14, YB01, ZJ91, Z93, AHP93, AG88a, AG88b, AP99, AP00, AP03, Ami00, ATMK03, ATR +12, AC17, BDMN03a, BDMN03b, BSL09, BG97, BWS +95, BV96a, BSS97, BCL +92, BHE +94, BHER94, BL98, BH03, BHG94, BHR40, BHG05, BSSF96a, BSSF96b, BK96, CD07, CC04, CC05, Car09, CGR88, CSA95, CWGH97, CDF10, CC97, CWK08, CCLK09, CGR99, CCG +06b, CRG01, CPP93, CS82, CWD08, CRW93, CFR08, CB09, Dac06, Dac09, Dac10, Dar02, DM07, DM12, Darr97, Dar00a, Dar00b, DH04a, DH40b, DC07, DRS96, DKG92a, DKG92c, ESRS01, ES04, EB94, Eng11, EG08, EG09a, EG09b, Erg11, EG13, EG01, FOBC96, FLZB97a, FLZB97b, FFG05, FDD99, Fug09, GDDC08, GSG7, GBMN06, GFF06b, GF06a, Gap11, GSC01, GIS98, GY08, GR02].

multiplot [GG16, GROZ04, GKD09, GE13, GB11, GR88b, GG89, GG90, GH02, GCH +18, GD05, GD06, GD08, GD09, GODZ10, GAD13, Ham11, HHKP99, HS08, HAV03, HC10, HW10, HW11, HF92, HU97, HR89, HGD11, HJZ09, HLL +18, IYK16, Kan15, KM00, KSS10, KSL11, KLM +09, KMC09, KS98a, KS98b, KS04, KP05a, KP05b, KP08, KAN95, KNK95, KAN96, KCF +05, Lab98, LM02, LDB96, LOSZ07b, LCL +12, LBGS16, LB91, LB92a, LB92b, LJ98, LZZ04, LOG12, Lem04, LCFQ18, LG +13, LCM14, Liu09, LX17, LY14, LC07, LCM07, LCHM10, LCHM13, LWM +02, M95, MAK99, MG07, MG09, MD98, MB05, MR07, MR14, MNMB06, NW89, NT94, NR12, NH97, OSW05, OSA06a, O907, OF08, OKS09, OCK +03, OYK +14, OC03, OMC08, OFH +08, OP07, ON09a, PRT92, PN95, PJY96, PSS094].

multiplot [PSPS95, PSS95, PA14, QCG15, RAH96, RZSO9, RTZ +96, RO04, RTA +08, RS97]
RS06, RCWY07, SGG+04, SF18, Sar03, Sat10, SL97a, ST06, SWW99, SM97, SHM98, SMT94, Sin95, SKP05, SP97, Sta95b, SB96, SK04, Sud04, STZ14, Sy03, Tak14, TSIM16, TCD17, Tau03b, Tau04, TCM08, TC09, TG08, TD09, VOD08, WJYO06, WL96, WY05, WY05, WY07b, WY07a, WLL07, WXQL08, WHG94, WJGHG96a, WHG96a, WJGHG96b, WHG96b, XWW+08, XJM08, YS18, YRGG13, hYtWbWL08, YR98, YB97, YBZL03, YB01, LDB96.

Multipole-Based [GSS98a, GSS98b, HLL08, LHL08, Mak99, OLLL03, OLL04].

Multiprocessor [SHG95, LMCPP92, Sin92, Ske89].

Multiprocessors [BB87, HS95].

Multiquadrics [CBN02].

Multiresolution [NKV94].

Multiscale [ERT12, TW03].

Multithreaded [ZB95, ZD05, CB14].

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

Multipole-Based [BHE+94, BHER94, ZD05].

Multipole-Based [GSS98a, GSS00, YB97].

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

Multipole-to-local [CFR08, YS18].

Multipoles [And92, AC94, GSS98b, HLL08, Mak99, OLLL03, OLL04].

Multitask [SM97, CCKL09].

Obstacles [Mak93].

Oblique [SM97, CCKL09].

October [Ano97b, HB93, IEE92a].

Opening [HLS95, MR07, SK04, YR98].

One [An94a, MTE94, WWF02, FRE+08, HM95, MR07, SK04, YR98].

One-Dimensional [SK04, YR98].


Opportunities [An90].

Optimal [DKG92b, HHKP09, BWS+95, BME90, CRG01, MG05, PRL03].

Optimal-Parameter [CRG01].

Optimization [BK15, MBS15].

Optimizing [PD15, ZBS11].

Orbitals [Gus98, Le 97, ZZ93, KS98a].

Order [BB87, BCP08, DR95].

non-equispaced [DR95].

non-standard [BCP08].

Non-Uniform [BB87].

nonbond [DKG92b].

nonbonded [ATMK03].

nonequispaced [PSN04].

nonlinear [CAJ09].

nonlinearly [CC13].

nonscillatory [GR02].

nonplanar [YB97].

nonsmooth [Beb06].

normal [GG16].

Nose [BVW96].

Notre [IEE96c].

November [ACM96, ACM97, ACM99, ACM03, Ho12, IE90, IE92b, IE93, IE94c, IE90, K+96, LCK11].

nuclear [PGB05].

number [GGK99, Ich02].

numbers [Dr+18, WYW05].

Numerica [Ise97].

Numerical [CL91, GKZ07, Kro02, Pri94, TDBEE11, dCGQS06, Atk97, BCM02, BCH93, CDF10, CG97, CHJN03, Dar00b, GCC+99, Gre90b, GM94, GH98, KSC99, Kro01, OR89, PRT92, RSS96, TYNO12, Wam99, ERT12].

O [Mak93].

Object [BT95, SHMC97, ESR01, SM97, SHM98].

Objects [BVW96, BV96b, SLC96, SLC97, BV96a, EG90a, Erg11, TC09].

Oblique [SM97, CCKL09].

Oct [WS93].

Oct-Tree [WS93].

October [An097b, HB93, IEE92a].

Off-Loading [HL15].

One [An94a, MTE94, WWF02, FRE+08, HM95, MR07, SK04, YR98].

one-dimensional [SK04, YR98].


Opening [And08].

OpenMP [AAB+17].

operator [CFR08, Lem08, Lem04, YS18].

Operators [CJ05, Beb06, CS82, ESM98, FBH04, Rah96, Rok98, TW03].

OPFMM [CRG01].

opportunities [An90].

Optical [Ful97].

Optimal [DKG92b, HHKP09, BWS+95, BME90, CRG01, MG05, PRL03].

optimal-parameter [CRG01].

Optimization [BK15, MBS15].

Optimizing [PD15, ZBS11].

Orbitals [Gus98, Le 97, ZZ93, KS98a].

Order [BB87, LS93, RRR05, Alu96, DC07, GH98, GBMN06, GL96, PRL03, TWYC06, Tau03a, Tau04].

Oregon [ACM99, IEE93].

organic [CKS91].

organization [AO10].
Polygons [BT03]. polyharmonic [BL97, BCR01, BPT07]. polymers [BCOY94]. Polynomial [DGR96, PRT92, Rei99]. Polynomials [Pan92]. Polytechnic [BR93]. Portable [BK15, BS97, OCK03, WS95b, WS95a]. Portland [ACM99, IEE93]. posed [HM95]. posteriori [XTH09]. Potential [CK95b, Gre87, Gre90a, HA17, SPS96, YR99, CK95a, GB11, Gre88, GR88a, GD07b, HHKP09, HF92, HR98, LCQFI8, Mil08, OLLL03, PA14, Rok85, Tau03a, WXQL08]. Potentials [CJ05, MB16, Pie93, DM00, LDB96, SH07]. power [PRT92]. PPPM [YF05, ZB14]. Practical [BN97, Pan95, CAJ09, Mak93]. practice [CK00]. Prager [GCH18, LGG13]. pragmatic [SB96]. Precise [Ami00]. preconditioned [BGGC06, GD07a]. Preconditioner [CDGS03, CDGS05, CPD17, Car06, DDL13, OF08, TCD17]. Preconditioning [MG11, ARD04, Car09]. Preprocessing [NN12, Beb06, FPG05, LZL04, MG07, MG09, RCWY07]. predictor [TWY07]. predictor-corrector [TWY07]. preeminent [YB12]. preprocessing [SK04]. Prescription [GS98b, CRW93]. presented [Ano97b]. Pressure [YAO18]. YRGS13. Price [WSB97]. Price/performance [WSB97]. Princeton [HM86, HDG15]. Principles [OKF14]. Pro [WSB97]. Problem [APG94, AGPS98, Ano94a, Ano94c, Dem95, Dem96a, Dem96b, HTG02, MTE94, Yin15, CCKL09, DH86, DHM03, Gre90b, IHHM05, Kat89, KS98a, Mil08, Pud16, SSF96, TL14, WXQL08]. Problems [BB87, EMRV92, GA96b, KK95, LJ96b, LJ96a, MG11, MBS15, SWW94, SG97, WZC+17, AP00, AD05, ATR+12, BSL09, Bes00, BCP08, BHGR04, BHGR05, BGGC06, CC04, CC05, Car09, EG08, EG09a, Erg11, FST05, Fuj98, GDDC08, GLS06, HM95, HNO06, HU97, JH08, Lab98, LCQFI8, Lin95, Liu08, MIES90, Oku96, ON08a, ON08b, ON09b, Rah96, RO04, SCM+90, TWY06, WYO06, WYO7b, WSWL95, WXY+08, XJM08, iYNK02, ZY05].

Proceedings [ACM96, ACM97, AG88, ERT12, Hol12, HM86, IEE02, Kar95, LCK11, Rod89, Ano92, Ano95a, IEE92a, IEE98, KK88, PA02, We91, B+95, BGPW00, HB93, HTA+97, IEE90, IEE92b, IEE93, IEE94b, IEE94c, IEE96b]. Proceedings. [IEE96c]. process [JdR+18]. processes [Sal96]. Processing [B+95, HTA+97, BCOY94, Rod89]. Processor [WWF02, FL13, MIH07]. processors [GD08]. produced [Kon93]. products [And08]. Professor [Wil00]. Program [CDCD97, YB01, App85, 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 [Ano97b, IEE94a, IEE96a, IEE97, WC94a, WC94b, CHJN03, GLS06]. propagator [ZB95]. properties [WY05, WY07a]. Protein [NT96, Kan15, KSS10, KS11, NT94]. protein-protein [KSS10]. proteins [ZB95]. protonatable [Kan15]. Provably [Tak98]. pseudo [CK91, OFH+08]. pseudo-pairwise [CK91]. pseudo-spectral [OFH+08].

psuedoparticle [Mak99]. Pseudospectral [Boy92b, KLZ+06]. Purpose [Ano94a, BGGT90, CKE08, FM96, FM99, KFMT00, MTE94, MT98, MKF93, EIM+92, EFT+93, FM+93, FM95, HFKM98, KMT94, MIES90, MT95, OMH+94, OME+92, SCM+90, TMES94].

Quadrature [WK18]. Quantum [SPS96, KLM+90, SSF96]. quartic
Special-Purpose
[Ano94a, CKE08, FM96, FHM99, KFMT00, MTES94, MT98, MFKN03, FM95, HFKM98, KMT94, MIES90, MT95, OMH+94, OME+92, SCM+90, TMES94]. Spectra
[ES04]. Spectral
RCWY07, OFH+08, PN95]. Speeding
[AO10]. Sphere
BP03, CDJ07, DC07, Lin95]. Spheres
[GD05]. Spherical
GOD210, KSC99, PJY96, ST02, YR98]. Spline
[CS98b, DKG92b]. Splines
[CS98a, BL97, BCR01, BPT07]. Square
[GGM01]. Stability
[Ni04, Sud04]. Stable
[DH04b]. Standard
[BCP08]. Static
[VOD08]. Station
[ERT12]. Statistical
[Kan15]. Steepest
[JMC97, JMB98, ESRS01]. Steepest-descent
[ESRS01]. Stellar
[HM86]. Step
[BS93, FLZB97a, FLZB97b, KM00, RCVW07]. Stepping
[BS97]. Stochastic
[FST05, Sal96]. Stokes
[GTK96, GK04, Tau03a, TG08, WLL+07]. Stokesian
[Ich02]. Storage
[Hol12, LCK11]. Strategy
[BB87, BCOY93, EG09b]. Strong
[BPK85]. Structural
[BADG98, NT96, ZQSW94, GF06b, GF06a, Goe99, Kat98, KS98a, NT94]. Structures
[An99, CSMCxx, GGM01, MI96, RW94, WPM+02, Car09, CWK08, EG13, LCZ07, WS91, ZCL+98, ZY05]. Studies
[RTZ+96]. Study
[BGLM05, HML66, Pri94, Dar97]. Studying
[Kro01]. Sub
[LCZ07]. Sub-entire-domain
[LCZ07]. Subdivision
[BT95]. Summation
[CWA14, LS93, Ami00, BAL91, IHM05, SF18, ZB14]. Summer
[RS96]. Sums
[DNS90, BG94, DYP93, KS04, RO04, SL97b]. Sunnyvale
[Wel91]. Supercomputers
[FQG+92, HM86, BAD01]. Supercomputing
[ACM96, Ano92, IEE90, IEE92b, IEE93, IEE94c, Kar95, Ano92, KK88]. Surface
[MG11, CCZ97, ESRS01, ZBG15]. Surfaces
[CSMCxx, HAS02, JMC97, JMB98, GH08, JBM98]. Surfaces-Wire
[CSMCxx]. Suspended
[VGZB09]. Switch [SGD+04]. Switching
[HL15]. Symbolic
[Pie93]. Symmetric
[CG04, OSW96a]. Symposium
[Ano97b, HB93, IEE92a, IE94a, IE95, IEE96a, IEE96b, IEE97, PA02, K+96, Mak93]. Syracuse
[IEE96b]. System
[BGI+99, RKGK12, BAA+97, TMES94, ZB95, HTG02]. Systems
[AAB+17, CPD17, GP93, Gre87, HEGH14, MT98, VTM91, YF05, AB95, BWS+95, BGGC06, CL91, CDF10, CFH89, DYP93, DKG92c, EIM+92, EFT+93, Gre88, Ich02, KS98a, KS98b, KN95, LM02, LBGS16, LB92a, LBI+97, LCM07, LCHM13, PGB05, PG96b, TYON12, YB12, ZB95]. Systolic
[BHGS90, DHM03]. T3D
[RAA+97]. Tails
[ADG96]. Tangential
[GH08]. Target
[SB98, GSC01]. Targets
[Ano97b]. Task
[ABB+17]. Task-Based
[AAB+17]. Tearing
[LS05, LOSZ07a, LOSZ07b, OSW96b]. Technique
[WCZ+17, Gas97, KLM+09]. Techniques
[CDGS03, CDGS05, PRT92, SWW99]. Telescoping
[LRW95]. Template
[BGLM05]. Tennessee
[IEE94b]. Tensor
[CB14, CSA95, GCH+18, HC08, HLL+18, LGG+13, YAO18]. Tensors
[PNB94]. Terabytes
[IEE02]. teraFLOPS
[TMES94]. Term
[DNS90]. Terms
[JP89]. Test
[ABB5]. Tflops
[Ano94a, HNY+99, HN10, MTES94, MFK00, MKFD02]. Theorem
[KSC99, Lab98]. Theorems
[HCO8]. Theoretical
[CC15]. Theory
[AP99, Buh03, CK00, GD07b, K+96, LBGS16, Pel98, Rok85, Rok90, Tau03a]. Thermodynamics
[Kan15]. Thin
[ZCL+98, CAJ09, ZY05]. Thin-stratified
[ZCL+98]. Third
[KK88, Rod89, Bha97].
Thousands [BT03]. Three
[CS98a, JMBC98, LO96a, Nil04, Pie93, Pri94, SL91, SC95, WSW+95, YB97, BSL09, BPT07, CWW08, CRR99, CCG+06b, ESR01, ES04, ESM98, GR88a, GR97, GH02, GD06, GD09, LB92b, LCQF18, MCBB07, OLL03, PSS95, SL97a, Tak14, TSI16, TC09, TG08, WSL95, YBZ04].

Three-Body [Pie93].

Three-Dimensional
[JMBC98, Pri94, WSW+95, YB97, BSL09, CWW08, ESR01, ES04, ESM98, LCQF18, OLL03, PSS95, Tak14, TC09, TG08, WSL95].
tiers
[WHG96a].

Time
[BS03, MD98, BSS97, FLZB97a, FLZB97b, GD07b, KM00, OFH+08, RC97, SRK+12, VW02, Xue98].

time-dependent
[MD98].
time-domain
[VW02].
time-efficient
[YF98].
time-harmonic
[GD07b].
time-step
[KM00].

topological
[BN07].
toroidal
[CKS91].

Toronto
[HB93].

Touchstone
[FQG+92].

TPM
[Xu95].

traces
[HLL+18].

trained
[HHKP09].

transfer
[GODZ10, KMC09].

Transform
[EB06, EB94, GS91, HLL08, HW11, LHL08, OLL03, OLL04, Sar03, ST02, Sud04, Boy92b, EMT99, GSS98a].

Transformation
[DNS90].

transforms
[DR95].

transient
[ESM98].

Translation
[GD03, ESM98, GD07b, Rah96, Rok98, TSM16].

translator
[HS08].

transpose
[TH08].

Transputer
[Wel91, CKS91, LB91].

Transputers
[BHGS90].

Transputing
[Wel91].

treatment
[KS98a].

Tree
[An99, ADB94, ADGBP99, BH89, Bar90, BADG00, BOX00, BH88, CDM98, CWA14, Jdr+18, SWW94, WPM+02, WS03, WN14, WSW+95, BAP96, BAD+97, BAO01, BCAD06, BJWS96, DUB66, GY08, JP09, PD89, PG94, PG96a, Pud16, Wan99, WS92, WSL95, WSH+12, Xue98, JKS09, JKW09].

Tree-Code
[CDM98].

Treecode
[KFM99, Mak04, SW94, DKPH04, WS95a, WSB+97].

Treecodes
[GSS98a, GSS00].

TreePM
[Bag02, IFM09, YF05].

Trees
[BF78].

trenches
[TW08].

trends
[MBS15, Car09, CGL03, Les09].

triangulated
[RS94].

Truly
[APG94, Ano94c].

truncated
[TW08].

truncating
[BPB95].

Truncation
[OC03, AP00, AB95, CC04, CC05].

tube
[Lin95].

tumors
[ES04].

tuned
[YB12].

tuning
[MKF01, NMO06].

turbulence
[HB+09, YNS+09, YBNY13].

Turkey
[An097b].

Two
[LS93, MCK96, Pan95, Pie93, RRR05, BL97, Car06, CHL06, CCG+06a, CC10, CC12, ECL02, EG01, GH98, KJCG08, Kro01, NTO9, PSPS95, RRR03, Rok90, Rok98, RCW07, SKPP95, WY07b, XJ08, YBZ04].

Two-Center
[Pan95].

two-component
[JKCG08].

Two-Dimensional
[LS93, BL97, CC10, CC12, ECL02, GH98, Kro01, NTO9, PSPS95, RRR03, WY07b, XJ08].

two-grid
[Car06].

two-step
[RCW07].

Type
[Gus98, ZZ93].

U.C.L.A
[AG88].

U.S.
[An090].

ultra
[DM07, DM12].

ultra-weak
[DM07, DM12].

ultracold
[JSG08].

Uncertainty
[MBS15].

Unified
[JBL02].

Uniform
[BB78].

uniqueness
[YSM05].

unit
[DKG92c, KS98b].

Universe
[BBAG00, ZGI+10, BAD01].

University
[IEE94a].

unknowns
[YBK+11].

Unrelaxed
[PNB94].

unstructured
[HKS05, MSV92].

UPC
[ZBS11].

Updates
[Kan15].

Updating
[HA17].

upon
[TD09].

Uranus
[MKF02].

USA
[Hol12, HM86, IEE96c, ACM97, IEE02, Kar95, K+96].

Use
[HM86, SPS96, Bes00, Mak93, PJY96, RTA+08, SM97].

User
[Wel91].

Using
[BVW96, BV96b, BP88, CL12, CKE08, CS98b, CPD17, GAA96, HE88, LKM02, LRW95, MI96, MPA96, Per99, SG97, SHMC97, SMC97, SP99, SC94, BV96a, Bor86, BH88, CJK91, CvdHMS94, DM07, ESR01, ES04, ESM98, Gas97, GF06b, GF96a, GD05, HC10, HLL+18, Kan15, KM00, LBGS16, LB91, LJK98, LO96b, LCZ07, LWM+02, MI95,
REFERENCES

MRH14, OYK +14, Pri94, RC97, Sat10, Syl03, Tau03a, WY07a, WS92, WSWL95, YB97, YBK +11, YBNY13, ZCG00. UT [Hol12]. Utah [RSS96].

vacancies [Kon93]. value [Lin95, ON08a, ON09b, RTA +08]. values [LX17]. variable [Tau03a, Tau04]. variables [JP89]. Variants [YTK14, BHER94].

Variational [DM12, DM07]. Vector [CS98a, TYON12, HC08, XWT09]. Vectorized [Bor86, GDK89, BP93]. Velocities [ZQSW94]. versatile [WS95a].

Version [GS98a, NT96, SP01, GG89, GG90, GR97, HC08, LCM07]. very [BSSF96a, BSSF96b, LBI +97, PSPS94]. vesicles [VGBZ09]. via [AGR88b, GB11, Gue97, GD07a, WJGHG96b].


Vortex [BCH93, CK00, DD95, RRR05, WSW +95, aYZ97, BLA05, CWD08, ECL02, HM95, Ros06, RS94, WSL05, AG88].

vortex-in-cell [CWD08]. vorticle [Ang17]. voxel [Ham11].

W [MD12]. WA [LCK11]. Waals [DKG92b]. Washington [IEE94a, IEE94c]. water [BAL91, HHKP99]. wave [BSL09, Bes00, BGGC06, CCZ97, CCKL09, CHJN03, CRW93, ESR01, ESM98, GLS06, LC94, MD98, Tak14, TCW08, TC09].

Wavelet [HKS05, BP93, RŠZ09, XWT09, XTH09]. wavelet-BEM [XTH09]. Wavelets [A +97, CM06, Tau03a]. WAVES [CHJN03].


Wood [ON09a]. Worcester [BR93]. work [BADD96, DTT96, Re09]. work- [BADD96]. Workshop [ERT12, HM86, AG88].

workstations [LJ98]. World [We91]. WOTUG [We91]. Would [Wil00].

X [Fu97]. X10 [MRH14]. x86 [TYON12, TYNO12]. x86_64 [NMH06]. XV [BR93]. XXVI [Bre04].

Yamakawa [GCH +18, LGG +13]. York [IEE90, IEE90, IEE96b]. Yukawa [BFO99, HJZ09, ZHPS10].

zero [GG16, SF18, ZC00]. zero-multipole [SF18]. Zonal [BDS07].

References


Agullo:2017:BGB [AAB +17] Emmanuel Agullo, Olivier

Amor:2001:DPF


Aarseth:1985:MTS


Auffinger:1995:STE


Antoine:2004:APE


Angyan:1994:CAM


REFERENCES

Antonuccio-Delogu:1994:PTB


Antonuccio-Delogu:1999:PTA


Adamson:1996:CCT


Anandakrishnan:2011:GBA


Anderson:1988:VMP


Aluru:1998:DIH


Ambrosiano:1988:FMM

Amбросиано:1988:GPS


Allen:1993:GIM


Aluru:1994:DIH


Aluru:1996:GBA


Amisaki:2000:PEE


Anderson:1992:IFM


Anderson:1999:TDS

REFERENCES


REFERENCES


Anonymous:1995:ECP


Anonymous:1995:PAC


Anonymous:1996:PAC


Naval Postgraduate School, ????, 1996. Two volumes.

Anonymous:1997:PAC


Anonymous:1997:RSA


Anandakrishnan:2010:ABN

Ramu Anandakrishnan and Alexey V. Onufriev. An \(N\log N\) approximation based on the natural organization of biomolecules for speeding up the computation of long range interactions. Journal of Computational Chemistry, 31(4): 691–706, March 2010. CODEN JCCHDD. ISSN 0192-
REFERENCES


Amini:2000:ATE


Amini:2003:MLF


Aluru:1994:TDI


Appel:1985:EPM


Alpert:1991:FAE

Method, and this paper shows how they can be computed in $O(N)$ time.

Allen:1987:CSL


Atkinson:1997:NSB


Amisaki:2003:DHA


Ying:1997:VM


Bailey:1995:PSS


Becciani:1997:PTC

REFERENCES


REFERENCES


Bathe:2003:CFS


Berger:1987:PSN


Becciani:2006:FMP


Beale:1993:VFR


Board:1992:AMD


Babuska:2002:MMN

REFERENCES


REFERENCES


REFERENCES


[BGPW00] F. Broeckx, M. J. Goovaerts, R. Piessens, and L. Wuytack,

**Barnes:1986:HFC**

J. E. Barnes and P. Hut. A hierarchical $O(N \log N)$ force-calculation algorithm. *Nature*, 324(6270):446-449, 1986. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). This paper appears to be the origin of fast multipole algorithms; its $O(N \log N)$ complexity was later improved to $O(N)$ [GR87]. See also [App85], which might predate this work.

**Bouchet:1988:CSU**


**Barnes:1989:EAT**


**Bordner:2003:BES**


**Bhatt:1997:PA**


**Board:1994:SIM**

REFERENCES


REFERENCES


REFERENCES

Brunet:1993:HAD


Blelloch:1997:PCB


Beatson:1998:FER


Bonnet:2007:FBT


Boris:1986:VNN


Bode:2000:TPM


Boyd:1992:FA

John P. Boyd. A fast algorithms for Chebyshev, Fourier


Benson:2014:PDF


Brebbia:1993:BEX


Brebbia:2004:BEX


Biesiadecki:1993:DMT


Blackston:1997:HPE


Board:2000:FMA


Bapat:2009:AFM

M. S. Bapat, L. Shen, and


REFERENCES


REFERENCES


REFERENCES


H. Cheng, W. Crutchfield, Z. Gimbutas, L. Greengard, J. Huang, V. Rokhlin, N. Yarvin, and J. Zhao. Remarks on the implementation of the wideband FMM for the Helmholtz equation in two dimensions. In *Inverse problems, multi-scale analysis and


REFERENCES


REFERENCES


Cruz:2011:FMM


Chau:2008:AFM


Chynoweth:1991:SOL


Caillol:1991:NSH


Cecka:2012:FMM


Coifman:2006:DW


REFERENCES


Challacombe:1995:RR

Chao:19xx:MFM

Clark:1994:PMD

Chen:2014:FST

Cocle:2008:CVC

Challacombe:1997:PBC
Matt Challacombe, Chris White, and Martin Head-Gordon. Periodic boundary conditions and the fast multipole method. *Journal of Chemical Physics*, 107(23):10131–??, 1997. CO-
REFERENCES

DEN JCPA6. ISSN 0021-9606 (print), 1089-7690 (electronic).

Chen:2008:FFM


Dachsel:2006:FAD


Dachsel:2009:ECF


Dachsel:2010:CAE


See [Dac09].

Darve:1997:FMM


Darve:2000:FMMa


Darve:2000:FMMb


Darrigrand:2002:CFM


[Dem96b] James Demmel. Fast hierarchical methods for the
REFERENCES


[Ding:1992:ALSb] Hong-Qiang Ding, Naoki Karasawa, and William A. Goddard, III. Atomic level


REFERENCES

Deem:1990:TCS


Dutt:1995:FFT


Dikaiakos:1996:FAS


Dongarra:2000:GEI


Dombroski:1996:KCE


Dubinski:1996:PTC


Dembart:1998:AFM

REFERENCES


REFERENCES


El-Shenawee:2001:MCS


Esselink:1995:CAL


Fann:2004:SOM


Fong:2009:BBF


Franklin:1996:GMI


Fedichev:2011:CEM


Fukushige:1999:HPS

Toshiyuki Fukushige, Piet Hut, and Junichiro Makino.
REFERENCES


Fortin:2013:ADD


Figueirido:1997:LSS


Fukushige:1995:BSG


Fukushige:1996:BSG


Fukushige:1993:SPC

T. Fukushige, J. Makino, T. Ito, S. K. Okumura,


H. Fujiwara. The fast multipole method for integral equations of seismic scattering

**Fuller:1997:OMX**


**Gurel:1996:ESS**


**Gurel:1996:FMM**


**Gumerov:2013:FMA**


**Gaspar:1997:FSB**


**Gavrilyuk:2011:BRF**

REFERENCES


Gumerov:2006:FMM


Gumerov:2007:FRB


Gumerov:2007:SPF


Gumerov:2008:FMM


Gumerov:2009:BFM


Garcia:2008:ISE


Grest:1989:VLC


Goude:2013:AFM

[GE13] Anders Goude and Stefan

\textbf{Gaul:2006:LSSb}  

\textbf{Gaul:2006:LSSa}  

\textbf{Greengard:1989:PVF}  

\textbf{Gimbutas:2016:FMM}  

\textbf{Greenbaum:1993:LED}  


REFERENCES


REFERENCES

=Grytsenko:2008:ACA=


=Greengard:1987:FAP=


=Greengard:1988:REPb=


=Greengard:1988:EIF=


=Greengard:1997:NVF=


=Gimbutas:2002:GFM=


=Greengard:1987:REP=


=Greengard:1988:REPa=

[Gre88] Leslie Greengard. *The rapid evaluation of potential fields

Greengard:1990:PF


Greengard:1990:NSB


Greengard:1994:FAC


Ginste:2004:FMM


Gyure:1998:PMH


Greengard:1991:FGT


Greengard:1998:NVF


[GW98] Leslie Greengard and Stephen Wandzura. Guest Editor’s introduction: Fast multipole


He:2008:DVT


Hesford:2010:FIS


Higham:2015:PCA


Hockney:1988:CSU


Holm:2014:DAA


Hinsen:1992:RDE


Hamada:1998:PPS

REFERENCES

ver Spring, MD 20910, USA, 1998.


He:2008:FES


Huang:2018:IEC


Hut:1986:USS


Hamilton:1995:RGM


Hamada:2010:TAB


Houzaki:2006:FPR

REFERENCES

Hamada:2009:THB


Hollingsworth:2012:SPI


Hamilton:1995:FMM


Hendrickson:1995:PMB


Hrycak:1998:IFM


Holt:1995:HBM


Hanninen:2008:EER

REFERENCES

Hanrahan:1991:RHR


Heath:1997:PES


Hoyler:1997:FMM


Hesford:2010:FMM


Hesford:2011:RRA

Andrew J. Hesford and Robert C. Waag. Reduced-rank approximations to the far-field transform in the gridded fast multipole method.
REFERENCES


Yao:2008:IFM


Ichiki:2002:ISD


IEEE:1990:PSN


IEEE:1992:ASF


IEEE:1992:PSM


REFERENCES

IEEE:1996:IAP


IEEE:1996:PFI


IEEE:1996:PSM


IEEE:1997:IAP


IEEE:1998:FIC


IEEE:2002:STI

[IEE02] IEEE, editor. SC2002: From Terabytes to Insight. Proceed-

[Ishiyama:2009:GMP]

[Izaguirre:2005:PMS]

[Iserles:1997:AN]

[Ibeid:2016:PMC]

[Yoshida:2002:NFM]

[Jaramillo-Botero:2002:UFM]
REFERENCES

Jandhyala:1998:FAA

Jia:2008:KDC

Jansen:2018:TCC

Jandhyala:1998:CSD
REFERENCES


REFERENCES


[KF99] Atsushi Kawai, Toshiyuki Fukushige, and Junichiro Makino. $7.3$/Mflops astrophysical N-body simulation with treecode on GRAPE-5. In ACM [ACM99], page ??


pean supercomputing accomplishments, and performance and computations — v. 3. 
Supercomputer design, hardware and software.

**Krishnan:1995:PAF**


**Kozyshenko:2016:IAE**


**Korchowiec:2009:ECT**


**Kreuzer:2009:FMB**

Kokubo:1994:HSP


Kutteh:1995:ICM


Kondratyev:1993:MME


Kropinski:1999:IEM

Kropinski:2001:ENM


Kropinski:2002:NMM


Kudin:1998:FMA


Kudin:1998:FMM


Kudin:2004:RIL


Kim:2011:CSV


Koc:1999:EAN

S. Koc, Jiming Song, and W. C. Chew. Error analysis for the numerical evaluation of the diagonal forms of the


[Leathrum:1992:MAF]

[Leathrum:1992:PFMb]

[Liem:1991:MDS]

[Lazarski:2016:DFT]
Lim:1997:MDV


Lu:1993:FAS


Lu:1994:MAS


Liska:2014:PFM


Letourneau:2014:CFM


Leimkuhler:2006:NAM


Lustig:1993:FMM


Li:2018:MDL


Lu:2007:AFM


Lambert:1996:MBA


LeRouzo:1997:MEC


Leathrum:1992:PFMa


Lemou:1998:MEF


Lemou:2004:MAF

Mohammed Lemou. On multipole approximations of the
REFERENCES


Leszczynski:1996:CCR


Liang:2013:FMM


Lim:2008:FFT

Kian Meng Lim, Xuefei He, and Siak Piang Lim. Fast Fourier transform on multipoles (FFTM) algorithm for Laplace equation with direct and indirect boundary ele-


Linton:1995:MMB


Liu:1994:PIB


Liu:2008:FMB


Liu:2009:FMB


**Lu:1996:AFMb**


**Lu:1996:AFMa**


**Lee:1998:PPS**


**Lienhart:2002:UFP**


**Lakshinarasimhulu:2002:CMB**


**Lin:1992:MDD**


**Lu:1996:MPF**

REFERENCES

Lu:1996:PIF


Lo:1999:SPD


Lee:2012:MMM


Langer:2007:IDS


Langer:2007:IFM


Ly:1999:SPD


Lambin:1993:ESM

ISSN 0020-7608 (print), 1097-461X (electronic).

Langer:2005:CBF


Lu:1996:AF


Lupo:2002:LSM


Liu:2017:FMM


Ltaief:2014:DDE


Lee:2004:SIP


Makedon:1993:PDA

F. Makedon, editor. Parallel I/O and databases: 2nd Annual symposium on issues and obstacles in the practical implementation of parallel algorithms and the use of parallel machines — June 1993, Hanover, NH, Dartmouth Institute for Advanced Gradu-
ate Studies in Parallel Computation. DIAGS, Hanover, NH, USA, 1993.

**Makino:1999:YAF**


**Makino:2004:FPT**


**Mattson:1995:PCC**


**Marchetti:1997:ICB**


**Malhotra:2000:LEF**

REFERENCES

CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic). URL http://dlib.computer.org/cs/books/cs2000/pdf/cs3004.pdf. See [DS00, BS00].

Mehl:2015:RTC


Mandel:1992:SIM


McCorquodale:2007:LCA


McDowell:1997:CGM


McKenney:1996:AFM


Marengo:1998:TDP

Edwin A. Marengo and Anthony J. Devaney. Time-dependent plane wave and
REFERENCES

Makino:2012:GAG

Makino:2000:TSB

Makino:2003:GMP

Marzouk:2005:MCO

Malas:2007:IPM

Malas:2009:AMF
Malas:2011:SCP


McKenney:1995:FPS


Makino:2007:GDP


MacDonald:1995:FSM


Macdonald:1996:FSM


Makino:1990:GSP

REFERENCES

Makino:2001:PET

Makino:2002:TSP

McCurdy:1999:ECP

Morice:2006:FMM

McKenney:1996:MDS

Martinsson:2007:AKI
REFERENCES

8275 (print), 1095-7197 (electronic).


**Mehrotra:1992:USC**


**Makino:1994:GOT**


**Nishida:1997:AFM**

Nilsson:2004:SHF


Nakano:1994:MMD


Najm:1999:CLE


Nitadori:2006:PTB


Niino:2012:PBC


Nyland:1993:DIA


Niedermeier:1994:SAM

REFERENCES


REFERENCES

Of:2007:FMM


Of:2008:EAM


Ooi:2008:HFM


Osei-Kuffuor:2014:SAL


Okunbor:1996:IMB


Ong:2004:FFT


Ong:2003:FA

REFERENCES

Olyslager:2008:FMM

Okumura:1992:GHP

Otani:2008:FPB

Otani:2008:PFM

Otani:2009:BPF
Y. Otani and N. Nishimura.

Otani:2009:FOP


Ormseth:2007:IFM


ODonnell:1989:FAN


Of:2005:AFM


Of:2006:FMM


Of:2006:BET

Günther Of, Olaf Steinbach, and Wolfgang L. Wendland. Boundary element tearing and interconnecting domain decomposition methods. In Multifield problems in solid and fluid mechanics, volume 28 of Lect. Notes Appl. Com-
Ohno:2014:PMD


Poczek:2002:FAI


Poursina:2014:IFM


Pan:1992:CCM


Panas:1995:PET


Park:1989:BBT

REFERENCES

Pouransari:2015:OAF


Pellegrini:1998:EFS


Pereira:1999:PBI


Pfalzner:1994:HTC


Pfalzner:1996:MBT


Pollock:1996:CPF


Papa:2005:CMD

REFERENCES


Pearce:2015:DLB


Piecuch:1993:MSC


Perez-Jorda:1996:CRS


Peirce:1995:SMM


Pluta:1994:DHE

Pringle:1994:NST


Pruett:2003:ABA


Pan:1992:PCT


Potts:2004:FCR


Petersen:1994:VFM


Petersen:1995:EEFa


Petersen:1995:EEFb

REFERENCES

1995. CODEN PRLAAZ. ISSN 0080-4630.


REFERENCES

Rossi:2006:EBS


Ramachandran:2003:FTD


Ramachandran:2005:FMM


Russo:1994:FTV


Rokhlin:1997:SFM


Rudberg:2006:EIF


Renegar:1996:MNA

REFERENCES


[Ravnik:2009:CBW]

[RoDriguez:2008:USV]

[Salmon:1996:GCC]

[Sarvas:2003:PIA]

Rokhlin:1994:FMM

[Sarv-as:2003:PIA]
REFERENCES


[SF18] Shun Sakuraba and Ikuo Fukuda. Performance eval-

Sendur:1997:SRP


Sabariego:2004:CME


Sabariego:2004:AFM


Shanker:2007:ACE


Sharp:2006:BSP


Singh:1995:IHB

REFERENCES

Singh:1993:PAF

SHHG93

Shanker:1998:FMA

SHM98

SHMC97

Shanker:1997:FMA


Sin92

Singer:1995:PIF
J. K. Singer. Parallel implementation of the fast multipole method with periodic


Schmidt:1997:EIF


Schmidt:1997:MES


Song:1996:MFM


Song:1997:MFM


Song:1998:FISa


Shanker:1997:OSI

Simos:2005:ACM


Shanker:1997:SIC


Solvason:1997:EEF


Sun:2001:MVF


Springel:2005:CSC


Scherbinin:1996:UME

Speck:2012:MST


Sagui:2006:NDM


Saad:1989:DCH


Schanz:2007:BEA


Strain:1996:ALS


Suda:2002:FSH


Schwab:2006:KLA

REFERENCES


Stalzer:1995:PFMb


Stalzer:1995:PFMa


Sun:2014:FMR


Suda:2004:SAF


Salmon:1994:STC


Springel:2005:SFE


Salmon:1994:FPT

John K. Salmon, Michael S. Warren, and Gregoire S. Winckelmans. Fast parallel tree codes for gravitational and fluid dynamical N-body

Schwichtenberg:1999:AMM


Sylvand:2003:CIC


Takahashi:2014:IBF


Tausch:2003:SBP


Tausch:2003:FMM


Tausch:2004:VOF

REFERENCES


**Tornberg:2008:FMM**


**Totoo:2014:PHI**


**Taiji:1994:GTM**

M. Taiji, J. Makino, T. Ebisuzaki[1][W03] and D. Sugimoto. GRAPE-4: a teraFLOPS massively parallel special-purpose computer system for astrophysical $N$-body simulations. In IEEE, editor, *Proceedings of the Eighth International Par-


**Tang:2012:FLC**


**Takahashi:2016:EBM**


**Tausch:2003:MBS**

Tang:2006:HOP


Vosbeek:2000:ACD


Veerapaneni:2009:BIM


VandeWiele:2008:AFM

REFERENCES

Victory:1991:CAF


Van:2002:DF


Wambgsanss:1999:GLN


Wagner:1994:RPA


Wagner:1994:RPF


Welch:1991:TPW


Wang:2008:FSM


Warren:1998:AAL


White:1994:DEI


White:1996:FTF


White:1996:RAQ


Wilson:2000:PWW


Windemuth:1995:AAM


White:1996:CGF


White:1996:LSD

[WJGHG96b] C. A. White, B. G. Johnson, P. M. W. Gill, and M. Head-Gordon. Linear scaling density functional calculations via


Computer Society Press order number RS00160.


Haitao Wang and Zhenhan Yao. Large scale analysis of mechanical properties in 3-D fiber-reinforced composites


REFERENCES


REFERENCES


[YF98]  Tao Yang and Cong Fu. Space/time-efficient scheduling and execution of parallel irregular computations. *ACM Transactions on Programming Languages and Systems*, 20(6):1195–1222, November 1998. CODEN ATPS DT. ISSN 0164-0925 (print), 1558-4593 (elec-
REFERENCES


Norman Yarvin and Vladimir Rokhlin. A generalized one-dimensional fast multipole method with application to filtering of spherical harmonics. Journal of Computa-
REFERENCES


Zhang:2014:PFS


Zhu:2015:SRB


Zhang:2011:OBH

Junchao Zhang, Babak Behzad, and Marc Snir. Optimizing the Barnes–Hut algorithm in UPC. In Lathrop et al. [LCK11], pages 75:1–75:11. ISBN 1-4503-0771-X. LCCN ????

Zhang:2015:DMB


Zhao:2015:SRB


Zhang:2000:SDC


Zhao:1998:TSM


Zinchenko:2005:MAA


Zheng:2016:AEA


Zwart:2010:SUI


Zhao:2007:VFM

Zhiqin Zhao, Narayan Kovvali, Wenbin Lin, Chang-Hoi Ahn, Luise Couchman, and Lawrence Carin. Volumetric fast multipole method for

**Zurek:1994:LSS**


**Zhang:2007:ASD**


**Zhang:2019:FMM**


**Zhao:2005:FMB**


**Zheng:1993:EMM**