A Flexible Inner-Outer Preconditioned GMRES Algorithm

Citation Report

#	ARTICLE	IF	CITATIONS
1	Dynamic load balancing of an iterative eigensolver on networks of heterogeneous clusters. , 0, , .		5
2	A new mixed preconditioning method for finite element computations. Computer Methods in Applied Mechanics and Engineering, 1992, 99, 27-42.	3.4	27
3	Preconditioned complex generalized minimal residual algorithm for dense algebraic variational equations in quantum reactive scattering. Journal of Chemical Physics, 1993, 99, 2739-2751.	1.2	12
4	BiCGstab(l) and other hybrid Bi-CG methods. Numerical Algorithms, 1994, 7, 75-109.	1.1	117
5	GMRESR: a family of nested GMRES methods. Numerical Linear Algebra With Applications, 1994, 1, 369-386.	0.9	216
6	A direct solver for the least-squares problem arising from GMRES(k). Communications in Numerical Methods in Engineering, 1994, 10, 743-749.	1.3	5
7	Finite element solution strategies for large-scale flow simulations. Computer Methods in Applied Mechanics and Engineering, 1994, 112, 3-24.	3.4	142
8	Multi-grid domain decomposition approach for solution of Navier-Stokes equations in primitive variable form. International Journal for Numerical Methods in Engineering, 1995, 38, 667-683.	1.5	2
9	Parallel fluid dynamics computations in aerospace applications. International Journal for Numerical Methods in Fluids, 1995, 21, 783-805.	0.9	79
10	New insights in GMRES-like methods with variable preconditioners. Journal of Computational and Applied Mathematics, 1995, 61, 189-204.	1.1	23
11	Maintaining convergence properties of BiCGstab methods in finite precision arithmetic. Numerical Algorithms, 1995, 10, 203-223.	1.1	78
12	Robust preconditioning of large, sparse, symmetric eigenvalue problems. Journal of Computational and Applied Mathematics, 1995, 64, 197-215.	1.1	32
13	Design of an iterative solution module for a parallel sparse matrix library (P_SPARSLIB). Applied Numerical Mathematics, 1995, 19, 343-357.	1.2	8
14	GMBACK: A Generalised Minimum Backward Error Algorithm for Nonsymmetric Linear Systems. SIAM Journal of Scientific Computing, 1995, 16, 698-719.	1.3	10
15	ILUM: A Multi-Elimination ILU Preconditioner for General Sparse Matrices. SIAM Journal of Scientific Computing, 1996, 17, 830-847.	1.3	108
16	Iterative methods for unsymmetric linear systems. Lecture Notes in Computer Science, 1996, , 217-234.	1.0	0
17	Nested Krylov methods based on GCR. Journal of Computational and Applied Mathematics, 1996, 67, 15-41.	1.1	91
18	Reliable updated residuals in hybrid Bi-CG methods. Computing (Vienna/New York), 1996, 56, 141-163.	3.2	84

#	Article	IF	Citations
19	Finite element modelling of the 1969 Portuguese tsunami. Physics and Chemistry of the Earth, 1996, 21, 1-6.	0.3	6
20	DQGMRES: a Direct Quasi-minimal Residual Algorithm Based on Incomplete Orthogonalization. Numerical Linear Algebra With Applications, 1996, 3, 329-343.	0.9	25
21	APPLICATION OF THE COLLOCATION METHOD IN THREE DIMENSIONS TO A MODEL SEMICONDUCTOR PROBLEM. International Journal for Numerical Methods in Engineering, 1996, 39, 1029-1040.	1.5	4
22	MODELLING OF WAVE PROPAGATION IN THE NEARSHORE REGION USING THE MILD SLOPE EQUATION WITH GMRES-BASED ITERATIVE SOLVERS. International Journal for Numerical Methods in Fluids, 1996, 23, 397-411.	0.9	8
23	Restarted GMRES preconditioned by deflation. Journal of Computational and Applied Mathematics, 1996, 69, 303-318.	1.1	159
24	A comparison of preconditioners in the solution of parabolic systems in three space dimensions using DASPK and a high order finite element method. Applied Numerical Mathematics, 1996, 20, 117-128.	1.2	6
25	Algorithm 777: HOMPACK90. ACM Transactions on Mathematical Software, 1997, 23, 514-549.	1.6	137
26	Parallel and Serial Applications of the RETRAN-03 Power Plant Simulation Code Using Domain Decomposition and Krylov Subspace Methods. Nuclear Technology, 1997, 117, 133-150.	0.7	1
27	Linear System Solvers: Sparse Iterative Methods. ICASE/LaRC Interdisciplinary Series in Science and Engineering, 1997, , 91-118.	0.1	12
28	Parallel Preconditioning with Sparse Approximate Inverses. SIAM Journal of Scientific Computing, 1997, 18, 838-853.	1.3	450
29	Approximate Inverse Techniques for Block-Partitioned Matrices. SIAM Journal of Scientific Computing, 1997, 18, 1657-1675.	1.3	77
30	Perturbation of Eigenvalues of Preconditioned Navier--Stokes Operators. SIAM Journal on Matrix Analysis and Applications, 1997, 18, 733-751.	0.7	7
31	Analysis of Augmented Krylov Subspace Methods. SIAM Journal on Matrix Analysis and Applications, 1997, 18, 435-449.	0.7	93
32	Solving optimal control problems by GAs. Nonlinear Analysis: Theory, Methods & Applications, 1997, 30, 2891-2902.	0.6	5
33	Massively parallel implementation of the mesoscale compressible community model. Parallel Computing, 1997, 23, 2143-2160.	1.3	18
34	Deflated and Augmented Krylov Subspace Techniques. Numerical Linear Algebra With Applications, 1997, 4, 43-66.	0.9	136
35	ILUS: An incomplete LU preconditioner in sparse skyline format. International Journal for Numerical Methods in Fluids, 1997, 25, 739-748.	0.9	20
36	GMRES physics-based preconditioner for all Reynolds and Mach numbers: numerical examples. International Journal for Numerical Methods in Fluids, 1997, 25, 1347-1371.	0.9	5

#	ARTICLE	IF	CITATIONS
37	Title is missing!. Numerical Algorithms, 1998, 17, 1-32.	1.1	5
38	Weighted FOM and GMRES for solving nonsymmetric linear systems. Numerical Algorithms, 1998, 18, 277-292.	1.1	46
39	A Nested FGMRES Method for Parallel Calculation of Nuclear Reactor Transients. Journal of Scientific Computing, 1998, 13, 65-93.	1.1	0
40	SOR as a preconditioner II. Applied Numerical Mathematics, 1998, 26, 465-481.	1.2	5
41	A Krylov-Schwarz iterative solver for the shallow water equations. Physics and Chemistry of the Earth, 1998, 23, 485-490.	0.3	1
42	Comparison of Different Krylov Subspace Methods Embedded in an Implicit Finite Volume Scheme for the Computation of Viscous and Inviscid Flow Fields on Unstructured Grids. Journal of Computational Physics, 1998, 140, 311-345.	1.9	39
43	A multi-grid enhanced GMRES algorithm for elasto-plastic problems. International Journal for Numerical Methods in Engineering, 1998, 42, 1441-1462.	1.5	14
44	Domain decomposition for the incompressible Navier-Stokes equations: solving subdomain problems accurately and inaccurately. International Journal for Numerical Methods in Fluids, 1998, 26, 1217-1237.	0.9	20
45	On the performance of various adaptive preconditioned GMRES strategies. Numerical Linear Algebra With Applications, 1998, 5, 101-121.	0.9	49
46	A new adaptive GMRES algorithm for achieving high accuracy. Numerical Linear Algebra With Applications, 1998, 5, 275-297.	0.9	19
47	Physics based GMRES preconditioner for compressible and incompressible Navier-Stokes equations. Computer Methods in Applied Mechanics and Engineering, 1998, 154, 203-228.	3.4	17
48	Preserving Symmetry in Preconditioned Krylov Subspace Methods. SIAM Journal of Scientific Computing, 1998, 20, 568-581.	1.3	4
49	Accelerated Inexact Newton Schemes for Large Systems of Nonlinear Equations. SIAM Journal of Scientific Computing, 1998, 19, 657-674.	1.3	45
50	Approximate Inverse Preconditioners via Sparse-Sparse Iterations. SIAM Journal of Scientific Computing, 1998, 19, 995-1023.	1.3	191
51	A new adiabatic kernel for the MC2 model. Atmosphere - Ocean, 1998, 36, 241-270.	0.6	41
52	An object-oriented framework for block preconditioning. ACM Transactions on Mathematical Software, 1998, 24, 159-183.	1.6	37
53	Distributed Schur Complement Techniques for General Sparse Linear Systems. SIAM Journal of Scientific Computing, 1999, 21, 1337-1356.	1.3	104
54	Parallel implementation of a multiblock method with approximate subdomain solution. Applied Numerical Mathematics, 1999, 30, 403-423.	1.2	14

#	ARTICLE	IF	CITATIONS
55	Implicitly restarted and deflated GMRES. Numerical Algorithms, 1999, 21, 261-285.	1.1	23
56	Iterative solution of the drift-diffusion equations. Numerical Algorithms, 1999, 21, 323-341.	1.1	11
57	Fast Iterative Methods for Solving of Boundary Nonlinear Integral Equations with Singularity. Journal of Computational Analysis and Applications, 1999, 1, 219-234.	0.2	3
58	Diagonal threshold techniques in robust multi-level ILU preconditioners for general sparse linear systems. Numerical Linear Algebra With Applications, 1999, 6, 257-280.	0.9	18
59	Acceleration of GMRES convergence for three-dimensional compressible, incompressible and MHD flows. , 1999, , .		1
60	Preconditioning for the Steady-State Navier--Stokes Equations with Low Viscosity. SIAM Journal of Scientific Computing, 1999, 20, 1299-1316.	1.3	186
61	ML(k)BiCGSTAB: A BiCGSTAB Variant Based on Multiple Lanczos Starting Vectors. SIAM Journal of Scientific Computing, 1999, 21, 1263-1290.	1.3	27
62	BILUM: Block Versions of Multielimination and Multilevel ILU Preconditioner for General Sparse Linear Systems. SIAM Journal of Scientific Computing, 1999, 20, 2103-2121.	1.3	76
63	Integral Equation Preconditioning for the Solution of Poisson's Equation on Geometrically Complex Regions. SIAM Journal of Scientific Computing, 1999, 21, 819-835.	1.3	0
64	Truncation Strategies for Optimal Krylov Subspace Methods. SIAM Journal on Numerical Analysis, 1999, 36, 864-889.	1.1	115
66	Coarse mesh evolution strategies in the Galerkin multigrid method with adaptive remeshing for geometrically non-linear problems. International Journal for Numerical Methods in Engineering, 2000, 49, 547-571.	1.5	9
67	Preconditioned Krylov subspace methods for solving nonsymmetric matrices from CFD applications. Computer Methods in Applied Mechanics and Engineering, 2000, 189, 825-840.	3.4	27
68	Preconditioned iterative methods and finite difference schemes for convectionâ€"diffusion. Applied Mathematics and Computation, 2000, 109, 11-30.	1.4	43
69	Sparse approximate inverse and multilevel block ILU preconditioning techniques for general sparse matrices. Applied Numerical Mathematics, 2000, 35, 67-86.	1.2	18
70	Analysis of acceleration strategies for restarted minimal residual methods. Journal of Computational and Applied Mathematics, 2000, 123, 261-292.	1.1	67
71	Iterative solution of linear systems in the 20th century. Journal of Computational and Applied Mathematics, 2000, 123, 1-33.	1.1	333
72	Krylov subspace projection method and its application on oil reservoir simulation. Applied Mathematics and Mechanics (English Edition), 2000, 21, 607-616.	1.9	0
73	Implicitly Restarted GMRES and Arnoldi Methods for Nonsymmetric Systems of Equations. SIAM Journal on Matrix Analysis and Applications, 2000, 21, 1112-1135.	0.7	112

#	ARTICLE	IF	CITATIONS
74	Flexible Conjugate Gradients. SIAM Journal of Scientific Computing, 2000, 22, 1444-1460.	1.3	150
75	Krylov Subspace Acceleration of Nonlinear Multigrid with Application to Recirculating Flows. SIAM Journal of Scientific Computing, 2000, 21, 1670-1690.	1.3	67
76	FQMR: A Flexible Quasi-Minimal Residual Method with Inexact Preconditioning. SIAM Journal of Scientific Computing, 2001, 23, 363-380.	1.3	36
77	An Algebraic Convergence Theory for Restricted Additive Schwarz Methods Using Weighted Max Norms. SIAM Journal on Numerical Analysis, 2001, 39, 463-479.	1.1	68
78	Geometric aspects of the theory of Krylov subspace methods. Acta Numerica, 2001, 10, 251-312.	6.3	65
79	A class of multilevel recursive incomplete LU preconditioning techniques. Korean Journal of Computational and Applied Mathematics, 2001, 8, 213-234.	0.2	4
80	Enhanced multi-level block ILU preconditioning strategies for general sparse linear systems. Journal of Computational and Applied Mathematics, 2001, 130, 99-118.	1.1	22
81	Fast and accurate discrete ordinates methods for multidimensional radiative transfer. Part I, basic methods. Journal of Quantitative Spectroscopy and Radiative Transfer, 2001, 69, 671-707.	1.1	91
82	An integrated Davidson and multigrid solution approach for very large scale symmetric eigenvalue problems. Computer Methods in Applied Mechanics and Engineering, 2001, 190, 3543-3563.	3.4	12
83	Stabilized space-time finite element formulations for free-surface flows. Communications in Numerical Methods in Engineering, 2001, 17, 813-819.	1.3	14
84	Partitioned-GMRES in Domain Decomposition with Approximate Subdomain Solution. BIT Numerical Mathematics, 2001, 41, 924-935.	1.0	2
85	Comment on â€˜Explicit, approximate expressions for the resolution anda posterioricovariance of massive tomographic systemsâ€™ byÂG.ÂNolet, R. Montelli and J. Virieux. Geophysical Journal International, 2001, 145, 307-314.	1.0	31
86	Parallel Iterative Methods for Sparse Linear Systems. Studies in Computational Mathematics, 2001, , 423-440.	0.2	56
87	Enhanced GMRES Acceleration Techniques for some CFD Problems. International Journal of Computational Fluid Dynamics, 2002, 16, 1-20.	0.5	23
88	Multigrain parallelism for eigenvalue computations on networks of clusters. , 0, , .		3
89	Modeling multicomponent reactive transport on parallel computers using Jacobian-Free Newton Krylov with operator-split preconditioning. Developments in Water Science, 2002, , 727-734.	0.1	3
90	On the Numerical Solution of $(lambda^2 A + lambda B + C), x = b$ and Application to Structural Dynamics. SIAM Journal of Scientific Computing, 2002, 23, 1875-1897.	1.3	48
91	GMRES with Deflated Restarting. SIAM Journal of Scientific Computing, 2002, 24, 20-37.	1.3	212

#	Article	IF	Citations
92	Flexible Inner-Outer Krylov Subspace Methods. SIAM Journal on Numerical Analysis, 2002, 40, 2219-2239.	1.1	95
93	A Case for a Biorthogonal Jacobi--Davidson Method: Restarting and Correction Equation. SIAM Journal on Matrix Analysis and Applications, 2002, 24, 238-259.	0.7	14
94	Preconditioning Techniques for Large Linear Systems: A Survey. Journal of Computational Physics, 2002, 182, 418-477.	1.9	886
95	Approximate inverse computation using Frobenius inner product. Numerical Linear Algebra With Applications, 2002, 9, 239-247.	0.9	12
96	Robust parameter-free algebraic multilevel preconditioning. Numerical Linear Algebra With Applications, 2002, 9, 409-428.	0.9	18
97	GPCG-generalized preconditioned CG method and its use with non-linear and non-symmetric displacement decomposition preconditioners. Numerical Linear Algebra With Applications, 2002, 9, 527-550.	0.9	24
98	Higher order finite element methods and multigrid solvers in a benchmark problem for the 3D Navier-Stokes equations. International Journal for Numerical Methods in Fluids, 2002, 40, 775-798.	0.9	98
99	Non-Nested Multi-Level Solvers for Finite Element Discretisations of Mixed Problems. Computing (Vienna/New York), 2002, 68, 313-341.	3.2	37
100	The effect of orderings on sparse approximate inverse preconditioners for non-symmetric problems. Advances in Engineering Software, 2002, 33, 611-619.	1.8	6
101	Parallel two level block ILU preconditioning techniques for solving large sparse linear systems. Parallel Computing, 2002, 28, 1451-1475.	1.3	13
102	Slip with friction and penetration with resistance boundary conditions for the Navierâ€"Stokes equationsâ€"numerical tests and aspects of the implementation. Journal of Computational and Applied Mathematics, 2002, 147, 287-300.	1.1	60
103	Parallel Solution of the Helmholtz Equation in a Multilayer Domain. BIT Numerical Mathematics, 2003, 43, 387-411.	1.0	5
104	Parallel iterative methods for Navier-Stokes equations and application to eigenvalue computation. Concurrency Computation Practice and Experience, 2003, 15, 1151-1168.	1.4	3
105	A multidomain spectral method for solving elliptic equations. Computer Physics Communications, 2003, 152, 253-273.	3.0	196
106	A 2D high-$\hat{\imath}^2$ Hall MHD implicit nonlinear solver. Journal of Computational Physics, 2003, 188, 573-592.	1.9	72
107	Parallel, multigrain iterative solvers for hiding network latencies on MPPs and networks of clusters. Parallel Computing, 2003, 29, 1237-1259.	1.3	3
108	Rational approximation preconditioners for sparse linear systems. Journal of Computational and Applied Mathematics, 2003, 158, 419-442.	1.1	0
109	A fast implementation for GMRES method. Journal of Computational and Applied Mathematics, 2003, 159, 269-283.	1.1	14

#	Article	IF	Citations
110	Theory of Inexact Krylov Subspace Methods and Applications to Scientific Computing. SIAM Journal of Scientific Computing, 2003, 25, 454-477.	1.3	158
111	A diagnostic stabilized finite-element ocean circulation model. Ocean Modelling, 2003, 5, 37-63.	1.0	22
112	On A Recursive Schur Preconditioner For Iterative Solution Of A Class Of Dense Matrix Problems. International Journal of Computer Mathematics, 2003, 80, 105-122.	1.0	4
113	Spectral Preconditioners for Nonhydrostatic Atmospheric Models. Monthly Weather Review, 2003, 131, 2464-2478.	0.5	25
114	A Class of Nested Iteration Schemes for Linear Systems with a Coefficient Matrix with a Dominant Positive Definite Symmetric Part. Numerical Algorithms, 2004, 35, 351-372.	1.1	71
115	Ainv and bilum preconditioning techniques. Applied Mathematics and Mechanics (English Edition), 2004, 25, 1012-1021.	1.9	1
116	Jacobian-free Newton–Krylov methods: a survey of approaches and applications. Journal of Computational Physics, 2004, 193, 357-397.	1.9	1,433
117	Flexible GMRES-FFT method for fast matrix solution: application to 3D dielectric bodies electromagnetic scattering. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2004, 17, 523-537.	1.2	13
118	Fast analysis of microwave integrated circuits by use of the inner-outer flexible GMRES-FFT method. Microwave and Optical Technology Letters, 2004, 43, 409-413.	0.9	8
119	Preconditioning a mixed discontinuous finite element method for radiation diffusion. Numerical Linear Algebra With Applications, 2004, 11, 795-811.	0.9	18
120	Comparison of matrix-free acceleration techniques in compressible Navier–Stokes calculations. International Journal for Numerical Methods in Engineering, 2004, 61, 455-474.	1.5	3
121	Faster PDE-based simulations using robust composite linear solvers. Future Generation Computer Systems, 2004, 20, 373-387.	4.9	8
122	A parallel solver for PDE systems and application to the incompressible Navier–Stokes equations. Applied Numerical Mathematics, 2004, 49, 97-116.	1.2	5
123	An iterative algorithm for finite element analysis. Journal of Computational and Applied Mathematics, 2004, 164-165, 469-491.	1.1	5
124	On a class of preconditioners for solving the Helmholtz equation. Applied Numerical Mathematics, 2004, 50, 409-425.	1.2	195
125	A Preconditioner for Generalized Saddle Point Problems. SIAM Journal on Matrix Analysis and Applications, 2004, 26, 20-41.	0.7	349
126	Inexact Krylov Subspace Methods for Linear Systems. SIAM Journal on Matrix Analysis and Applications, 2004, 26, 125-153.	0.7	93
128	Numerical Simulation of Water Injection in Disconnected and Connected Fractured Media Using Jacobian-free Fully Implicit Control Volume Method. , 2004, , .		3

#	Article	IF	Citations
129	An Embedded Iterative Scheme in Electromagnetism. Lecture Notes in Computer Science, 2004, , 977-984.	1.0	1
130	The inner-outer Flexible GMRES Method for the FEM Analysis. , 0, , .		1
131	Solution of Linear Systems. Handbook of Numerical Analysis, 2005, 13, 755-824.	0.9	1
132	Distributed block independent set algorithms and parallel multilevel ILU preconditioners. Journal of Parallel and Distributed Computing, 2005, 65, 331-346.	2.7	3
133	Parallel iterative solvers for sparse linear systems in circuit simulation. Future Generation Computer Systems, 2005, 21, 1275-1284.	4.9	15
134	Relaxation strategies for nested Krylov methods. Journal of Computational and Applied Mathematics, 2005, 177, 347-365.	1.1	23
135	Pressure separation—a technique for improving the velocity error in finite element discretisations of the Navier–Stokes equations. Applied Mathematics and Computation, 2005, 165, 275-290.	1.4	11
136	Efficient iterative algorithms for the stochastic finite element method with application to acoustic scattering. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 1037-1055.	3.4	55
137	A robust preconditioner for fluid–structure interaction problems. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 4027-4047.	3.4	30
138	A variational multiscale higher-order finite element formulation for turbomachinery flow computations. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 4797-4823.	3.4	40
139	Numerical solution of parameter-dependent linear systems. Numerical Linear Algebra With Applications, 2005, 12, 923-940.	0.9	9
140	A computational stream function method for two-dimensional incompressible viscous flows. International Journal for Numerical Methods in Engineering, 2005, 62, 1950-1981.	1.5	16
141	Iterative solution techniques for unsteady flow computations using higher order time integration schemes. International Journal for Numerical Methods in Fluids, 2005, 47, 857-862.	0.9	15
142	Comparison of the GMRES and ORTHOMIN for the black oil model in porous media. International Journal for Numerical Methods in Fluids, 2005, 48, 501-519.	0.9	11
143	Numerical methods for the QCD overlap operator: III. Nested iterations. Computer Physics Communications, 2005, 165, 221-242.	3.0	20
144	An implicit compact scheme solver with application to chemically reacting flows. Journal of Computational Physics, 2005, 203, 700-730.	1.9	13
145	Fast analysis of electromagnetic scattering of 3D dielectric bodies by use of the loose GMRES-FFT method. International Journal of Electronics, 2005, 92, 401-415.	0.9	1
146	A Technique for Accelerating the Convergence of Restarted GMRES. SIAM Journal on Matrix Analysis and Applications, 2005, 26, 962-984.	0.7	136

#	Article	IF	Citations
147	Combining Fast Multipole Techniques and an Approximate Inverse Preconditioner for Large Electromagnetism Calculations. SIAM Journal of Scientific Computing, 2005, 27, 774-792.	1.3	145
148	A Finite Element Variational Multiscale Method for the Navier--Stokes Equations. SIAM Journal of Scientific Computing, 2005, 26, 1485-1503.	1.3	148
149	Fast analysis of microwave integrated circuits using preconditioned SMCG method. , 0, , .		2
150	Application of the inner–outer flexible GMRES-FFT method to the analysis of scattering and radiation by cavity-backed patch antennas and arrays. International Journal of Electronics, 2005, 92, 645-659.	0.9	3
151	Numerical solution of saddle point problems. Acta Numerica, 2005, 14, 1-137.	6.3	1,724
152	Fast-yet-accurate PVT simulation by combined direct and iterative methods. , 0, , .		2
153	Computation of scattering from clusters of spheres using the fast multipole method. Journal of the Acoustical Society of America, 2005, 117, 1744-1761.	0.5	52
154	A High-Order Accurate Unstructured GMRES Algorithm for Inviscid Compressible Flows. , 2005, , .		6
155	Parallel Acceleration of Krylov Solvers by Factorized Approximate Inverse Preconditioners. Lecture Notes in Computer Science, 2005, , 623-636.	1.0	9
156	Multifrontal method preconditioned GMRES–FFT algorithm for fast analysis of microstrip circuits. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2005, 24, 94-106.	0.5	7
157	A Quasi-Newton Preconditioned Newton–Krylov Method for Robust and Efficient Time-Domain Simulation of Integrated Circuits With Strong Parasitic Couplings. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2006, 25, 2868-2881.	1.9	11
158	A Multipreconditioned Conjugate Gradient Algorithm. SIAM Journal on Matrix Analysis and Applications, 2006, 27, 1056-1068.	0.7	41
159	Aggregation-Based Algebraic Multilevel Preconditioning. SIAM Journal on Matrix Analysis and Applications, 2006, 27, 998-1018.	0.7	36
160	A Multigrid Method for Incompressible Flow Problems Using Quasi Divergence Free Functions. SIAM Journal of Scientific Computing, 2006, 28, 141-171.	1.3	2
161	A quasi-newton preconditioned newton-krylov method for robust and efficient time-domain simulation of integrated circuits with strong parasitic couplings. , 0, , .		0
162	Large Atmospheric Computation on the Earth Simulator: The LACES Project. Scientific Programming, 2006, 14, 13-25.	0.5	3
163	A numerical strategy for a high frequency electromagnetic scattering problem in a mixed formulation. Comptes Rendus Physique, 2006, 7, 509-517.	0.3	4
164	Quadratic finite elements and incompressible viscous flows. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 1692-1708.	3.4	6

#	Article	IF	Citations
165	A two-level variational multiscale method for convection-dominated convection–diffusion equations. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 4594-4603.	3.4	88
166	A comparison of time-discretization/linearization approaches for the incompressible Navier–Stokes equations. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 5995-6010.	3.4	52
167	Matrix-free preconditioning using partial matrix estimation. BIT Numerical Mathematics, 2006, 46, 711-729.	1.0	11
168	A Matrix-free Two-grid Preconditioner for Solving Boundary Integral Equations in Electromagnetism. Computing (Vienna/New York), 2006, 77, 275-296.	3.2	21
169	Improved Discontinuity-capturing Finite Element Techniques for Reaction Effects in Turbulence Computation. Computational Mechanics, 2006, 38, 356-364.	2.2	74
170	A class of constraint preconditioners for nonsymmetric saddle point matrices. Numerische Mathematik, 2006, 103, 47-61.	0.9	19
171	A preconditioner for generalized saddle point problems: Application to 3D stationary Navier-Stokes equations. Numerical Methods for Partial Differential Equations, 2006, 22, 1289-1313.	2.0	8
172	On the efficiency of linearization schemes and coupled multigrid methods in the simulation of a 3D flow around a cylinder. International Journal for Numerical Methods in Fluids, 2006, 50, 845-862.	0.9	31
173	Numerical simulation of sand dune evolution in severe winds. International Journal for Numerical Methods in Fluids, 2006, 50, 1229-1246.	0.9	23
174	Comparison of GMRES and ORTHOMIN for the black oil model on unstructured grids. International Journal for Numerical Methods in Fluids, 2006, 52, 941-962.	0.9	0
175	Performance analysis of parallel Krylov methods for solving boundary integral equations in electromagnetism. Communications in Numerical Methods in Engineering, 2006, 23, 691-701.	1.3	2
176	The SSOR-preconditioned inner outer flexible GMRES method for the FEM analysis of EM problems. Microwave and Optical Technology Letters, 2006, 48, 1708-1712.	0.9	10
177	Study of parallel numerical methods for semiconductor device simulation. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2006, 19, 15-32.	1.2	14
178	A quasi-newton preconditioned Newton-Krylov method for robust and efficient time-domain simulation of integrated circuits with strong parasitic couplings. , 2006, , .		1
179	Circular orbits and spin in black-hole initial data. Physical Review D, 2006, 74, .	1.6	107
180	ON THE PARALLEL SOLUTION OF LARGE INDUSTRIAL WAVE PROPAGATION PROBLEMS. Journal of Computational Acoustics, 2006, 14, 83-111.	1.0	14
181	Application of Parallel Genetic Algorithm with Two-step Fitness Function forthe design of Multi-band Single-Layer Frequency Selective Surface. , 2007, , .		0
182	Block preconditioning of real-valued iterative algorithms for complex linear systems. IMA Journal of Numerical Analysis, 2007, 28, 598-618.	1.5	138

#	ARTICLE	IF	CITATIONS
183	A Variant of SOR Method for Singular Linear Systems and its Application to a Variable Preconditioned GCR Method. AIP Conference Proceedings, 2007, , .	0.3	0
184	Fast Multipole Accelerated Boundary Elements for Numerical Computation of the Head Related Transfer Function. , 2007, , .		4
185	Convergence in Backward Error of Relaxed GMRES. SIAM Journal of Scientific Computing, 2007, 29, 710-728.	1.3	17
186	Iterative Solution of Augmented Systems Arising in Interior Methods. SIAM Journal on Optimization, 2007, 18, 666-690.	1.2	31
187	Efficient Preconditioning of Sequences of Nonsymmetric Linear Systems. SIAM Journal of Scientific Computing, 2007, 29, 1918-1941.	1.3	34
188	An Efficient Solver for the Incompressible Navier–Stokes Equations in Rotation Form. SIAM Journal of Scientific Computing, 2007, 29, 1959-1981.	1.3	29
189	A Note on GMRES Preconditioned by a Perturbed $L D L^T$ Decomposition with Static Pivoting. SIAM Journal of Scientific Computing, 2007, 29, 2024-2044.	1.3	18
190	A parallel Newton-Krylov flow solver for the Euler equations on multi-block grids. , 2007, , .		3
191	Block preconditioning for saddle point systems with indefinite (1, 1) block. International Journal of Computer Mathematics, 2007, 84, 1117-1129.	1.0	30
192	Fast Large RCS Calculation Using the Boundary Element Method. Journal of Electromagnetic Waves and Applications, 2007, 21, 1959-1968.	1.0	6
193	On O(n) algebraic preconditioners for the fast multipole method. , 2007, , .		1
194	Recent computational developments in Krylov subspace methods for linear systems. Numerical Linear Algebra With Applications, 2007, 14, 1-59.	0.9	256
195	Comparison of fully implicit and IMPES formulations for simulation of water injection in fractured and unfractured media. International Journal for Numerical Methods in Engineering, 2007, 69, 698-728.	1.5	42
196	Two preconditioners for saddle point problems in fluid flows. International Journal for Numerical Methods in Fluids, 2007, 54, 355-377.	0.9	34
197	Efficient solution techniques for implicit finite element schemes with flux limiters. International Journal for Numerical Methods in Fluids, 2007, 55, 611-635.	0.9	7
198	Robust GMRES recursive method for fast finite element analysis of 3D electromagnetic problems. Microwave and Optical Technology Letters, 2007, 49, 1010-1015.	0.9	1
199	The multigrid preconditioned flexible GMRES solver for hierarchical TVFEM analysis. Microwave and Optical Technology Letters, 2007, 49, 2012-2018.	0.9	1
200	An implicit compact scheme solver for two-dimensional multicomponent flows. Computers and Fluids, 2007, 36, 376-397.	1.3	11

#	Article	IF	Citations
201	Flexible BiCG and flexible Bi-CGSTAB for nonsymmetric linear systems. Applied Mathematics and Computation, 2007, 188, 226-233.	1.4	23
202	A numerical method for solving the 3D unsteady incompressible Navierâ€"Stokes equations in curvilinear domains with complex immersed boundaries. Journal of Computational Physics, 2007, 225, 1782-1809.	1.9	333
203	Building resolving large-eddy simulations and comparison with wind tunnel experiments. Journal of Computational Physics, 2007, 227, 633-653.	1.9	72
204	A tailored solver for bifurcation analysis of ocean-climate models. Journal of Computational Physics, 2007, 227, 654-679.	1.9	37
205	Numerical experiments on a flexible variant of GMRES-DR. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1020701-1020702.	0.2	1
206	Algebraic Multigrid Methods for Direct Frequency Response Analyses in Solid Mechanics. Computational Mechanics, 2007, 39, 497-507.	2.2	14
207	Multilevel iterative solvers for the edge finite element solution of the 3D Maxwell equation. Computers and Mathematics With Applications, 2008, 55, 2346-2362.	1.4	13
208	EULAG, a computational model for multiscale flows. Computers and Fluids, 2008, 37, 1193-1207.	1.3	237
209	Fast generalized cross validation using Krylov subspace methods. Numerical Algorithms, 2008, 47, 109-131.	1.1	4
210	Advances in Iterative Methods and Preconditioners for the Helmholtz Equation. Archives of Computational Methods in Engineering, 2008, 15, 37-66.	6.0	125
211	On the preconditioning of the block tridiagonal linear system of equations. Journal of Applied Mathematics and Computing, 2008, 28, 133-146.	1.2	0
212	Fast Galerkin BEM for 3D-potential theory. Computational Mechanics, 2008, 42, 417-429.	2.2	16
213	Recursive Krylovâ€•based multigrid cycles. Numerical Linear Algebra With Applications, 2008, 15, 473-487.	0.9	84
214	Pressure corrected implicit Î¸-schemes for the incompressible Navierâ€"Stokes equations. Applied Mathematics and Computation, 2008, 201, 747-761.	1.4	6
215	A variant algorithm of the Orthomin(m) method for solving linear systems. Applied Mathematics and Computation, 2008, 206, 42-49.	1.4	4
216	An Investigation of Induced Drag Minimization Using a Newton-Krylov Algorithm. , 2008, , .		5
217	Preconditioned iterative methods for Stokes flow problems arising in computational geodynamics. Physics of the Earth and Planetary Interiors, 2008, 171, 33-47.	0.7	128
218	Simulation of Closely Related Dynamic Nonlinear Systems With Application to Processâ€"Voltageâ€"Temperature Corner Analysis. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2008, 27, 883-892.	1.9	0

#	ARTICLE	IF	CITATIONS
219	An Augmented Lagrangian Approach to Linearized Problems in Hydrodynamic Stability. SIAM Journal of Scientific Computing, 2008, 30, 1459-1473.	1.3	18
220	An optimal, parallel, fully implicit Newton–Krylov solver for three-dimensional viscoresistive magnetohydrodynamics. Physics of Plasmas, 2008, 15, .	0.7	87
221	Nonconforming finite elements of higher order satisfying a new compatibility condition. Journal of Numerical Mathematics, 2008, 16, .	1.8	4
222	Growth of Rounding Errors and Repetitivity of Large Eddy Simulations. AIAA Journal, 2008, 46, 1773-1781.	1.5	19
223	Parallel Newton-Krylov Solver for the Euler equations Discretized Using Simultaneous Approximation Terms. AIAA Journal, 2008, 46, 2773-2786.	1.5	113
224	Algorithm 881. ACM Transactions on Mathematical Software, 2008, 35, 1-12.	1.6	9
225	Iterative methods for overlap and twisted mass fermions. Computational Science & Discovery, 2008, 1, 015001.	1.5	3
226	Multi-stage Learning of Linear Algebra Algorithms. , 2008, , .		2
227	Scalable parallel implicit solvers for 3D magnetohydrodynamics. Journal of Physics: Conference Series, 2008, 125, 012041.	0.3	23
228	FAST ITERATIVE SOLUTION METHODS IN ELECTROMAGNETIC SCATTERING. Progress in Electromagnetics Research, 2008, 79, 151-178.	1.6	23
229	A safeguard approach to detect stagnation of GMRES(m) with applications in Newton-Krylov methods. Computational and Applied Mathematics, 2008, 27, .	1.3	4
230	ADAPTIVELY ACCELERATED GMRES FAST FOURIER TRANSFORM METHOD FOR ELECTROMAGNETIC SCATTERING. Progress in Electromagnetics Research, 2008, 81, 303-314.	1.6	4
231	EXPERIMENTS WITH LANCZOS BICONJUGATE A-ORTHONORMALIZATION METHODS FOR MOM DISCRETIZATIONS OF MAXWELL'S EQUATIONS. Progress in Electromagnetics Research, 2009, 99, 427-451.	1.6	20
232	Comparison of iteration solution methods with multilevel fast multipole algorithm for solving large-scale scattering problems. , 2009, , .		2
233	Fast Newton-FGMRES solver for large-scale power flow study. , 2009, , .		0
234	On nonlinear preconditioners in Newton–Krylov methods for unsteady flows. International Journal for Numerical Methods in Fluids, 2010, 62, 565-573.	0.9	3
235	Efficient preconditioning techniques for finite–element quadratic discretization arising from linearized incompressible Navier–Stokes equations. International Journal for Numerical Methods in Fluids, 2010, 63, 1394-1420.	0.9	2
236	Mixed preconditioners for harmonic balance Jacobians. International Journal of RF and Microwave Computer-Aided Engineering, 2009, 19, 211-217.	0.8	1

#	ARTICLE	IF	CITATIONS
237	A power sparse approximate inverse preconditioning procedure for large sparse linear systems. Numerical Linear Algebra With Applications, 2009, 16, 259-299.	0.9	16
238	Constraint Schur complement preconditioners for nonsymmetric saddle point problems. Applied Numerical Mathematics, 2009, 59, 151-169.	1.2	23
239	An accurate and efficient method for the incompressible Navierâ€"Stokes equations using the projection method as a preconditioner. Journal of Computational Physics, 2009, 228, 7565-7595.	1.9	99
240	Equivalent operator preconditioning for elliptic problems. Numerical Algorithms, 2009, 50, 297-380.	1.1	27
241	Parallel algebraic hybrid solvers for large 3D convection-diffusion problems. Numerical Algorithms, 2009, 51, 151-177.	1.1	8
242	An Efficient Newton-Krylov Implementation ofÂtheÂConstrained Runs Scheme for Initializing onÂaÂSlowÂManifold. Journal of Scientific Computing, 2009, 39, 167-188.	1.1	17
243	Forward modelling of magnetic induction tomography: a sensitivity study for detecting haemorrhagic cerebral stroke. Medical and Biological Engineering and Computing, 2009, 47, 1301-1313.	1.6	40
244	A Jacobian-free Newtonâ€"Krylov algorithm for compressible turbulent fluid flows. Journal of Computational Physics, 2009, 228, 3490-3507.	1.9	47
245	FGMRES preconditioning by symmetric/skew-symmetric decomposition of generalized stokes problems. Mathematics and Computers in Simulation, 2009, 79, 1862-1877.	2.4	1
246	Bifurcation analysis of 3D ocean flows using a parallel fully-implicit ocean model. Ocean Modelling, 2009, 30, 287-297.	1.0	12
247	A High-Order Parallel Newton-Krylov Flow Solver for the Euler Equations. , 2009, , .		7
248	Single- and Multi-Point Aerodynamic Shape Optimization Using a Parallel Newton-Krylov Approach. , 2009, , .		2
249	Globalization Strategies for Inexact-Newton Solvers. , 2009, , .		13
250	A broadband fast multipole accelerated boundary element method for the three dimensional Helmholtz equation. Journal of the Acoustical Society of America, 2009, 125, 191-205.	0.5	106
251	An Efficient Surface Integral Equation Solution to EM Scattering by Chiral Objects Above a Lossy Half Space. IEEE Transactions on Antennas and Propagation, 2009, 57, 3586-3593.	3.1	15
252	Black hole initial data on hyperboloidal slices. Physical Review D, 2009, 80, .	1.6	26
253	A Parallel Harmonic-Balance Approach to Steady-State and Envelope-Following Simulation of Driven and Autonomous Circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2009, 28, 490-501.	1.9	24
254	Algebraic Multilevel Krylov Methods. SIAM Journal of Scientific Computing, 2009, 31, 3417-3437.	1.3	17

#	Article	IF	Citations
255	How to Make Simpler GMRES and GCR More Stable. SIAM Journal on Matrix Analysis and Applications, 2009, 30, 1483-1499.	0.7	19
256	Controlling Inner Iterations in the Jacobiâ€"Davidson Method. SIAM Journal on Matrix Analysis and Applications, 2009, 31, 460-477.	0.7	21
257	Non-Segregated Algorithm for Incompressible Flow Simulations with Fully Conservative Finite Difference and JFNK Method(Fluids Engineering). 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2009, 75, 2163-2172.	0.2	3
258	Fully Conservative Finite Difference Scheme for Low-Mach Number Unsteady Compressible Flow Simulations(Fluids Engineering). 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2009, 75, 2153-2162.	0.2	4
259	Application of the shifted-Laplace preconditioner for iterative solution of a higher order finite element discretisation of the vector wave equation: First experiences. Applied Numerical Mathematics, 2010, 60, 1157-1170.	1.2	2
260	Modified HSS iteration methods for a class of complex symmetric linear systems. Computing (Vienna/New York), 2010, 87, 93-111.	3.2	265
261	New multigrid smoothers for the Oseen problem. Numerical Linear Algebra With Applications, 2010, 17, 557-576.	0.9	24
262	Preconditioning of matrices partitioned in 2 Ã— 2 block form: eigenvalue estimates and Schwarz DD for mixed FEM. Numerical Linear Algebra With Applications, 2010, 17, 787-810.	0.9	21
263	Wellâ€conditioned MLFMA for electromagnetic scattering from dielectric objects above a lossy halfâ€space. Microwave and Optical Technology Letters, 2010, 52, 381-386.	0.9	8
264	Parallel Newton-Krylov solvers for modeling of a navigation lock filling system. Procedia Computer Science, 2010, 1, 699-707.	1.2	3
265	Skew-symmetric form of convective terms and fully conservative finite difference schemes for variable density low-Mach number flows. Journal of Computational Physics, 2010, 229, 276-300.	1.9	143
266	BiCR variants of the hybrid BiCG methods for solving linear systems with nonsymmetric matrices. Journal of Computational and Applied Mathematics, 2010, 234, 985-994.	1.1	18
267	A variable preconditioned GCR(<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 the GSOR method for singular and rectangular linear systems. Journal of Computational and Applied Mathematics, 2010, 234, 703-712.	1.1	2
268	Machine Learning for Multi-stage Selection of Numerical Methods. , 2010, , .		3
269	Milestones in the Development of Iterative Solution Methods. Journal of Electrical and Computer Engineering, 2010, 2010, 1-33.	0.6	8
270	Iterative Solution for Groundstate of H + 2 Ion. Communications in Theoretical Physics, 2010, 53, 57-62.	1.1	1
271	Combined MDA-SVD-MLFMA for analysis of the EM scattering from complex objects. , 2010, , .		1
272	Aerodynamic Optimization Algorithm with Integrated Geometry Parameterization and Mesh Movement. AIAA Journal, 2010, 48, 400-413.	1.5	164

#	ARTICLE	IF	CITATIONS
273	Convergence property of inner-outer flexible GMRES for solving electromagnetic scattering problems with method of mements. , 2010, , .		0
274	A fast and robust mixed-precision solver for the solution of sparse symmetric linear systems. ACM Transactions on Mathematical Software, 2010, 37, 1-24.	1.6	14
275	Solving the Poisson equation on small aspect ratio domains using unstructured meshes. Ocean Modelling, 2010, 35, 253-263.	1.0	14
276	A Simplified and Flexible Variant of GCROT for Solving Nonsymmetric Linear Systems. SIAM Journal of Scientific Computing, 2010, 32, 1672-1694.	1.3	50
277	Fast Newton-FGMRES Solver for Large-Scale Power Flow Study. IEEE Transactions on Power Systems, 2010, 25, 769-776.	4.6	48
278	A Modified Nonlinear Inexact Uzawa Algorithm with a Variable Relaxation Parameter for the Stabilized Saddle Point Problem. SIAM Journal on Matrix Analysis and Applications, 2010, 31, 1934-1957.	0.7	23
279	A Stable Unstructured Finite Volume Method with Multigrid for Parallel Large-Scale Incompressible Viscous Fluid Flow Computations. , 2010, , .		0
280	Parallel Solution Methods for Aerostructural Analysis and Design Optimization. , 2010, , .		38
281	Computation of the head-related transfer function via the fast multipole accelerated boundary element method and its spherical harmonic representation. Journal of the Acoustical Society of America, 2010, 127, 370-386.	0.5	65
282	Flexible GMRES with Deflated Restarting. SIAM Journal of Scientific Computing, 2010, 32, 1858-1878.	1.3	40
283	An investigation of near-zone preconditioning techniques for integral equation solutions by method of moments. , 2011, , .		1
284	Fast Structured AMG Preconditioning for the Bidomain Model in Electrocardiology. SIAM Journal of Scientific Computing, 2011, 33, 721-745.	1.3	27
285	Fluidity: A fully unstructured anisotropic adaptive mesh computational modeling framework for geodynamics. Geochemistry, Geophysics, Geosystems, 2011, 12, n/a-n/a.	1.0	89
286	Design of Low-Sweep Wings for Maximum Range. , 2011, , .		3
287	A Stable Unstructured Finite Volume Method with Arbitrary Lagrangian-Eulerian Formulation for the Numerical Simulation of Insect Flight. , 2011, , .		0
288	A Stable Unstructured Finite Volume Method with Multigrid for Parallel Large-Scale Incompressible Viscous Fluid Flow Computations. , 2011, , .		0
289	A Flexible Generalized Conjugate Residual Method with Inner Orthogonalization and Deflated Restarting. SIAM Journal on Matrix Analysis and Applications, 2011, 32, 1212-1235.	0.7	19
290	Numerical Method for LES of Incompressible Flow with Compact Finite Difference. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2011, 77, 1731-1746.	0.2	0

#	Article	IF	Citations
291	A preconditioning technique for a class of PDE-constrained optimization problems. Advances in Computational Mathematics, 2011, 35, 149-173.	0.8	33
292	Convergence analysis of generalized nonlinear inexact Uzawa algorithm for stabilized saddle point problems. Frontiers of Mathematics in China, 2011, 6, 473-492.	0.4	3
293	A novel flexible GMRES with deflated restarted for efficient solution of electromagnetic problems. Microwave and Optical Technology Letters, 2011, 53, 1360-1364.	0.9	2
294	An efficient hierarchical preconditioner for quadratic discretizations of finite element problems. Numerical Linear Algebra With Applications, 2011, 18, 789-803.	0.9	10
295	Fast iterative solver for convection–diffusion systems with spectral elements. Numerical Methods for Partial Differential Equations, 2011, 27, 231-254.	2.0	6
296	Modified augmented Lagrangian preconditioners for the incompressible Navier–Stokes equations. International Journal for Numerical Methods in Fluids, 2011, 66, 486-508.	0.9	73
297	A dimensional split preconditioner for Stokes and linearized Navier–Stokes equations. Applied Numerical Mathematics, 2011, 61, 66-76.	1.2	78
298	parafish: A parallel FE–PN neutron transport solver based on domain decomposition. Annals of Nuclear Energy, 2011, 38, 145-150.	0.9	14
299	A stable unstructured finite volume method for parallel large-scale viscoelastic fluid flow calculations. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 779-791.	1.0	13
300	Parallel multilevel methods for implicit solution of shallow water equations with nonsmooth topography on the cubed-sphere. Journal of Computational Physics, 2011, 230, 2523-2539.	1.9	30
301	Implementation of the Jacobian-free Newton–Krylov method for solving the first-order ice sheet momentum balance. Journal of Computational Physics, 2011, 230, 6531-6545.	1.9	19
302	Preconditioners for regularized saddle point matrices. Journal of Numerical Mathematics, 2011, 19, .	1.8	3
303	Transient Stability Online Simulation by Symplectic Runge-Kutta Method and FGMRES Solver. , 2011, , .		1
304	A BiCGStab2 variant of the IDR(s) method for solving linear equations. , 2012, , .		1
305	Development of efficient Krylov preconditioning techniques for multi-dimensional method of characteristics. Journal of Nuclear Science and Technology, 2012, 49, 457-465.	0.7	4
306	Newton–Picard-Based Preconditioning for Linear-Quadratic Optimization Problems with Time-Periodic Parabolic PDE Constraints. SIAM Journal of Scientific Computing, 2012, 34, A1214-A1239.	1.3	12
307	FAST MULTIPOLE BOUNDARY ELEMENT METHOD FOR THREE DIMENSIONAL ELECTROMAGNETIC SCATTERING PROBLEM. International Journal of Computational Materials Science and Engineering, 2012, 01, 1250038.	0.5	3
308	Grid-Free Vortex Methods for Natural Convection; Handling Source Terms and Nonlinear Diffusion. Numerical Heat Transfer, Part B: Fundamentals, 2012, 62, 370-398.	0.6	2

#	ARTICLE	IF	CITATIONS
309	A Preconditioned 3-D Multi-Region Fast Multipole Solver for Seismic Wave Propagation in Complex Geometries. Communications in Computational Physics, 2012, 11, 594-609.	0.7	25
310	Simulating an Elastic Ring with Bend and Twist by an Adaptive Generalized Immersed Boundary Method. Communications in Computational Physics, 2012, 12, 433-461.	0.7	20
311	Short-Term Recurrence Krylov Subspace Methods for Nearly Hermitian Matrices. SIAM Journal on Matrix Analysis and Applications, 2012, 33, 480-500.	0.7	4
312	Flexible Variants of Block Restarted GMRES Methods with Application to Geophysics. SIAM Journal of Scientific Computing, 2012, 34, A714-A736.	1.3	44
313	Reduced order solution of structured linear systems arising in certain PDE-constrained optimization problems. Computational Optimization and Applications, 2012, 53, 591-617.	0.9	16
314	Macro-elementwise preconditioning methods. Mathematics and Computers in Simulation, 2012, 82, 1952-1963.	2.4	0
315	Composable Linear Solvers for Multiphysics. , 2012, , .		29
316	Large-scale time-harmonic electromagnetic field analysis using a multigrid solver on a distributed memory parallel computer. Parallel Computing, 2012, 38, 485-500.	1.3	4
317	Hybrid Bi-CG methods with a Bi-CG formulation closer to the IDR approach. Applied Mathematics and Computation, 2012, 218, 10889-10899.	1.4	4
318	Numerical simulation of four-field extended magnetohydrodynamics in dynamically adaptive curvilinear coordinates via Newtonâ€"Krylovâ€"Schwarz. Journal of Computational Physics, 2012, 231, 5822-5853.	1.9	4
319	A comparison of the Jacobian-free Newtonâ€"Krylov method and the EVP model for solving the sea ice momentum equation with a viscous-plastic formulation: A serial algorithm study. Journal of Computational Physics, 2012, 231, 5926-5944.	1.9	46
320	Scalable Newton-Krylov Solver for Very Large Power Flow Problems. IEEE Transactions on Power Systems, 2012, 27, 390-396.	4.6	28
321	Aerodynamic Shape Optimization of Wings Using a Parallel Newton-Krylov Approach. AIAA Journal, 2012, 50, 540-550.	1.5	63
322	A parallel highâ€order accurate finite element nonlinear Stokes ice sheet model and benchmark experiments. Journal of Geophysical Research, 2012, 117, .	3.3	33
323	Simulation of unconventional well tests with the finite volume method. Petroleum Science, 2012, 9, 317-329.	2.4	8
324	Stable discretization of poroelasticity problems and efficient preconditioners for arising saddle point type matrices. Computing and Visualization in Science, 2012, 15, 191-207.	1.2	26
325	Amesos2 and Belos: Direct and Iterative Solvers for Large Sparse Linear Systems. Scientific Programming, 2012, 20, 241-255.	0.5	66
326	Resolution adapted finite element modeling of radio frequency interactions on conductive resonant structures in MRI. Magnetic Resonance in Medicine, 2012, 67, 1444-1452.	1.9	6

#	Article	IF	Citations
327	Analyzing the wave number dependency of the convergence rate of a multigrid preconditioned Krylov method for the Helmholtz equation with an absorbing layer. Numerical Linear Algebra With Applications, 2012, 19, 232-252.	0.9	11
328	Krylovâ€accelerated algebraic multigrid for semiâ€definite and nonsymmetric systems in computational fluid dynamics. Numerical Linear Algebra With Applications, 2012, 19, 210-231.	0.9	4
329	A robust innerâ€"outer hierarchically semiâ€separable preconditioner. Numerical Linear Algebra With Applications, 2012, 19, 992-1016.	0.9	5
330	Immersed boundary model of aortic heart valve dynamics with physiological driving and loading conditions. International Journal for Numerical Methods in Biomedical Engineering, 2012, 28, 317-345.	1.0	148
331	Numerical simulation of irregular wave overtopping against a smooth sea dike. China Ocean Engineering, 2012, 26, 153-166.	0.6	6
332	GMRES implementations and residual smoothing techniques for solving ill-posed linear systems. Computers and Mathematics With Applications, 2012, 63, 1-13.	1.4	19
333	Application of the multi-level time-harmonic fast multipole BEM to 3-D visco-elastodynamics. Engineering Analysis With Boundary Elements, 2012, 36, 744-758.	2.0	24
334	Review of implicit methods for the magnetohydrodynamic description of magnetically confined plasmas. Journal of Computational Physics, 2012, 231, 822-838.	1.9	50
335	On (essentially) non-oscillatory discretizations of evolutionary convectionâ€"diffusion equations. Journal of Computational Physics, 2012, 231, 1570-1586.	1.9	45
336	Iterative Solver for Linear System Obtained by Edge Element: Variable Preconditioned Method With Mixed Precision on GPU. IEEE Transactions on Magnetics, 2012, 48, 467-470.	1.2	19
337	Two-Level preconditioned Krylov subspace methods for the solution of three-dimensional heterogeneous Helmholtz problems in seismics. Numerical Analysis and Applications, 2012, 5, 175-181.	0.2	11
338	SIMPLEâ€type preconditioners for cellâ€centered, colocated finite volume discretization of incompressible Reynoldsâ€averaged Navierâ€"Stokes equations. International Journal for Numerical Methods in Fluids, 2013, 71, 830-849.	0.9	51
339	A projection method to solve linear systems in tensor format. Numerical Linear Algebra With Applications, 2013, 20, 27-43.	0.9	127
340	Modulusâ€based synchronous multisplitting iteration methods for linear complementarity problems. Numerical Linear Algebra With Applications, 2013, 20, 425-439.	0.9	123
341	Steepest descent preconditioning for nonlinear GMRESâ€‰optimization. Numerical Linear Algebra With Applications, 2013, 20, 453-471.	0.9	15
342	A general approach to analyse preconditioners for twoâ€byâ€two block matrices. Numerical Linear Algebra With Applications, 2013, 20, 723-742.	0.9	16
343	A parallel implementation of the modified augmented Lagrangian preconditioner for the incompressible Navierâ€"Stokes equations. Numerical Algorithms, 2013, 64, 73-84.	1.1	10
344	Recursive self preconditioning method based on Schur complement for Toeplitz matrices. Numerical Algorithms, 2013, 62, 505-525.	1.1	3

#	ARTICLE	IF	CITATIONS
345	New approaches for computation of low Mach number flows. Computers and Fluids, 2013, 85, 143-152.	1.3	9
346	Analysis and parallel implementation of a forced N-body problem. Journal of Computational Physics, 2013, 245, 235-258.	1.9	7
347	Treatment planning for a TCPC test case: A numerical investigation under rigid and moving wall assumptions. International Journal for Numerical Methods in Biomedical Engineering, 2013, 29, 197-216.	1.0	19
348	Block Krylov Methods to Solve Adjoint Problems in Aerodynamic Design Optimization. AIAA Journal, 2013, 51, 2183-2191.	1.5	14
349	Velocityâ€"pressure coupling on GPUs. Computing (Vienna/New York), 2013, 95, 123-143.	3.2	3
350	Towards Faster Solution of Large Power Flow Problems. IEEE Transactions on Power Systems, 2013, 28, 4918-4925.	4.6	22
351	Solving linear equations with a stabilized GPBiCG method. Applied Numerical Mathematics, 2013, 67, 4-16.	1.2	8
352	Block Preconditioners for Coupled Physics Problems. SIAM Journal of Scientific Computing, 2013, 35, S368-S385.	1.3	12
353	Hiding Global Communication Latency in the GMRES Algorithm on Massively Parallel Machines. SIAM Journal of Scientific Computing, 2013, 35, C48-C71.	1.3	80
354	A Flexible Krylov Solver for Shifted Systems with Application to Oscillatory Hydraulic Tomography. SIAM Journal of Scientific Computing, 2013, 35, A3001-A3023.	1.3	31
355	Generalized Golub–Kahan Bidiagonalization and Stopping Criteria. SIAM Journal on Matrix Analysis and Applications, 2013, 34, 571-592.	0.7	23
356	Absolute Value Preconditioning for Symmetric Indefinite Linear Systems. SIAM Journal of Scientific Computing, 2013, 35, A696-A718.	1.3	11
357	Inner-Iteration Krylov Subspace Methods for Least Squares Problems. SIAM Journal on Matrix Analysis and Applications, 2013, 34, 1-22.	0.7	19
358	Numerical calculation of extremely large reflector antenna using high-performance parallel MLFMA. , 2013, , .		0
359	Solution to 3-D electromagnetic problems discretized by a hybrid FEM/MOM method. Computer Physics Communications, 2013, 184, 73-78.	3.0	7
360	Parallel Implementations of FGMRES for Solving Large, Sparse Non-symmetric Linear Systems. Procedia Computer Science, 2013, 18, 491-500.	1.2	10
361	Accelerated GCRO-DR method for solving sequences of systems of linear equations. Journal of Computational and Applied Mathematics, 2013, 253, 131-141.	1.1	6
362	Parallel large-scale numerical simulations of purely-elastic instabilities behind a confined circular cylinder in a rectangular channel. Journal of Non-Newtonian Fluid Mechanics, 2013, 195, 46-56.	1.0	19

#	Article	IF	Citations
363	Asynchronous Partial Update of Domain Decomposition Preconditioners to Solve Nonlinear CFD Problems. Procedia Engineering, 2013, 61, 130-135.	1.2	0
364	Simulation of the Navier–Stokes equations in three dimensions with a spectral collocation method. International Journal for Numerical Methods in Fluids, 2013, 73, 103-129.	0.9	66
365	A unified mathematical framework and an adaptive numerical method for fluid–structure interaction with rigid, deforming, and elastic bodies. Journal of Computational Physics, 2013, 250, 446-476.	1.9	119
366	All-at-once solution of time-dependent Stokes control. Journal of Computational Physics, 2013, 232, 498-515.	1.9	56
367	A transformation-free HOC scheme and multigrid method for solving the 3D Poisson equation on nonuniform grids. Journal of Computational Physics, 2013, 234, 199-216.	1.9	28
368	An arbitrary Lagrangian–Eulerian formulation for solving moving boundary problems with large displacements and rotations. Journal of Computational Physics, 2013, 255, 660-679.	1.9	27
369	A Monolithic Approach for the Numerical Simulation of Fluid Structure Interaction Problems. , 2013, , .		0
370	Advances in Homotopy Continuation Methods in Computational Fluid Dynamics. , 2013, , .		6
371	Augmented Arnoldi-Tikhonov Regularization Methods for Solving Large-Scale Linear Ill-Posed Systems. Mathematical Problems in Engineering, 2013, 2013, 1-8.	0.6	2
372	Discrete fractional Sobolev norms for domain decomposition preconditioning. IMA Journal of Numerical Analysis, 2013, 33, 318-342.	1.5	16
373	Optimal magnet configurations for Lorentz force velocimetry in low conductivity fluids. Measurement Science and Technology, 2013, 24, 065303.	1.4	6
374	An improved two‐grid preconditioner for the solution of three‐dimensional Helmholtz problems in heterogeneous media. Numerical Linear Algebra With Applications, 2013, 20, 663-688.	0.9	35
375	A Modified Block Flexible GMRES Method with Deflation at Each Iteration for the Solution of Non-Hermitian Linear Systems with Multiple Right-Hand Sides. SIAM Journal of Scientific Computing, 2013, 35, S345-S367.	1.3	22
376	A direct coupling method for 3D hydroelastic analysis of floating structures. International Journal for Numerical Methods in Engineering, 2013, 96, 842-866.	1.5	33
377	An Adjoint-based Derivative Evaluation Method for Time-dependent Aeroelastic Optimization of Flexible Aircraft. , 2013, , .		10
378	Pivoting strategies for tough sparse indefinite systems. ACM Transactions on Mathematical Software, 2013, 40, 1-19.	1.6	19
379	Comparison of Reduced- and Full-space Algorithms for PDE-constrained Optimization. , 2013, , .		8
380	Pseudo-transient Continuation, Solution Update Methods, and CFL Strategies for DG Discretizations of the RANS-SA Equations. , 2013, , .		11

#	Article	IF	Citations
381	3D Mixed Element Discontinuous Galerkin with Shock Capturing. , 2013, , .		12
382	A Parallel Implementation of the Mortar Element Method in 2D and 3D. ESAIM: Proceedings and Surveys, 2013, 43, 213-224.	0.4	1
383	Drag Prediction Using Adaptive Discontinuous Finite Elements. Journal of Aircraft, 2014, 51, 1284-1294.	1.7	26
384	A parallel aerostructural optimization framework for aircraft design studies. Structural and Multidisciplinary Optimization, 2014, 50, 1079-1101.	1.7	77
385	Revisiting Individual Discipline Feasible using matrix-free Inexact-Newton-Krylov. , 2014, , .		4
386	Fully-implicit log-conformation formulation of constitutive laws. Journal of Non-Newtonian Fluid Mechanics, 2014, 214, 78-87.	1.0	31
387	Additive Schwarz with Variable Weights. Lecture Notes in Computational Science and Engineering, 2014, , 779-787.	0.1	5
388	Finite element three-dimensional Stokes ice sheet dynamics model with enhanced local mass conservation. Journal of Computational Physics, 2014, 274, 299-311.	1.9	6
389	Robust and GPU-accelerated IPO to improve high frequency EM scattering from large scale radar scene simulation. , 2014, , .		1
390	pTatin3D: High-Performance Methods for Long-Term Lithospheric Dynamics. , 2014, , .		61
391	Deflation Strategies to Improve the Convergence of Communication-Avoiding GMRES. , 2014, , .		2
392	Generalized Arnoldi--Tikhonov Method for Sparse Reconstruction. SIAM Journal of Scientific Computing, 2014, 36, B225-B247.	1.3	42
393	A direct hierarchical multilevel preconditioner for the solution of finite element-boundary integral equations. , 2014, , .		0
394	Hierarchical Schur complement preconditioner for the stochastic Galerkin finite element methods. Numerical Linear Algebra With Applications, 2014, 21, 136-151.	0.9	31
395	Coupled finite element - hierarchical boundary element methods for dynamic soil-structure interaction in the frequency domain. International Journal for Numerical Methods in Engineering, 2014, 97, 505-530.	1.5	14
396	A new level-dependent coarse grid correction scheme for indefinite Helmholtz problems. Numerical Linear Algebra With Applications, 2014, 21, 513-533.	0.9	10
397	NUMERICAL SIMULATION OF AL-SI ALLOYS WITH AND WITHOUT A DIRECTIONAL SOLIDIFICATION. Image Analysis and Stereology, 2014, 33, 29.	0.4	5
398	Generalized Conjugate A-Orthogonal Residual Squared Method for Complex Non-Hermitian Linear Systems. Journal of Computational Mathematics, 2014, 32, 248-265.	0.2	3

#	Article	IF	Citations
399	Two-level algebraic domain decomposition preconditioners using Jacobiâ€"Schwarz smoother and adaptive coarse grid corrections. Journal of Computational and Applied Mathematics, 2014, 261, 1-13.	1.1	4
400	Hierarchical Krylov and nested Krylov methods for extreme-scale computing. Parallel Computing, 2014, 40, 17-31.	1.3	31
401	Parallel preconditioners for the unsteady Navierâ€"Stokes equations and applications to hemodynamics simulations. Computers and Fluids, 2014, 92, 253-273.	1.3	24
402	Skew-symmetric convection form and secondary conservative finite difference methods for moving grids. Journal of Computational Physics, 2014, 257, 1081-1112.	1.9	11
403	Chebyshev acceleration of iterative refinement. Numerical Algorithms, 2014, 66, 591-608.	1.1	14
404	Concurrent aerostructural topology optimization of a wing box. Computers and Structures, 2014, 134, 1-17.	2.4	71
405	VBARMS: A variable block algebraic recursive multilevel solver for sparse linear systems. Journal of Computational and Applied Mathematics, 2014, 259, 164-173.	1.1	9
406	A comparison of iterative methods to solve complex valued linear algebraic systems. Numerical Algorithms, 2014, 66, 811-841.	1.1	106
407	Flexible global generalized Hessenberg methods for linear systems with multiple right-hand sides. Journal of Computational and Applied Mathematics, 2014, 263, 312-325.	1.1	6
409	Fully resolved immersed electrohydrodynamics for particle motion, electrolocation, and self-propulsion. Journal of Computational Physics, 2014, 256, 88-108.	1.9	25
410	A Domain Decomposition Method for Boundary Integral Equations Using a Transmission Condition Based on the Near-Zone Couplings. IEEE Transactions on Antennas and Propagation, 2014, 62, 4105-4114.	3.1	27
411	A Combined Preconditioning Strategy for Nonsymmetric Systems. SIAM Journal of Scientific Computing, 2014, 36, A2533-A2556.	1.3	3
412	Evaluating the Impact of SDC on the GMRES Iterative Solver. , 2014, , .		58
413	Accurate and Scalable O (N) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 217 Td (stretchy="false")) Computations on Large Parallel Computers. Physical Review Letters, 2014, 112, 046401.	2.1	35
414	Inexact Hessian-vector products in reduced-space differential-equation constrained optimization. Optimization and Engineering, 2014, 15, 575-608.	1.3	23
415	Multigroup diffusion preconditioners for multiplying fixed-source transport problems. Journal of Computational Physics, 2014, 274, 455-472.	1.9	5
416	A flexible CMRH algorithm for nonsymmetric linear systems. Journal of Applied Mathematics and Computing, 2014, 45, 43-61.	1.2	5
417	FGMRES for linear discrete ill-posed problems. Applied Numerical Mathematics, 2014, 75, 175-187.	1.2	14

#	ARTICLE	IF	CITATIONS
418	A parallel implementation of Davidson methods for large-scale eigenvalue problems in SLEPc. ACM Transactions on Mathematical Software, 2014, 40, 1-29.	1.6	11
419	A parallel Jacobian-free Newton–Krylov solver for a coupled sea ice-ocean model. Journal of Computational Physics, 2014, 257, 901-911.	1.9	38
420	A second-order accurate in time IMplicit–EXplicit (IMEX) integration scheme for sea ice dynamics. Journal of Computational Physics, 2014, 263, 375-392.	1.9	33
421	Towards Gradient-Based Design Optimization of Flexible Transport Aircraft with Flutter Constraints. , 2014, , .		13
422	Efficient Variable-Coefficient Finite-Volume Stokes Solvers. Communications in Computational Physics, 2014, 16, 1263-1297.	0.7	41
423	IDA: An implicit, parallelizable method for calculating drainage area. Water Resources Research, 2014, 50, 4110-4130.	1.7	14
424	On the Use of Finite Difference Matrix-vector Products in Newton-krylov Solvers for Implicit Climate Dynamics with Spectral Elements. Procedia Computer Science, 2015, 51, 2036-2045.	1.2	3
425	High-performance algebraic multigrid solver optimized for multi-core based distributed parallel systems. , 2015, , .		16
426	An iterative KP1 method for solving the transport equation in 3D domains on unstructured grids. Computational Mathematics and Mathematical Physics, 2015, 55, 1698-1712.	0.2	3
427	A Full-Space Method with Matrix Aggregates for Stress-Constrained Structural Optimization. , 2015, , .		1
428	Jacobian–free Newton–Krylov method for implicit time–spectral solution of the compressible Navier–Stokes equations. International Journal for Numerical Methods in Fluids, 2015, 79, 1-15.	0.9	6
429	Towards a new multiscale air quality transport model using the fully unstructured anisotropic adaptive mesh technology of Fluidity (version 4.1.9). Geoscientific Model Development, 2015, 8, 3421-3440.	1.3	10
430	A mass, momentum, and energy conserving, fully implicit, scalable algorithm for the multi-dimensional, multi-species Rosenbluth–Fokker–Planck equation. Journal of Computational Physics, 2015, 297, 357-380.	1.9	61
431	Development and Analysis of a Block-Preconditioner for the Phase-Field Crystal Equation. SIAM Journal of Scientific Computing, 2015, 37, B425-B451.	1.3	21
432	An Enhanced Preconditioned JMCFIE-DDM for Analysis of Electromagnetic Scattering by Composite Objects. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 1362-1365.	2.4	10
433	Finite element approximation and preconditioners for a coupled thermal–acoustic model. Computers and Mathematics With Applications, 2015, 70, 2342-2354.	1.4	6
434	AmgX: A Library for GPU Accelerated Algebraic Multigrid and Preconditioned Iterative Methods. SIAM Journal of Scientific Computing, 2015, 37, S602-S626.	1.3	84
435	A low frequency elastodynamic fast multipole boundary element method in three dimensions. Computational Mechanics, 2015, 56, 829-848.	2.2	9

#	Article	IF	Citations
436	TSIRM: A Two-Stage Iteration with Least-Squares Residual Minimization Algorithm to Solve Large Sparse Linear Systems. , 2015, , .		0
437	A Flexible Iterative Solver for Nonconvex, Equality-Constrained Quadratic Subproblems. SIAM Journal of Scientific Computing, 2015, 37, A1801-A1824.	1.3	3
438	Solution of Nonlinear Stokes Equations Discretized By High-Order Finite Elements on Nonconforming and Anisotropic Meshes, with Application to Ice Sheet Dynamics. SIAM Journal of Scientific Computing, 2015, 37, B804-B833.	1.3	32
439	Nested Krylov Methods for Shifted Linear Systems. SIAM Journal of Scientific Computing, 2015, 37, S90-S112.	1.3	22
440	Large-scale Multi-material Topology Optimization for Additive Manufacturing. , 2015, , .		14
441	Efficient solution of the simplified P_N equations. Journal of Computational Physics, 2015, 284, 155-170.	1.9	23
442	Asynchronous partial update of the Restricted Additive Schwarz preconditioner to solve nonlinear CFD problems. Computers and Fluids, 2015, 110, 211-218.	1.3	0
443	A flexible and adaptive simpler block GMRES with deflated restarting for linear systems with multiple right-hand sides. Journal of Computational and Applied Mathematics, 2015, 282, 139-156.	1.1	12
444	Flexible and multi-shift induced dimension reduction algorithms for solving large sparse linear systems. Numerical Linear Algebra With Applications, 2015, 22, 1-25.	0.9	13
445	A high-resolution computational model of the deforming human heart. Biomechanics and Modeling in Mechanobiology, 2015, 14, 829-849.	1.4	46
446	Matrix Reordering Using Multilevel Graph Coarsening for ILU Preconditioning. SIAM Journal of Scientific Computing, 2015, 37, A391-A419.	1.3	13
447	Algorithmically scalable block preconditioner for fully implicit shallow-water equations in CAM-SE. Computational Geosciences, 2015, 19, 49-61.	1.2	6
448	Tikhonov regularization via flexible Arnoldi reduction. BIT Numerical Mathematics, 2015, 55, 1145-1168.	1.0	8
449	A 3-D implicit finite-volume model of shallow water flows. Advances in Water Resources, 2015, 83, 263-276.	1.7	10
450	Accelerating COBAYA3 on multi-core CPU and GPU systems using PARALUTION. Annals of Nuclear Energy, 2015, 82, 252-259.	0.9	7
451	A Hybrid Ewald-Spectral Cavity Green's Function Boundary Element Method With Spectral Domain Acceleration for Modeling of Over-Moded Cavities. IEEE Transactions on Antennas and Propagation, 2015, 63, 2627-2635.	3.1	6
452	Data decomposition in Monte Carlo neutron transport simulations using global view arrays. International Journal of High Performance Computing Applications, 2015, 29, 348-365.	2.4	10
453	Numerical and computational aspects of some block-preconditioners for saddle point systems. Parallel Computing, 2015, 49, 164-178.	1.3	5

#	ARTICLE	IF	CITATIONS
454	Investigation of the sensing properties of a localized surface plasmon nanocavity. International Journal of Applied Electromagnetics and Mechanics, 2015, 47, 113-123.	0.3	0
455	The fully-implicit log-conformation formulation and its application to three-dimensional flows. Journal of Non-Newtonian Fluid Mechanics, 2015, 223, 209-220.	1.0	14
456	Constrained pressure residual multiscale (CPR-MS) method for fully implicit simulation of multiphase flow in porous media. Journal of Computational Physics, 2015, 299, 472-486.	1.9	43
457	Simulation of injector dynamics during steady inductive helicity injection current drive in the HIT-SI experiment. Physics of Plasmas, 2015, 22, .	0.7	10
458	A scalable, matrix-free multigrid preconditioner for finite element discretizations of heterogeneous Stokes flow. Computer Methods in Applied Mechanics and Engineering, 2015, 290, 496-523.	3.4	104
459	Preconditioned iterative methods for Navierâ€"Stokes control problems. Journal of Computational Physics, 2015, 292, 194-207.	1.9	16
460	Preconditioning. Acta Numerica, 2015, 24, 329-376.	6.3	141
461	Numerical simulation and comparison of a real Alâ€"Si alloy with virtually generated alloys. Archive of Applied Mechanics, 2015, 85, 1161-1171.	1.2	8
462	A Volume Integral Formulation Based on Facet Elements for Nonlinear Magnetostatic Problems. IEEE Transactions on Magnetics, 2015, 51, 1-6.	1.2	21
463	A Low-Rank in Time Approach to PDE-Constrained Optimization. SIAM Journal of Scientific Computing, 2015, 37, B1-B29.	1.3	50
464	Iterative Methods. Texts in Applied Mathematics, 2015, , 613-781.	0.4	0
465	NUMERICAL SOLUTION OF THE TIME-DEPENDENT NAVIERâ€"STOKES EQUATION FOR VARIABLE DENSITYâ€"VARIABLE VISCOSITY. PART I. Mathematical Modelling and Analysis, 2015, 20, 232-260.	0.7	13
466	Constrained pseudo-transient continuation. International Journal for Numerical Methods in Engineering, 2015, 102, 1683-1703.	1.5	54
467	Fine-Grained Parallel Incomplete LU Factorization. SIAM Journal of Scientific Computing, 2015, 37, C169-C193.	1.3	120
468	A transpose-free quasi-minimal residual variant of the CORS method for solving non-Hermitian linear systems. Journal of Computational Physics, 2015, 291, 20-33.	1.9	2
469	Newton--Picard Preconditioners for Time-Periodic Parabolic Optimal Control Problems. SIAM Journal on Numerical Analysis, 2015, 53, 2206-2225.	1.1	7
470	The numerical simulation of the wing kinematics effects on near wake topology and aerodynamic performance in hovering Drosophila flight. Computers and Fluids, 2015, 122, 90-110.	1.3	7
471	Strong transient effects of the flow around a harmonically plunging NACA0012 airfoil at low Reynolds numbers. Theoretical and Computational Fluid Dynamics, 2015, 29, 391-412.	0.9	1

#	Article	IF	Citations
472	On the scalability of inexact balancing domain decomposition by constraints with overlapped coarse/fine corrections. Parallel Computing, 2015, 50, 1-24.	1.3	13
473	Composing Scalable Nonlinear Algebraic Solvers. SIAM Review, 2015, 57, 535-565.	4.2	93
474	Improved combined tangential formulation for electromagnetic analysis of penetrable bodies. Journal of the Optical Society of America B: Optical Physics, 2015, 32, 1780.	0.9	12
475	Iterative Sparse Triangular Solves for Preconditioning. Lecture Notes in Computer Science, 2015, , 650-661.	1.0	46
476	Solving the Boltzmann transport equation with multigrid and adaptive space/angle discretisations. Annals of Nuclear Energy, 2015, 86, 99-107.	0.9	9
477	Preconditioners for regularized saddle point problems with an application for heterogeneous Darcy flow problems. Journal of Computational and Applied Mathematics, 2015, 280, 141-157.	1.1	10
478	Analysis of some projection method based preconditioners for models of incompressible flow. Applied Numerical Mathematics, 2015, 90, 77-90.	1.2	4
479	Solving multizone and multicrack elastostatic problems: A fast multipole symmetric Galerkin boundary element method approach. Engineering Analysis With Boundary Elements, 2015, 50, 486-495.	2.0	11
480	An efficient $\mathcal{O}(N)$ O (N) algorithm for computing $\mathcal{O}(N^2)$ O (N 2) acoustic wave interactions in large N N -obstacle three dimensional configurations. BIT Numerical Mathematics, 2015, 55, 117-139.	1.0	13
481	On ${\varvec{m}}$ m -step Hermitian and skew-Hermitian splitting preconditioning methods. Journal of Engineering Mathematics, 2015, 93, 77-86.	0.6	8
482	A Fast Multipole Boundary Element Method for Three-Dimensional Half-Space Acoustic Wave Problems Over an Impedance Plane. International Journal of Computational Methods, 2015, 12, 1350090.	0.8	11
483	Several variants of the Hermitian and skew-Hermitian splitting method for a class of complex symmetric linear systems. Numerical Linear Algebra With Applications, 2015, 22, 338-356.	0.9	40
484	Unified analysis of preconditioning methods for saddle point matrices. Numerical Linear Algebra With Applications, 2015, 22, 233-253.	0.9	27
485	Global GPBiCG method for complex non-Hermitian linear systems with multiple right-hand sides. Computational and Applied Mathematics, 2016, 35, 171-185.	1.3	6
486	3-D radiative transfer in large-eddy simulations â€" experiences coupling the TenStream solver to the UCLA-LES. Geoscientific Model Development, 2016, 9, 1413-1422.	1.3	16
487	Adaptive aggregation-based domain decomposition multigrid for twisted mass fermions. Physical Review D, 2016, 94, .	1.6	36
488	Efficient solution of timeâ€domain boundary integral equations arising in soundâ€hard scattering. International Journal for Numerical Methods in Engineering, 2016, 107, 430-449.	1.5	5
489	An overset mesh approach for 3D mixed element high-order discretizations. Journal of Computational Physics, 2016, 322, 33-51.	1.9	63

#	Article	IF	Citations
490	Mesh-Resolved Airfoil Simulations Using Finite Volume and Discontinuous Galerkin Solvers. AIAA Journal, 2016, 54, 2659-2670.	1.5	4
491	A Fast Solver for an *H₁* Regularized PDE-Constrained Optimization Problem. Communications in Computational Physics, 2016, 19, 143-167.	0.7	7
492	Optimisation of Ducted Propellers for Hybrid Air Vehicles Using High-Fidelity CFD. Aeronautical Journal, 2016, 120, 1632-1657.	1.1	26
493	Linear algebra software for large-scale accelerated multicore computing. Acta Numerica, 2016, 25, 1-160.	6.3	11
494	A full-space barrier method for stress-constrained discrete material design optimization. Structural and Multidisciplinary Optimization, 2016, 54, 619-639.	1.7	14
495	A phase field model for damage in elasto-viscoplastic materials. Computer Methods in Applied Mechanics and Engineering, 2016, 312, 167-185.	3.4	79
496	Stochastic Galerkin methods for the steady-state Navier–Stokes equations. Journal of Computational Physics, 2016, 316, 435-452.	1.9	19
497	A parallel adaptive viscoelastic flow solver with template based dynamic mesh refinement. Journal of Non-Newtonian Fluid Mechanics, 2016, 234, 36-50.	1.0	4
498	Parameter estimates for the Relaxed Dimensional Factorization preconditioner and application to hemodynamics. Computer Methods in Applied Mechanics and Engineering, 2016, 300, 129-145.	3.4	26
499	Novel accurate and scalable 3-D MT forward solver based on a contracting integral equation method. Computers and Geosciences, 2016, 96, 208-217.	2.0	23
500	Pipelined, Flexible Krylov Subspace Methods. SIAM Journal of Scientific Computing, 2016, 38, C441-C470.	1.3	11
501	A scalable, fully implicit algorithm for the reduced two-field low-β extended MHD model. Journal of Computational Physics, 2016, 326, 763-772.	1.9	13
502	Numerical recovery strategies for parallel resilient Krylov linear solvers. Numerical Linear Algebra With Applications, 2016, 23, 888-905.	0.9	22
503	Fast Alternating BiDirectional Preconditioner for the 2D High-Frequency Lippmann--Schwinger Equation. SIAM Journal of Scientific Computing, 2016, 38, B866-B888.	1.3	16
504	TSIRM: A two-stage iteration with least-squares residual minimization algorithm to solve large sparse linear and nonlinear systems. Journal of Computational Science, 2016, 17, 535-546.	1.5	2
505	A Highly Scalable Multilevel Schwarz Method with Boundary Geometry Preserving Coarse Spaces for 3D Elasticity Problems on Domains with Complex Geometry. SIAM Journal of Scientific Computing, 2016, 38, C73-C95.	1.3	35
506	Two alternatives for magnetic resonance electrical impedance tomography: injected or induced current. Physiological Measurement, 2016, 37, 2024-2049.	1.2	1
507	LibPowerMon: A Lightweight Profiling Framework to Profile Program Context and System-Level Metrics. , 2016, , .		8

#	Article	IF	Citations
508	Reducing complexity of algebraic multigrid by aggregation. Numerical Linear Algebra With Applications, 2016, 23, 501-518.	0.9	4
509	Accelerating large partial EVD/SVD calculations by filtered block Davidson methods. Science China Mathematics, 2016, 59, 1635-1662.	0.8	4
510	Analysis and Practical Use of Flexible BiCGStab. Journal of Scientific Computing, 2016, 68, 803-825.	1.1	10
511	Efficient mesh deformation based on radial basis function interpolation by means of the inverse fast multipole method. Computer Methods in Applied Mechanics and Engineering, 2016, 308, 286-309.	3.4	21
512	Using the VBARMS method in parallel computing. Parallel Computing, 2016, 57, 197-211.	1.3	1
513	A fully-implicit, Giles-type nonreflecting boundary condition in a DG-Chimera turbomachinery solver. , 2016, , .		2
514	A parallel monolithic algorithm for the numerical simulation of large‐scale fluid structure interaction problems. International Journal for Numerical Methods in Fluids, 2016, 80, 687-714.	0.9	28
515	Newton–Raphson preconditioner for Krylov type solvers on GPU devices. SpringerPlus, 2016, 5, 788.	1.2	4
516	Variable Preconditioning of Krylov Subspace Methods for Hierarchical Matrices With Adaptive Cross Approximation. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	5
517	A variant of the deteriorated PSS preconditioner for nonsymmetric saddle point problems. BIT Numerical Mathematics, 2016, 56, 587-604.	1.0	21
518	Discontinuous Galerkin Turbulent Flow Simulations of NASA Turbulence Model Validation Cases and High Lift Prediction Workshop Test Case DLR-F11. , 2016, , .		2
519	Large-Scale Compliance-Minimization and Buckling Topology Optimization of the Undeformed Common Research Model Wing. , 2016, , .		14
520	A Mixed Potential MLFMA for Higher Order Moment Methods With Application to the Generalized Method of Moments. IEEE Transactions on Antennas and Propagation, 2016, 64, 650-662.	3.1	16
521	Computational free-surface fluid–structure interaction with application to floating offshore wind turbines. Computers and Fluids, 2016, 141, 155-174.	1.3	138
522	Multigrid method based on transformation-free high-order scheme for solving 2D Helmholtz equation on nonuniform grids. Advances in Difference Equations, 2016, 2016, .	3.5	8
523	A stable and scalable hybrid solver for rate-type non-Newtonian fluid models. Journal of Computational and Applied Mathematics, 2016, 300, 103-118.	1.1	1
524	FSI modeling of a propulsion system based on compliant hydrofoils in a tandem configuration. Computers and Fluids, 2016, 141, 201-211.	1.3	76
525	An Algebraic Multilevel Preconditioner with Low-Rank Corrections for Sparse Symmetric Matrices. SIAM Journal on Matrix Analysis and Applications, 2016, 37, 235-259.	0.7	26

#	Article	IF	Citations
526	A Multi-Solver Overset Mesh Approach for 3D Mixed Element Variable Order Discretizations. , 2016, , .		12
527	Kona: A Parallel Optimization Library for Engineering-Design Problems. , 2016, , .		0
528	Parallel preconditioners for monolithic solution of shear bands. Journal of Computational Physics, 2016, 304, 359-379.	1.9	10
529	Numerical Study of SUPG and LPS Methods Combined with Higher Order Variational Time Discretization Schemes Applied to Time-Dependent Linear Convectionâ€"Diffusionâ€"Reaction Equations. Journal of Scientific Computing, 2016, 67, 988-1018.	1.1	12
530	Two-Level Spaceâ€"Time Domain Decomposition Methods for Three-Dimensional Unsteady Inverse Source Problems. Journal of Scientific Computing, 2016, 67, 860-882.	1.1	19
531	Matrix-equation-based strategies for convectionâ€"diffusion equations. BIT Numerical Mathematics, 2016, 56, 751-776.	1.0	35
532	Free-surface flow modeling and simulation of horizontal-axis tidal-stream turbines. Computers and Fluids, 2017, 158, 157-166.	1.3	114
533	GMRES with multiple preconditioners. SeMA Journal, 2017, 74, 213-231.	1.0	9
534	Comparison of preconditioned Krylov subspace iteration methods for PDE-constrained optimization problems. Numerical Algorithms, 2017, 74, 19-37.	1.1	25
535	On the equivalence between the Scheduled Relaxation Jacobi method and Richardson's non-stationary method. Journal of Computational Physics, 2017, 332, 446-460.	1.9	13
536	Multigrid methods for convectionâ€"diffusion problems discretized by a monotone scheme. Computer Methods in Applied Mechanics and Engineering, 2017, 317, 723-745.	3.4	5
537	Continuous Crystallization in a Helically Coiled Flow Tube: Analysis of Flow Field, Residence Time Behavior, and Crystal Growth. Industrial & Engineering Chemistry Research, 2017, 56, 3699-3712.	1.8	40
538	On conservation laws of Navierâ€"Stokes Galerkin discretizations. Journal of Computational Physics, 2017, 337, 289-308.	1.9	84
539	Erasure Coding for Fault-Oblivious Linear System Solvers. SIAM Journal of Scientific Computing, 2017, 39, C48-C64.	1.3	2
540	Implementation of Newton's method with an analytical Jacobian to solve the 1D sea ice momentum equation. Journal of Computational Physics, 2017, 340, 69-84.	1.9	12
541	Enhanced Constrained Pressure Residual ECPR Preconditioning for Solving Difficult Large Scale Thermal Models. , 2017, , .		2
542	A Hybrid Indirectâ€"Direct Coupling Method for Strongly Coupled Nonlinear Magnetic Problems. IEEE Transactions on Magnetics, 2017, 53, 1-11.	1.2	2
543	Multistep matrix splitting iteration preconditioning for singular linear systems. Numerical Algorithms, 2017, 75, 457-475.	1.1	1

#	Article	IF	Citations
544	Hybrid finite difference/finite element immersed boundary method. International Journal for Numerical Methods in Biomedical Engineering, 2017, 33, e2888.	1.0	97
545	The Inverse Fast Multipole Method: Using a Fast Approximate Direct Solver as a Preconditioner for Dense Linear Systems. SIAM Journal of Scientific Computing, 2017, 39, A761-A796.	1.3	37
546	A Rational Function Preconditioner For Indefinite Sparse Linear Systems. SIAM Journal of Scientific Computing, 2017, 39, A1145-A1167.	1.3	8
547	Efficient computation of past global ocean circulation patterns using continuation in paleobathymetry. Ocean Modelling, 2017, 115, 77-85.	1.0	1
548	Numerical Simulation of a Flexible X-Wing Flapping-Wing Micro Air Vehicle. AIAA Journal, 2017, 55, 2295-2306.	1.5	26
549	An arbitrary Lagrangianâ€Eulerian framework with exact mass conservation for the numerical simulation of 2D rising bubble problem. International Journal for Numerical Methods in Engineering, 2017, 112, 2110-2134.	1.5	5
550	Numerical studies of a class of linear solvers for fine-scale petroleum reservoir simulation. Computing and Visualization in Science, 2017, 18, 93-102.	1.2	4
551	An enhanced analytical method for the subsonic indicial lift of two-dimensional aerofoils â€" with numerical cross-validation. Aerospace Science and Technology, 2017, 67, 354-365.	2.5	15
552	A scalable nonlinear fluidâ€"structure interaction solver based on a Schwarz preconditioner with isogeometric unstructured coarse spaces in 3D. Journal of Computational Physics, 2017, 340, 498-518.	1.9	29
553	Application of the inverse fast multipole method as a preconditioner in a 3D Helmholtz boundary element method. Journal of Computational Physics, 2017, 341, 406-428.	1.9	15
554	Block triangular preconditioners for linearization schemes of the Rayleighâ€"BÃ©nard convection problem. Numerical Linear Algebra With Applications, 2017, 24, e2096.	0.9	9
555	ParMooNâ€"A modernized program package based on mapped finite elements. Computers and Mathematics With Applications, 2017, 74, 74-88.	1.4	41
556	A genetic link between transform and hyper-extended margins. Earth and Planetary Science Letters, 2017, 465, 184-192.	1.8	43
557	A fast immersed boundary method for external incompressible viscous flows using lattice Green's functions. Journal of Computational Physics, 2017, 331, 257-279.	1.9	47
558	A Newtonâ€"Krylov method with an approximate analytical Jacobian for implicit solution of Navierâ€"Stokes equations on staggered overset-curvilinear grids with immersed boundaries. Journal of Computational Physics, 2017, 331, 227-256.	1.9	40
559	Preconditioning Techniques Based on the Birkhoffâ€"von Neumann Decomposition. Computational Methods in Applied Mathematics, 2017, 17, 201-215.	0.4	2
560	Full Waveform Inversion Guided by Travel Time Tomography. SIAM Journal of Scientific Computing, 2017, 39, S587-S609.	1.3	15
561	Multipreconditioned Gmres for Shifted Systems. SIAM Journal of Scientific Computing, 2017, 39, S222-S247.	1.3	16

#	Article	IF	Citations
562	Weighted Inner Products for GMRES and GMRES-DR. SIAM Journal of Scientific Computing, 2017, 39, S610-S632.	1.3	4
563	Constraint Interface Preconditioning for the Incompressible Stokes Equations. SIAM Journal on Numerical Analysis, 2017, 55, 2286-2311.	1.1	1
564	BePI. , 2017, , .		39
565	Analysis on block diagonal and triangular preconditioners for a PML system of an electromagnetic scattering problem. Computers and Mathematics With Applications, 2017, 74, 2856-2873.	1.4	0
566	h-multigrid agglomeration based solution strategies for discontinuous Galerkin discretizations of incompressible flow problems. Journal of Computational Physics, 2017, 347, 382-415.	1.9	20
567	A comparison of viscous-plastic sea ice solvers with and without replacement pressure. Ocean Modelling, 2017, 115, 59-69.	1.0	15
568	Low-Rank Correction Methods for Algebraic Domain Decomposition Preconditioners. SIAM Journal on Matrix Analysis and Applications, 2017, 38, 807-828.	0.7	18
569	High-Performance Parallel Solver for Integral Equations of Electromagnetics Based on Galerkin Method. Mathematical Geosciences, 2017, 49, 751-776.	1.4	37
570	A moving control volume approach to computing hydrodynamic forces and torques on immersed bodies. Journal of Computational Physics, 2017, 347, 437-462.	1.9	23
571	A Chimera-based, zonal discontinuous Galerkin method. , 2017, , .		5
572	Elasto-viscoplastic phase field modelling of anisotropic cleavage fracture. Journal of the Mechanics and Physics of Solids, 2017, 99, 19-34.	2.3	94
573	Exploring versioned distributed arrays for resilience in scientific applications. International Journal of High Performance Computing Applications, 2017, 31, 564-590.	2.4	10
574	A scalable block-preconditioning strategy for divergence-conforming B-spline discretizations of the Stokes problem. Computer Methods in Applied Mechanics and Engineering, 2017, 316, 839-858.	3.4	8
575	A Jacobian-free Edge-based Galerkin Formulation for Compressible Flows. Computers and Fluids, 2017, 143, 141-156.	1.3	7
576	TOUGH3: A new efficient version of the TOUGH suite of multiphase flow and transport simulators. Computers and Geosciences, 2017, 108, 2-7.	2.0	60
577	Resolving the sign conflict problem for hp–hexahedral Nédélec elements with application to eddy current problems. Computers and Structures, 2017, 181, 41-54.	2.4	6
578	A preconditioner for optimal control problems, constrained by Stokes equation with a time-harmonic control. Journal of Computational and Applied Mathematics, 2017, 310, 5-18.	1.1	23
579	Domain decomposition method for solving scattering from PEC objects. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
580	Preconditioning of two-by-two block matrix systems with square matrix blocks, with applications. , 2017, 62, 537-559.		2
581	A New Analysis of Iterative Refinement and Its Application to Accurate Solution of Ill-Conditioned Sparse Linear Systems. SIAM Journal of Scientific Computing, 2017, 39, A2834-A2856.	1.3	70
582	A numerical investigation of multi space reduced basis preconditioners for parametrized elliptic advection-diffusion equations. Communications in Applied and Industrial Mathematics, 2017, 8, 282-297.	0.6	1
583	Performance modeling under resource constraints using deep transfer learning. , 2017, , .		28
585	A modified GMRES method for solving large-scale Lyapunov equations for multi-agent systems. , 2017, , .		1
586	Multi-Objective Approaches to Markov Decision Processes with Uncertain Transition Parameters. , 2017, , .		11
587	The Design of Steady State Schemes for Computational Aerodynamics. Handbook of Numerical Analysis, 2017, , 303-349.	0.9	4
588	Distributed Fault Tolerant Linear System Solvers Based on Erasure Coding. , 2017, , .		2
589	Development and Application of a New High-Efficiency Sparse Linear System Solver in the Thermal-Hydraulic System Analysis Code. Science and Technology of Nuclear Installations, 2017, 2017, 1-10.	0.3	4
590	Multi Space Reduced Basis Preconditioners for Large-Scale Parametrized PDEs. SIAM Journal of Scientific Computing, 2018, 40, A954-A983.	1.3	8
591	Using high-order polynomial basis in 3-D EM forward modeling based on volume integral equation method. Geophysical Journal International, 2018, 213, 1387-1401.	1.0	27
592	Induced Current Magnetic Resonance Electrical Conductivity Imaging With Oscillating Gradients. IEEE Transactions on Medical Imaging, 2018, 37, 1606-1617.	5.4	4
593	Benchmarking Approaches for the Multidisciplinary Analysis of Complex Systems Using a Taylor Series-Based Scalable Problem. , 2018, , 98-116.		2
594	Strategy for Fine-Grained Parallelism in Multi-Level Computational Engineering Solvers. , 2018, , .		2
595	Efficient Large-Scale Thermoelastic Topology Optimization of CAD Geometry with Automated Adaptive Mesh Generation. , 2018, , .		3
596	Finite elements for scalar convection-dominated equations and incompressible flow problems: a never ending story?. Computing and Visualization in Science, 2018, 19, 47-63.	1.2	54
597	An assessment of some solvers for saddle point problems emerging from the incompressible Navier–Stokes equations. Computer Methods in Applied Mechanics and Engineering, 2018, 331, 492-513.	3.4	10
598	A Higher-Order Unstructured Finite Volume Solver for Three-Dimensional Compressible Flows. , 2018, , .		3

#	Article	IF	Citations
599	Bayes Meets Krylov: Statistically Inspired Preconditioners for CGLS. SIAM Review, 2018, 60, 429-461.	4.2	21
600	Irregularization accelerates iterative regularization. Calcolo, 2018, 55, 1.	0.6	1
601	Benefits of advanced full-wave vector analysis codes for the design of high-power microwave tubes. , 2018, , .		1
602	An integrated crystal plasticity–phase field model for spatially resolved twin nucleation, propagation, and growth in hexagonal materials. International Journal of Plasticity, 2018, 106, 203-227.	4.1	125
603	Scalability study of an implicit solver for coupled fluid-structure interaction problems on unstructured meshes in 3D. International Journal of High Performance Computing Applications, 2018, 32, 207-219.	2.4	13
604	Numerical simulation of fluid–structure interaction problems with hyperelastic models: A monolithic approach. Mathematics and Computers in Simulation, 2018, 145, 186-208.	2.4	16
605	GMRES Convergence Bounds for Eigenvalue Problems. Computational Methods in Applied Mathematics, 2018, 18, 203-222.	0.4	3
606	Global FOM and GMRES algorithms for a class of complex matrix equations. Journal of Computational and Applied Mathematics, 2018, 335, 227-241.	1.1	3
607	SSMR Preconditioned Linear Iterative Solvers for Electromagnetic Simulations. , 2018, , .		0
608	Unraveling the Physics of the Yellowstone Magmatic System Using Geodynamic Simulations. Frontiers in Earth Science, 2018, 6, .	0.8	16
609	Multipreconditioned GMRES for simulating stochastic automata networks. Open Mathematics, 2018, 16, 986-998.	0.5	0
610	An order 102 speedup in the computation of the steady-state thermal response of geothermal heat exchangers. AIP Conference Proceedings, 2018, , .	0.3	6
611	On Convergence Speed of Parallel Variants of BiCGSTAB for Solving Linear Equations. Communications in Computer and Information Science, 2018, , 401-413.	0.4	0
612	A monolithic fluid–structure interaction framework applied to red blood cells. International Journal for Numerical Methods in Biomedical Engineering, 2019, 35, e3171.	1.0	9
613	Shrink or Substitute: Handling Process Failures in HPC Systems Using In-Situ Recovery. , 2018, , .		11
614	Multilevel Variable-Block Schur-Complement-Based Preconditioning for the Implicit Solution of the Reynolds- Averaged Navier-Stokes Equations Using Unstructured Grids. , 2018, , .		0
615	Simulating Free-Surface FSI and Fatigue Damage in Wind-Turbine Structural Systems. Modeling and Simulation in Science, Engineering and Technology, 2018, , 1-28.	0.4	2
616	Pattern-based Modeling of Multiresilience Solutions for High-Performance Computing. , 2018, , .		6

#	Article	IF	Citations
617	An integral equation approach for the solution of the Stokes flow with Hermite surfaces. Engineering Analysis With Boundary Elements, 2018, 96, 14-22.	2.0	9
618	Using Jacobi iterations and blocking for solving sparse triangular systems in incomplete factorization preconditioning. Journal of Parallel and Distributed Computing, 2018, 119, 219-230.	2.7	27
619	Hessian-based Dimension Reduction for Optimization Under Uncertainty. , 2018, , .		7
620	Enabling Modular Aerostructural Optimization: Individual Discipline Feasible without the Jacobians. , 2018, , .		3
621	Performance of preconditioned iterative solvers in MFiX–Trilinos for fluidized beds. Journal of Supercomputing, 2018, 74, 4104-4126.	2.4	4
622	A spectrally preconditioned and initially deflated variant of the restarted block GMRES method for solving multiple right-hand sides linear systems. International Journal of Mechanical Sciences, 2018, 144, 775-787.	3.6	7
623	Mixed Inner–Outer Iteration Technique-Based Surface Integral Equations for Fast Solving EM Scattering From Penetrable Objects. IEEE Transactions on Antennas and Propagation, 2018, 66, 4752-4758.	3.1	4
624	An automated selection algorithm for nonlinear solvers in MDO. Structural and Multidisciplinary Optimization, 2018, 58, 349-377.	1.7	7
625	A Hierarchical Low Rank Schur Complement Preconditioner for Indefinite Linear Systems. SIAM Journal of Scientific Computing, 2018, 40, A2234-A2252.	1.3	7
626	Limited Memory Block Preconditioners for Fast Solution of Fractional Partial Differential Equations. Journal of Scientific Computing, 2018, 77, 950-970.	1.1	15
627	Weighted and flexible versions of block CMRH method for solving nonsymmetric linear systems with multiple right-hand sides. Computers and Mathematics With Applications, 2018, 76, 2011-2021.	1.4	6
628	A Flexible SIE-DDM for EM Scattering by Large and Multiscale Problems. IEEE Transactions on Antennas and Propagation, 2018, 66, 7466-7471.	3.1	9
629	A Computational Architecture for Coupling Heterogeneous Numerical Models and Computing Coupled Derivatives. ACM Transactions on Mathematical Software, 2018, 44, 1-39.	1.6	88
630	A Mixed Discontinuous Galerkin Method Without Interior Penalty for Time-Dependent Fourth Order Problems. Journal of Scientific Computing, 2018, 77, 467-501.	1.1	12
631	A multigrid solver to the Helmholtz equation with a point source based on travel time and amplitude. Numerical Linear Algebra With Applications, 2019, 26, e2206.	0.9	3
632	Iterative methods for the delay Lyapunov equation with T-Sylvester preconditioning. Applied Numerical Mathematics, 2019, 135, 173-185.	1.2	8
633	Accelerating the iterative solution of convection–diffusion problems using singular value decomposition. Numerical Linear Algebra With Applications, 2019, 26, e2211.	0.9	3
634	Parameter modified versions of preconditioning and iterative inner product free refinement methods for two-by-two block matrices. Linear Algebra and Its Applications, 2019, 582, 403-429.	0.4	3

#	Article	IF	Citations
635	SIE-DDM Based on a Hybrid Direct–Iterative Approach for Analysis of Multiscale Problems. IEEE Transactions on Antennas and Propagation, 2019, 67, 7440-7451.	3.1	5
636	Alternating positive semidefinite splitting preconditioners for double saddle point problems. Calcolo, 2019, 56, 1.	0.6	13
637	Monolithic Overlapping Schwarz Domain Decomposition Methods with GDSW Coarse Spaces for Incompressible Fluid Flow Problems. SIAM Journal of Scientific Computing, 2019, 41, C291-C316.	1.3	12
638	A DLM immersed boundary method based wave-structure interaction solver for high density ratio multiphase flows. Journal of Computational Physics, 2019, 398, 108804.	1.9	37
639	Stochastic-deterministic population balance modeling and simulation of a fluidized bed crystallizer experiment. Chemical Engineering Science, 2019, 208, 115102.	1.9	5
640	An efficient numerical framework for the amplitude expansion of the phase-field crystal model. Modelling and Simulation in Materials Science and Engineering, 2019, 27, 044004.	0.8	17
641	A Hierarchical Space-Time Spectral Element and Moment-of-Fluid Method for Improved Capturing of Vortical Structures in Incompressible Multi-phase/Multi-material Flows. Journal of Scientific Computing, 2019, 81, 1527-1566.	1.1	4
642	A distributed and parallel asynchronous unite and conquer method to solve large scale non-Hermitian linear systems with multiple right-hand sides. Parallel Computing, 2019, 89, 102551.	1.3	1
643	Flexible Krylov Methods for ell_p Regularization. SIAM Journal of Scientific Computing, 2019, 41, S149-S171.	1.3	22
644	An Augmented Lagrangian Preconditioner for the 3D Stationary Incompressible Navier--Stokes Equations at High Reynolds Number. SIAM Journal of Scientific Computing, 2019, 41, A3073-A3096.	1.3	55
645	Artificial Viscosity Smoothing Operations for an Implicit Discontinuous Galerkin Method. , 2019, , .		1
646	A Robust Iterative Scheme for Symmetric Indefinite Systems. SIAM Journal of Scientific Computing, 2019, 41, A1733-A1752.	1.3	0
647	Matrix-free multigrid block-preconditioners for higher order discontinuous Galerkin discretisations. Journal of Computational Physics, 2019, 394, 417-439.	1.9	22
648	Fully parallel level set method for large-scale structural topology optimization. Computers and Structures, 2019, 221, 13-27.	2.4	34
649	Physical and Numerical Instabilities in Simulations of Reacting and Non Reacting Flows. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2019, , 119-185.	0.3	0
650	An efficient coupled pressure–velocity solver for three-dimensional injection molding simulation using Schur complement preconditioned FGMRES. Engineering Computations, 2019, 36, 1101-1120.	0.7	0
651	A New Dynamical Core of the Global Environmental Multiscale (GEM) Model with a Height-Based Terrain-Following Vertical Coordinate. Monthly Weather Review, 2019, 147, 2555-2578.	0.5	16
652	The numerical investigation of Lagrangian and Eulerian coherent structures for the near wake structure of a hovering Drosophila. Theoretical and Computational Fluid Dynamics, 2019, 33, 255-279.	0.9	4

#	ARTICLE	IF	CITATIONS
653	Seafloor expression of oceanic detachment faulting reflects gradients in mid-ocean ridge magma supply. Earth and Planetary Science Letters, 2019, 516, 176-189.	1.8	25
654	An efficient preconditioner for adaptive Fast Multipole accelerated Boundary Element Methods to model time-harmonic 3D wave propagation. Computer Methods in Applied Mechanics and Engineering, 2019, 352, 189-210.	3.4	5
655	A Unified 2D/3D Large-Scale Software Environment for Nonlinear Inverse Problems. ACM Transactions on Mathematical Software, 2019, 45, 1-35.	1.6	12
656	A 3-D finite volume model for sediment transport in coastal waters. Ocean Dynamics, 2019, 69, 561-580.	0.9	1
657	Augmented Lagrangian preconditioner for large-scale hydrodynamic stability analysis. Computer Methods in Applied Mechanics and Engineering, 2019, 351, 718-743.	3.4	18
658	A flexible and adaptive Simpler GMRES with deflated restarting for shifted linear systems. Computers and Mathematics With Applications, 2019, 78, 997-1007.	1.4	7
659	A robust incompressible Navier-Stokes solver for high density ratio multiphase flows. Journal of Computational Physics, 2019, 390, 548-594.	1.9	60
660	Shot-record extended model domain preconditioners for least-squares migration. Geophysics, 2019, 84, S285-S299.	1.4	2
661	Fully iterative ILU preconditioning of the unsteady Navier–Stokes equations for GPGPU. Computers and Mathematics With Applications, 2019, 77, 907-927.	1.4	4
662	A robust and efficient iterative method for hyper-elastodynamics with nested block preconditioning. Journal of Computational Physics, 2019, 383, 72-93.	1.9	14
663	Modelling and optimisation of water management in sloping coastal aquifers with seepage, extraction and recharge. Journal of Hydrology, 2019, 571, 471-484.	2.3	3
664	Status and future perspectives for lattice gauge theory calculations to the exascale and beyond. European Physical Journal A, 2019, 55, 1.	1.0	37
665	Towards Half-Precision Computation for Complex Matrices: A Case Study for Mixed Precision Solvers on GPUs. , 2019, , .		6
666	A Coupled Newton-Krylov Time Spectral Solver for Wing Flutter and LCO Prediction. , 2019, , .		13
667	A Modified GMRES Method for Solving a Symmetric Solution to Lyapunov Equation for Multi-Agent Systems. SICE Journal of Control Measurement and System Integration, 2019, 12, 223-227.	0.4	0
668	Parallel Approaches in the Heavy Ball GMRES Method. , 2019, , .		0
669	Hyper-reduced order models for parametrized unsteady Navier-Stokes equations on domains with variable shape. Advances in Computational Mathematics, 2019, 45, 2463-2501.	0.8	13
670	Computer Modeling of Wind Turbines: 2. Free-Surface FSI and Fatigue-Damage. Archives of Computational Methods in Engineering, 2019, 26, 1101-1115.	6.0	17

#	ARTICLE	IF	CITATIONS
671	Coarsening and filtering for absorbing layers in a discontinuous Galerkin method. , 2019, , .		0
672	Nonreflecting boundary conditions for the Euler equations in a discontinuous Galerkin discretization. , 2019, , .		1
673	Accelerating Hybrid Monte Carlo simulations of the Hubbard model on the hexagonal lattice. Computer Physics Communications, 2019, 236, 15-25.	3.0	9
674	A fully implicit, conservative, non-linear, electromagnetic hybrid particle-ion/fluid-electron algorithm. Journal of Computational Physics, 2019, 376, 597-616.	1.9	19
675	Multi space reduced basis preconditioners for parametrized Stokes equations. Computers and Mathematics With Applications, 2019, 77, 1583-1604.	1.4	1
676	Preconditioning methods for eddy-current optimally controlled time-harmonic electromagnetic problems. Journal of Numerical Mathematics, 2019, 27, 1-21.	1.8	27
677	Simulating vortex induced vibration of an impulsively started flexible filament by an implicit IB–LB coupling scheme. Computers and Mathematics With Applications, 2020, 79, 159-173.	1.4	6
678	A new preconditioner for elliptic PDE-constrained optimization problems. Numerical Algorithms, 2020, 83, 653-668.	1.1	4
679	A face–based monolithic approach for the incompressible magnetohydrodynamics equations. International Journal for Numerical Methods in Fluids, 2020, 92, 347-371.	0.9	3
680	An efficient and accurate MPI-based parallel simulator for streamer discharges in three dimensions. Journal of Computational Physics, 2020, 401, 109026.	1.9	13
681	Multigrid preconditioning for a space-time spectral-element discontinuous-Galerkin solver. , 2020, , .		3
682	Boundary condition optimization to improve the stability of inviscid and compressible finite-volume methods on unstructured meshes. Computers and Fluids, 2020, 199, 104418.	1.3	1
683	Efficient iterative solvers for a complex valued two-by-two block linear system with application to parabolic optimal control problems. Applied Numerical Mathematics, 2020, 152, 422-445.	1.2	8
684	Shifted skew-symmetric/skew-symmetric splitting method and its application to generalized saddle point problems. Applied Mathematics Letters, 2020, 103, 106184.	1.5	2
685	Optimal-order preconditioners for the Morse–Ingard equations. Computers and Mathematics With Applications, 2020, 79, 2458-2471.	1.4	2
686	An extension of the positive-definite and skew-Hermitian splitting method for preconditioning of generalized saddle point problems. Computers and Mathematics With Applications, 2020, 79, 2304-2321.	1.4	4
687	Scalable angular adaptivity for Boltzmann transport. Journal of Computational Physics, 2020, 406, 109124.	1.9	8
688	Krylov Methods for Low-Rank Regularization. SIAM Journal on Matrix Analysis and Applications, 2020, 41, 1477-1504.	0.7	3

#	ARTICLE	IF	CITATIONS
689	On the feasibility of using open source solvers for the simulation of a turbulent air flow in a dairy barn. Computers and Electronics in Agriculture, 2020, 175, 105546.	3.7	10
690	An Adaptive Discontinuous Petrov--Galerkin Method for the Grad--Shafranov Equation. SIAM Journal of Scientific Computing, 2020, 42, B1227-B1249.	1.3	6
691	Evaluation of Actuator Disk Model Relative to Actuator Surface Model for Predicting Utility-Scale Wind Turbine Wakes. Energies, 2020, 13, 3574.	1.6	16
692	On the efficiency of nested GMRES preconditioners for 3D acoustic and elastodynamic H-matrix accelerated Boundary Element Methods. Computers and Mathematics With Applications, 2020, 80, 471-489.	1.4	6
693	Convergence acceleration for high-order shock-fitting methods in hypersonic flow applications with efficient implicit time-stepping schemes. Computers and Fluids, 2020, 210, 104668.	1.3	6
694	A shift-splitting preconditioner for asymmetric saddle point problems. Computational and Applied Mathematics, 2020, 39, 1.	1.0	3
695	p-Multigrid matrix-free discontinuous Galerkin solution strategies for the under-resolved simulation of incompressible turbulent flows. Computers and Fluids, 2020, 206, 104558.	1.3	12
696	A Parallel and Broadband Helmholtz FMBEM Model for Large-Scale Target Strength Modeling. Journal of Theoretical and Computational Acoustics, 2020, 28, 2050001.	0.5	8
698	Superior properties of the PRESB preconditioner for operators on two-by-two block form with square blocks. Numerische Mathematik, 2020, 146, 335-368.	0.9	4
699	A Fast Block $alpha$-Circulant Preconditoner for All-at-Once Systems From Wave Equations. SIAM Journal on Matrix Analysis and Applications, 2020, 41, 1912-1943.	0.7	19
700	Enhancements to Overset Methods for Improved Accuracy and Solution Convergence. , 2020, , .		5
701	High-order matrix-free incompressible flow solvers with GPU acceleration and low-order refined preconditioners. Computers and Fluids, 2020, 203, 104541.	1.3	10
702	The nested block preconditioning technique for the incompressible Navierâ€"Stokes equations with emphasis on hemodynamic simulations. Computer Methods in Applied Mechanics and Engineering, 2020, 367, 113122.	3.4	18
703	Solution Optimization of RBF Interpolation for Implicit Modeling of Orebody. IEEE Access, 2020, 8, 13781-13791.	2.6	4
704	On Fixed-Point, Krylov, and $2imes 2$ Block Preconditioners for Nonsymmetric Problems. SIAM Journal on Matrix Analysis and Applications, 2020, 41, 871-900.	0.7	6
705	Modeling intracranial aneurysm stability and growth: an integrative mechanobiological framework for clinical cases. Biomechanics and Modeling in Mechanobiology, 2020, 19, 2413-2431.	1.4	5
706	Modified Hermitian-normal splitting iteration methods for a class of complex symmetric linear systems. Computational and Applied Mathematics, 2020, 39, 1.	1.0	2
707	Multicolor lowâ€rank preconditioner for general sparse linear systems. Numerical Linear Algebra With Applications, 2020, 27, e2316.	0.9	2

#	Article	IF	Citations
708	Efficient discontinuous Galerkin implementations and preconditioners for implicit unsteady compressible flow simulations. Computers and Fluids, 2020, 203, 104542.	1.3	11
709	3D topology optimization of heat sinks for liquid cooling. Applied Thermal Engineering, 2020, 178, 115540.	3.0	46
710	Deflated GMRES with multigrid for lattice QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 803, 135281.	1.5	0
711	A nonlinear subiteration strategy for improved robustness of pseudo-transient continuation methods. , 2020, , .		0
712	An efficient, conservative, time-implicit solver for the fully kinetic arbitrary-species 1D-2V Vlasov-AmpÃ¨re system. Journal of Computational Physics, 2020, 419, 109686.	1.9	5
713	A Local Coupling Multitrace Domain Decomposition Method for Electromagnetic Scattering From Multilayered Dielectric Objects. IEEE Transactions on Antennas and Propagation, 2020, 68, 7099-7108.	3.1	15
714	A Fast Solution for the Generalized Radial Basis Functions Interpolant. IEEE Access, 2020, 8, 80148-80159.	2.6	0
715	Implementing a Smooth Exact Penalty Function for Equality-Constrained Nonlinear Optimization. SIAM Journal of Scientific Computing, 2020, 42, A1809-A1835.	1.3	11
716	Hybrid multi-projection method using sparse approximate inverses on GPU clusters. International Journal of High Performance Computing Applications, 2020, 34, 282-305.	2.4	2
717	Sparse Linear Algebra Toolkit for Computational Aerodynamics. , 2020, , .		9
718	Efficient variants of the CMRH method for solving a sequence of multi-shifted non-Hermitian linear systems simultaneously. Journal of Computational and Applied Mathematics, 2020, 375, 112788.	1.1	7
719	Efficient Convergence for a Higher-Order Unstructured Finite Volume Solver for Compressible Flows. AIAA Journal, 2020, 58, 1490-1505.	1.5	0
720	Fully implicit hybrid two-level domain decomposition algorithms for two-phase flows in porous media on 3D unstructured grids. Journal of Computational Physics, 2020, 409, 109312.	1.9	18
721	Unconditionally energy stable schemes for an electrohydrodynamic model of charge transport in dielectric liquids. Computer Methods in Applied Mechanics and Engineering, 2020, 361, 112817.	3.4	12
722	Fast solver of optimal control problems constrained by Ohta-Kawasaki equations. Numerical Algorithms, 2020, 85, 787-809.	1.1	2
723	Implicit Time Integration of Discontinuous Galerkin Approximations to the Navier-Stokes Equations. , 2020, , .		4
724	A Scalable Approximate Inverse Block Preconditioner for an Incompressible Magnetohydrodynamics Model Problem. SIAM Journal of Scientific Computing, 2020, 42, B57-B79.	1.3	12
725	Solving the Three-Dimensional High-frequency Helmholtz Equation Using Contour Integration and Polynomial Preconditioning. SIAM Journal on Matrix Analysis and Applications, 2020, 41, 58-82.	0.7	9

#	Article	IF	Citations
726	Spatial Control of Carbon Dynamics in Soil by Microbial Decomposer Communities. Frontiers in Environmental Science, 2020, 8, .	1.5	15
727	An assessment of two classes of variational multiscale methods for the simulation of incompressible turbulent flows. Computer Methods in Applied Mechanics and Engineering, 2020, 365, 112997.	3.4	5
728	A computational model applied to myocardial perfusion in the human heart: From large coronaries to microvasculature. Journal of Computational Physics, 2021, 424, 109836.	1.9	23
729	Inner product free iterative solution and elimination methods for linear systems of a three-by-three block matrix form. Journal of Computational and Applied Mathematics, 2021, 383, 113117.	1.1	1
730	Diffusion Synthetic Acceleration for Heterogeneous Domains, Compatible with Voids. Nuclear Science and Engineering, 2021, 195, 119-136.	0.5	4
731	A linearized coarse mesh finite difference preconditioner for the within-group Krylov subspace iteration based on two-dimensional method of characteristics. Annals of Nuclear Energy, 2021, 151, 107889.	0.9	1
732	Mixed Kirchhoff stressâ€"displacementâ€"pressure formulations for incompressible hyperelasticity. Computer Methods in Applied Mechanics and Engineering, 2021, 374, 113562.	3.4	9
733	A multigrid accelerated eigensolver for the Hermitian Wilsonâ€"Dirac operator in lattice QCD. Computer Physics Communications, 2021, 258, 107615.	3.0	3
734	The divergence-conforming immersed boundary method: Application to vesicle and capsule dynamics. Journal of Computational Physics, 2021, 425, 109872.	1.9	23
735	Efficient solution techniques for two-phase flow in heterogeneous porous media using exact Jacobians. Computational Geosciences, 2021, 25, 163-177.	1.2	1
736	On the use of multigrid preconditioners for topology optimization. Structural and Multidisciplinary Optimization, 2021, 63, 835-853.	1.7	7
737	Mass transport in electrokinetic microflows with the wall reaction affecting the hydrodynamics. Theoretical and Computational Fluid Dynamics, 2021, 35, 39-60.	0.9	3
738	An Inner Product Free Solution Method for an Equation of Motion with Indefinite Matrices. Studies in Computational Intelligence, 2021, , 37-47.	0.7	0
739	A Flexible FEM-BEM-DDM for EM Scattering by Multiscale Anisotropic Objects. IEEE Transactions on Antennas and Propagation, 2021, 69, 8562-8573.	3.1	7
740	An Asynchronous Incomplete Block LU Preconditioner for Computational Fluid Dynamics on Unstructured Grids. SIAM Journal of Scientific Computing, 2021, 43, C1-C30.	1.3	1
741	A Multilevel Schwarz Preconditioner Based on a Hierarchy of Robust Coarse Spaces. SIAM Journal of Scientific Computing, 2021, 43, A1907-A1928.	1.3	11
742	Fast Iterative Solution of the Optimal Transport Problem on Graphs. SIAM Journal of Scientific Computing, 2021, 43, A2295-A2319.	1.3	10
743	Performance Analysis and Optimal Design of Time-Delay Directed Consensus Networks. IEEE Transactions on Control of Network Systems, 2022, 9, 197-209.	2.4	2

#	Article	IF	Citations
744	Iteratively Reweighted FGMRES and FLSQR for Sparse Reconstruction. SIAM Journal of Scientific Computing, 2021, 43, S47-S69.	1.3	6
745	KSPHPDDM and PCHPDDM: Extending PETSc with advanced Krylov methods and robust multilevel overlapping Schwarz preconditioners. Computers and Mathematics With Applications, 2021, 84, 277-295.	1.4	16
746	Comparison between algebraic and matrix‐free geometric multigrid for a Stokes problem on adaptive meshes with variable viscosity. Numerical Linear Algebra With Applications, 2021, 28, e2375.	0.9	9
747	Augmented Lagrangian preconditioners for the Oseen–Frank model of nematic and cholesteric liquid crystals. BIT Numerical Mathematics, 2021, 61, 607-644.	1.0	4
748	On the convergence of Krylov methods with low-rank truncations. Numerical Algorithms, 2021, 88, 1383-1417.	1.1	8
749	Two‐level preconditioning for Ridge Regression. Numerical Linear Algebra With Applications, 2021, 28, e2371.	0.9	1
750	Numerical methods for solving the equivalent inclusion equation in semi-analytical models. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2021, 235, 2455-2473.	1.0	1
751	Computational approaches to efficient generation of the stationary state for incoherent light excitation. Journal of Chemical Physics, 2021, 154, 124126.	1.2	1
752	A Reynolds-robust preconditioner for the Scott-Vogelius discretization of the stationary incompressible Navier-Stokes equations. SMAI Journal of Computational Mathematics, 0, 7, 75-96.	0.0	20
753	Iterative Approximation of Preconditioning Matrices Through Krylov-Type Solver Iterations. International Journal of Computational Methods, 0, , 2150027.	0.8	3
754	Hybrid parallel iterative sparse linear solver framework for reservoir geomechanical and flow simulation. Journal of Computational Science, 2021, 51, 101330.	1.5	4
755	Operator-Based Linearization Approach for Modeling of Multiphase Flow with Buoyancy and Capillarity. SPE Journal, 2021, 26, 1858-1875.	1.7	21
756	Implementation of a semi-Lagrangian fully-implicit time integration of the unified soundproof system of equations for numerical weather prediction. Monthly Weather Review, 2021, , .	0.5	1
757	Snowball Earth Bifurcations in a Fully-Implicit Earth System Model. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2021, 31, 2130017.	0.7	0
758	Adaptation and validation of the ParSWMS numerical code for simulation of water flow and solute transport in soilless greenhouse substrates. Journal of Hydrology, 2021, 596, 126053.	2.3	4
759	Matrix Equation Techniques for Certain Evolutionary Partial Differential Equations. Journal of Scientific Computing, 2021, 87, 1.	1.1	9
760	Efficient, Positive, and Energy Stable Schemes for Multi-D Poisson–Nernst–Planck Systems. Journal of Scientific Computing, 2021, 87, 1.	1.1	17
761	Large-eddy simulation on the similarity between wakes of wind turbines with different yaw angles. Journal of Fluid Mechanics, 2021, 921, .	1.4	37

#	Article	IF	Citations
762	Coupled Newton–Krylov Time-Spectral Solver for Flutter and Limit Cycle Oscillation Prediction. AIAA Journal, 2021, 59, 2214-2232.	1.5	13
763	Semiconvergence of the extended PSS method for singular generalized saddle point problems. International Journal of Computer Mathematics, 0, , 1-15.	1.0	0
764	Kaczmarz-Type Inner-Iteration Preconditioned Flexible GMRES Methods for Consistent Linear Systems. SIAM Journal of Scientific Computing, 2021, 43, S345-S366.	1.3	7
765	Implicit reduced Vlasov–Fokker–Planck–Maxwell model based on high-order mixed elements. Journal of Computational Physics, 2021, 434, 110214.	1.9	5
766	Optimal control of buoyancy-driven liquid steel stirring modeled with single-phase Navier–Stokes equations. Journal of Mathematics in Industry, 2021, 11, .	0.7	0
767	Aerodynamic Optimization of a Transonic Strut-Braced-Wing Regional Aircraft Based on the Reynolds-Averaged Navier-Stokes Equations. , 2021, , .		2
768	OpenImpala: OPEN source IMage based PArallisable Linear Algebra solver. SoftwareX, 2021, 15, 100729.	1.2	4
769	A new iterative method for solving the systems arisen from finite element discretization of a time-harmonic parabolic optimal control problems. Mathematics and Computers in Simulation, 2021, 185, 771-782.	2.4	2
770	Optimizing Proprotor Blades Using Coupled Aeroacoustic and Aerodynamic Sensitivities. , 2021, , .		4
771	A comparison of element agglomeration algorithms for unstructured geometric multigrid. Journal of Computational and Applied Mathematics, 2021, 390, 113379.	1.1	5
772	Aerodynamic Shape Optimization for Unsteady Flows With Application to Laminar Flows. , 2021, , .		1
773	Model order reduction of flow based on a modular geometrical approximation of blood vessels. Computer Methods in Applied Mechanics and Engineering, 2021, 380, 113762.	3.4	15
774	Efficient preconditioning techniques for velocity tracking of Stokes control problem. Applied Numerical Mathematics, 2021, 165, 322-338.	1.2	0
775	Efficient preconditioning of a high-order solver for multiple physics. , 2021, , .		0
776	A Multitrace Surface Integral Equation Method for PEC/Dielectric Composite Objects. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 1404-1408.	2.4	5
777	Aerodynamic Design Optimization of a Transonic Strut-Braced-Wing Regional Aircraft. Journal of Aircraft, 2022, 59, 253-271.	1.7	13
778	On Chebyshev accelerated iteration methods for two-by-two block linear systems. Journal of Computational and Applied Mathematics, 2021, 391, 113449.	1.1	3
779	Robust and efficient multilevel–ILU preconditioning of hybrid Newton–GMRES for incompressible Navier–Stokes equations. International Journal for Numerical Methods in Fluids, 2021, 93, 3405-3423.	0.9	3

#	Article	IF	Citations
780	Adaptive complex frequency with V-cycle GMRES for preconditioning 3D Helmholtz equation. Geophysics, 2021, 86, T349-T359.	1.4	7
781	A new two-parameter iteration method for indefinite complex symmetric linear systems. Japan Journal of Industrial and Applied Mathematics, 2022, 39, 145-163.	0.5	5
782	A discrete adjoint method for pressure-based algorithms. Computers and Fluids, 2021, 227, 105037.	1.3	10
783	A Krylov subspace type method for Electrical Impedance Tomography. ESAIM: Mathematical Modelling and Numerical Analysis, 0, , .	0.8	2
784	Robust preconditioning techniques for multiharmonic finite element method with application to time-periodic parabolic optimal control problems. Advances in Computational Mathematics, 2021, 47, 1.	0.8	0
785	A comparison of coarse spaces for Helmholtz problems in the high frequency regime. Computers and Mathematics With Applications, 2021, 98, 239-253.	1.4	11
786	A new iterative method for solving a class of two-by-two block complex linear systems. Calcolo, 2021, 58, 1.	0.6	2
787	Linear and nonlinear solvers for simulating multiphase flow within large-scale engineered subsurface systems. Advances in Water Resources, 2021, 156, 104029.	1.7	4
788	Computational methods for boundary optimal control and identification problems. Mathematics and Computers in Simulation, 2021, 189, 276-290.	2.4	5
789	Irksome: Automating Runge–Kutta Time-stepping for Finite Element Methods. ACM Transactions on Mathematical Software, 2021, 47, 1-26.	1.6	7
790	Three-dimensional preconditioned FM-IBEM solution to broadband-frequency seismic wave scattering in a layered sedimentary basin. Engineering Analysis With Boundary Elements, 2021, 133, 1-18.	2.0	4
791	Spliss: A Sparse Linear System Solver for Transparent Integration of Emerging HPC Technologies into CFD Solvers and Applications. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2021, , 635-645.	0.2	8
792	Parallel Domain-Decomposition Preconditioning for Computational Fluid Dynamics. Lecture Notes in Computer Science, 1999, , 176-202.	1.0	1
794	Preconditioned Krylov Subspace Methods for the Numerical Solution of Markov Chains. , 1995, , 49-64.		19
795	Investigating the Benefit of FP16-Enabled Mixed-Precision Solvers for Symmetric Positive Definite Matrices Using GPUs. Lecture Notes in Computer Science, 2020, , 237-250.	1.0	6
796	Low-Rank Cholesky Factor Krylov Subspace Methods for Generalized Projected Lyapunov Equations. Mathematics in Industry, 2017, , 157-193.	0.1	1
797	CPU and GPU Performance of Large Scale Numerical Simulations in Geophysics. Lecture Notes in Computer Science, 2014, , 12-23.	1.0	3
798	Recent Results on Domain Decomposition Preconditioning for the High-Frequency Helmholtz Equation Using Absorption. Geosystems Mathematics, 2017, , 3-26.	0.0	8

#	Article	IF	Citations
799	A Geometric Multigrid Preconditioner for the Solution of the Helmholtz Equation in Three-Dimensional Heterogeneous Media on Massively Parallel Computers. Geosystems Mathematics, 2017, , 141-155.	0.0	2
800	Numerical Studies of Higher Order Variational Time Stepping Schemes for Evolutionary Navier-Stokes Equations. Lecture Notes in Computational Science and Engineering, 2017, , 19-33.	0.1	3
802	Some Preconditioning Techniques for Saddle Point Problems. Mathematics in Industry, 2008, , 195-211.	0.1	29
803	Large Eddy Simulation of Combustion on Massively Parallel Machines. Lecture Notes in Computer Science, 2008, , 444-464.	1.0	2
804	Parallel Scientific Computing on Loosely Coupled Networks of Computers. Lecture Notes in Computational Science and Engineering, 2009, , 79-106.	0.1	3
806	Experience in Developing an Open Source Scalable Software Infrastructure in Japan. Lecture Notes in Computer Science, 2010, , 448-462.	1.0	25
807	A Structure Preserving FGMRES Method for Solving Large Lyapunov Equations. Mathematics in Industry, 2012, , 131-136.	0.1	4
808	Cooperative Application/OS DRAM Fault Recovery. Lecture Notes in Computer Science, 2012, , 241-250.	1.0	25
809	The Acceleration of Multigrid Convergence by Recombination Techniques. Lecture Notes in Computational Science and Engineering, 2000, , 34-43.	0.1	2
810	Parallel Linear Systems Solvers: Sparse Iterative Methods. ERCOFTAC Series, 1996, , 173-200.	0.1	2
811	Iterative solution of linear systems in the 20th century. , 2001, , 175-207.		4
812	Finite particle method for static deformation problems solved using JFNK method. Computers and Geotechnics, 2020, 122, 103502.	2.3	10
813	Topology optimization of thermal fluid–structure systems using body-fitted meshes and parallel computing. Journal of Computational Physics, 2020, 417, 109574.	1.9	42
814	A numerical study on Neumann-Neumann methods forhpapproximations on geometrically refined boundary layer meshes II. Three-dimensional problems. ESAIM: Mathematical Modelling and Numerical Analysis, 2006, 40, 99-122.	0.8	7
817	Mixed-precision iterative refinement using tensor cores on GPUs to accelerate solution of linear systems. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200110.	1.0	26
819	Revisiting Asynchronous Linear Solvers. Journal of the ACM, 2015, 62, 1-27.	1.8	28
820	Comparison of distributed memory algorithms for X-ray wave propagation in inhomogeneous media. Optics Express, 2020, 28, 29590.	1.7	3
821	Algebraic preconditioners for the Fast Multipole Method in electromagnetic scattering analysis from large structures: trends and problems. Electronic Journal of Boundary Elements, 2009, 7, .	0.3	9

#	ARTICLE	IF	CITATIONS
822	Arnoldi-based Sampling for High-dimensional Optimization using Imperfect Data. , 2015, , .		1
823	PARALLEL SOLUTION METHODS AND PRECONDITIONERS FOR EVOLUTION EQUATIONS. Mathematical Modelling and Analysis, 2018, 23, 287-308.	0.7	9
824	B-Spline Gaussian Collocation Software for Two-Dimensional Parabolic PDEs. Advances in Applied Mathematics and Mechanics, 2013, 5, 528-547.	0.7	6
825	Flexible GPBi-CG Method for Nonsymmetric Linear Systems. Applied Mathematics, 2012, 03, 331-335.	0.1	1
826	The effect of near-zone preconditioning on electromagnetic integral equations of first and second kind. Advances in Radio Science, 0, 11, 61-65.	0.7	6
827	On using collocation in three dimensions and solving a model semiconductor problem. Journal of Research of the National Institute of Standards and Technology, 1995, 100, 661.	0.4	6
828	A MULTI-FIDELITY ADAPTIVE SAMPLING METHOD FOR METAMODEL-BASED UNCERTAINTY QUANTIFICATION OF COMPUTER SIMULATIONS. , 2016, , .		4
829	Optimal and Low-Memory Near-Optimal Preconditioning of Fully Implicit Runge--Kutta Schemes for Parabolic PDEs. SIAM Journal of Scientific Computing, 2021, 43, A3527-A3551.	1.3	5
830	A GPU-Based Integrated Simulation Framework for Modelling of Complex Subsurface Applications. , 2021, , .		1
831	Parallel Two-Level Methods for Three-Dimensional Transonic Compressible Flow Simulations on Unstructured Meshes * *The work was supported in part by the NSF grants ASC-9457534, ECS-9527169, and ECS-9725504.. , 2000, , 89-96.		0
835	A Robust Preconditioner for GMRES Method Applied to Finite Network Method. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2005, 1, 241-245.	0.4	0
836	Analysis of 3-D Electromagnetic Wave Scattering with the Krylov Subspace FFT Iterative Methods. , 2005, , .		0
837	Comparing Some Methods and Preconditioners for Hydropower Plant Flow Simulations. Lecture Notes in Computer Science, 2008, , 391-404.	1.0	0
839	A strategy of reducing the inner iteration counts for the variable preconditioned GCR(vc_m) method. JSIAM Letters, 2010, 2, 77-80.	0.3	1
840	Lanczos Biconjugate A-Orthonormalization Methods for Surface Integral Equations in Electromagnetism. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2010, 6, 335-339.	0.4	1
841	Acceleration of Flexible GMRES Using Fast Multipole Method for Implementation Based on Combined Tangential Formulation. IEICE Transactions on Electronics, 2011, E94-C, 1661-1668.	0.3	0
842	Scalability Studies of an Implicit Shallow Water Solver for the Rossby-Haurwitz Problem. Lecture Notes in Computer Science, 2011, , 172-184.	1.0	0
843	Efficient Implementation of Inner-Outer Flexible GMRES for the Method of Moments Based on a Volume-Surface Integral Equation. IEICE Transactions on Electronics, 2011, E94-C, 24-31.	0.3	1

#	Article	IF	Citations
844	Parallel Preconditioned Hierarchical Harmonic Balance for Analog and RF Circuit Simulation. , 0, , .		0
847	A Preconditioned Scheme for Nonsymmetric Saddle-Point Problems. , 2012, , 219-250.		0
849	The single-grid multilevel method and its applications. Inverse Problems and Imaging, 2013, 7, 987-1005.	0.6	0
851	Efficient Solvers for Large-Scale Saddle Point Systems Arising in Feedback Stabilization of Multi-field Flow Problems. IFIP Advances in Information and Communication Technology, 2014, , 11-20.	0.5	0
852	Accelerating COBAYA3 on multi-core CPU and GPU systems using PARALUTION. , 2014, , .		3
853	COUPLING OF FINITE ELEMENTS AND HIERARCHICAL BOUNDARY ELEMENTS FOR DYNAMIC SOIL-STRUCTURE INTERACTION PROBLEMS. , 2014, , .		0
854	Newtonâ€"Krylov Power Flow Solver. Atlantis Studies in Scientific Computing in Electromagnetics, 2014, , 73-81.	0.1	0
855	Solving Linear Systems of Equations. Atlantis Studies in Scientific Computing in Electromagnetics, 2014, , 11-19.	0.1	1
857	Recent developments in hybrid CG methods. Lecture Notes in Computer Science, 1994, , 174-183.	1.0	4
858	Data structures, computational, and communication kernels for distributed memory sparse iterative solvers. Lecture Notes in Computer Science, 1995, , 252-257.	1.0	4
859	THE NUMERICAL SIMULATION OF LARGE-SCALE FLUID-STRUCTURE INTERACTION PROBLEMS IN A FULLY COUPLED FORM. , 0, , .		0
860	Classical Iterative Methods. , 2015, , 205-224.		0
862	Solvers for the Coupled Linear Systems of Equations. Springer Series in Computational Mathematics, 2016, , 649-675.	0.1	1
863	Partially Updated Restricted Additive Schwarz Preconditioner. Lecture Notes in Computational Science and Engineering, 2016, , 437-444.	0.1	0
864	Comparative Performance Analysis of Coarse Solvers for Algebraic Multigrid on Multicore and Manycore Architectures. Lecture Notes in Computer Science, 2016, , 116-127.	1.0	2
865	The Multilevel Krylov-Multigrid Method for the Helmholtz Equation Preconditioned by the Shifted Laplacian. Geosystems Mathematics, 2017, , 113-139.	0.0	3
866	A Data-Parallel ILUPACK for Sparse General and Symmetric Indefinite Linear Systems. Lecture Notes in Computer Science, 2017, , 121-133.	1.0	2
867	On the Optimality of Shifted Laplacian in a Class of Polynomial Preconditioners for the Helmholtz Equation. Geosystems Mathematics, 2017, , 53-81.	0.0	2

#	ARTICLE	IF	CITATIONS
868	Modal Analysis of Healthy and Cracked Isotropic Plates in Peridynamics. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 359-361.	0.3	1
870	Non-stationary Structure-Preserving Preconditioning for Image Restoration. Springer INdAM Series, 2019, , 51-75.	0.4	0
872	Adaptive Multilevel Krylov Methods. Electronic Transactions on Numerical Analysis, 0, 51, 512-528.	0.0	2
873	On Convergence Speed of Parallel Variants of GPBiCG Method for Solving Linear Equations. Journal of Physics: Conference Series, 2019, 1391, 012093.	0.3	0
874	Immersed Boundary Projection Methods. Computational Methods in Engineering & the Sciences, 2020, , 3-43.	0.3	0
875	Low-Order Finite Element Solver with Small Matrix-Matrix Multiplication Accelerated by AI-Specific Hardware for Crustal Deformation Computation. , 2020, , .		3
876	Design, Fabrication, and Characterization of a Water-Cooled Electromagnet and Magnetic Field Mapping. UluslararasÄ± Muhendislik Arastirma Ve Gelistirme Dergisi, 0, , 349-357.	0.1	0
877	Applications of the PRESB Preconditioning Method for OPT-PDE Problems. Lecture Notes in Computational Science and Engineering, 2021, , 73-81.	0.1	0
878	Multipreconditioning with Application to Two-Phase Incompressible Navierâ€"Stokes Flow. Lecture Notes in Computational Science and Engineering, 2021, , 165-173.	0.1	1
879	A Survey of Optimal Control Problems for PDEs. Studies in Computational Intelligence, 2021, , 376-390.	0.7	0
880	Investigation of Accelerated Monostatic Radar Cross Section Computations by Using Block and Projection Iterative Methods. , 2020, , .		2
881	An Introduction and Summary of Use of Optimal Control Methods for PDEâ€™s. Lecture Notes in Computer Science, 2020, , 275-283.	1.0	0
882	Transonic flow simulation in a bent channel using SU2 software. , 2020, , .		0
883	A ROM-accelerated parallel-in-time preconditioner for solving all-at-once systems in unsteady convection-diffusion PDEs. Applied Mathematics and Computation, 2022, 416, 126750.	1.4	2
884	Error resilience of three GMRES implementations under fault injection. Journal of Supercomputing, 2022, 78, 7158-7185.	2.4	2
885	A High-Order Accurate Unstructured GMRES Solver for the Compressible Euler Equations. , 2006, , 435-440.		0
886	A Proposal for a Dynamically Adapted Inexact Additive Schwarz Preconditioner. , 2007, , 341-345.		0
887	Adaptive Space-Time Finite Element Methods for Non-autonomous Parabolic Problems with Distributional Sources. Computational Methods in Applied Mathematics, 2020, 20, 677-693.	0.4	11

#	ARTICLE	IF	CITATIONS
888	Crack development assessment using modal analysis in peridynamic theory. Journal of Computational Design and Engineering, 2021, 8, 125-139.	1.5	3
889	Solving sparse linear systems with approximate inverse preconditioners on analog devices. , 2021, , .		3
890	Semi-analytic integration for a parallel space-time boundary element method modelling the heat equation. Computers and Mathematics With Applications, 2021, 103, 156-170.	1.4	4
891	Rotated Block Diagonal Preconditioners for Navier-Stokes Control Problems. SSRN Electronic Journal, 0, , .	0.4	0
892	CPU parallel-based adaptive parameterized level set method for large-scale structural topology optimization. Structural and Multidisciplinary Optimization, 2022, 65, 1.	1.7	8
893	Improved Hierarchical IR Drop Analysis in Homogeneous Circuits. , 2020, , .		2
894	A New Block-Diagonal Preconditioner for a Class of $$3 \times 3$$ Block Saddle Point Problems. Mediterranean Journal of Mathematics, 2022, 19, 1.	0.4	5
895	Performance impact of precision reduction in sparse linear systems solvers. PeerJ Computer Science, 2022, 8, e778.	2.7	3
896	Preconditioning techniques for the coupled Stokesâ€"Darcy problem: spectral and field-of-values analysis. Numerische Mathematik, 2022, 150, 257-298.	0.9	7
897	ACURA: Acoustics-Convection Upstream Resolution Algorithm. , 2022, , .		0
898	Onset of wake meandering for a floating offshore wind turbine under side-to-side motion. Journal of Fluid Mechanics, 2022, 934, .	1.4	19
899	Approximate Generalized Inverses with Iterative Refinement for $epsilon$-Accurate Preconditioning of Singular Systems. SIAM Journal on Matrix Analysis and Applications, 2022, 43, 40-67.	0.7	1
900	An advectionâ€"diffusion based filter for machinable designs in topology optimization. Computer Methods in Applied Mechanics and Engineering, 2022, 391, 114488.	3.4	5
901	Multidirectional sweeping preconditioners with non-overlapping checkerboard domain decomposition for Helmholtz problems. Journal of Computational Physics, 2022, 453, 110887.	1.9	5
902	Fast rotated BSOR method for block two-by-two linear systems with application to PDE-constrained optimal control problems. BIT Numerical Mathematics, 0, , 1.	1.0	0
903	Predictive capability of actuator disk models for wakes of different wind turbine designs. Renewable Energy, 2022, 188, 269-281.	4.3	13
904	Space-Time Block Preconditioning for Incompressible Flow. SIAM Journal of Scientific Computing, 2022, 44, A337-A363.	1.3	4
905	The Influence of Gauge Conditions on Process and Result of Solving 3-D Problems of Computational Electromagnetism by the Finite Element Method. IEEE Transactions on Magnetics, 2022, 58, 1-11.	1.2	1

#	Article	IF	Citations
906	A coupled distributed Lagrange multiplier (DLM) and discrete element method (DEM) approach to simulate particulate flow with collisions. Powder Technology, 2022, 398, 117091.	2.1	2
907	Fast Solution of Fully Implicit Runge--Kutta and Discontinuous Galerkin in Time for Numerical PDEs, Part I: the Linear Setting. SIAM Journal of Scientific Computing, 2022, 44, A416-A443.	1.3	6
908	Recherche en Prévision Numérique Contributions to Numerical Weather Prediction. Atmosphere - Ocean, 2022, 60, 35-64.	0.6	1
909	Propulsive performance of plunging airfoils in biplane configuration. Physics of Fluids, 2022, 34, .	1.6	5
910	Efficient iteration methods for complex systems with an indefinite matrix term. Calcolo, 2022, 59, 1.	0.6	2
911	A reduced unified continuum formulation for vascular fluid–structure interaction. Computer Methods in Applied Mechanics and Engineering, 2022, 394, 114852.	3.4	3
912	A conservative implicit-PIC scheme for the hybrid kinetic-ion fluid-electron plasma model on curvilinear meshes. Journal of Computational Physics, 2022, 459, 111144.	1.9	3
913	Parameter–robust preconditioning for unsteady Stokes control problems. Proceedings in Applied Mathematics and Mechanics, 2021, 21, .	0.2	1
914	A mass conserving arbitrary Lagrangian–Eulerian formulation for three‐dimensional multiphase fluid flows. International Journal for Numerical Methods in Fluids, 2022, 94, 346-376.	0.9	0
915	Toward efficient polynomial preconditioning for GMRES. Numerical Linear Algebra With Applications, 2022, 29, .	0.9	3
916	Analysis of Electromagnetic Scattering from Composite Objects using a Multi-trace Surface Integral Equation Method. , 2021, , .		0
917	Large-Eddy Simulation of Wakes of Waked Wind Turbines. Energies, 2022, 15, 2899.	1.6	7
921	Deflation and Augmentation Techniques in Krylov Subspace Methods for the Solution of Linear Systems. Computational Science, Engineering and Technology Series, 0, , 249-275.	0.2	0
923	HIFIR: Hybrid Incomplete Factorization with Iterative Refinement for Preconditioning Ill-Conditioned and Singular Systems. ACM Transactions on Mathematical Software, 2022, 48, 1-33.	1.6	0
924	Flexible GMRES solver for interpolating MLPG analysis of heat conduction. Numerical Heat Transfer, Part B: Fundamentals, 0, , 1-34.	0.6	0
925	A Novel Embedded Domain Decomposition Method for Electromagnetic Simulation of Structures in Inhomogeneous Medium. IEEE Transactions on Antennas and Propagation, 2022, 70, 9470-9482.	3.1	1
926	Modelling tippers on a sphere. Geophysical Journal International, 2022, 231, 737-748.	1.0	3
927	Stabilized finite element methods for a fully-implicit logarithmic reformulation of the Oldroyd-B constitutive law. Journal of Non-Newtonian Fluid Mechanics, 2022, 306, 104838.	1.0	7

#	Article	IF	Citations
930	An Embedded FEM-BEM-DDM for Solving Inhomogeneous Background Medium. , 2021, , .		1
931	Active flow control optimization with stability guarantees. , 2022, , .		1
932	Fuel burn evaluation of a transonic strut-braced-wing regional aircraft through multipoint aerodynamic optimisation. Aeronautical Journal, 2023, 127, 305-329.	1.1	6
933	Recycling Krylov Subspaces for Efficient Partitioned Solution of Aerostructural Coupled Adjoint Systems. , 2022, , .		0
934	Parameter-Robust Preconditioning for Oseen Iteration Applied to Stationary and Instationary Navier--Stokes Control. SIAM Journal of Scientific Computing, 2022, 44, B694-B722.	1.3	0
935	Wing Aerodynamic Shape Optimization with Time Spectral Limit-Cycle Oscillation Adjoint. , 2022, , .		2
936	Improving Numerical Accuracy for the Viscous-Plastic Formulation of Sea Ice. SSRN Electronic Journal, 0, , .	0.4	0
937	PMCHWT Solver Accelerated by Adaptive Cross Approximation for Efficient Computation of Scattering from Metal Nanoparticles. Micromachines, 2022, 13, 1086.	1.4	1
938	Towards automatic finite-element methods for geodynamics via Firedrake. Geoscientific Model Development, 2022, 15, 5127-5166.	1.3	4
939	Three-dimensional finite-difference finite-element frequency-domain wave simulation with multi-level optimized additive Schwarz domain-decomposition preconditioner: A tool for FWI of sparse node datasets. Geophysics, 0, , 1-84.	1.4	3
940	Comparative study of innerâ€"outer Krylov solvers for linear systems in structured and high-order unstructured CFD problems. Computers and Fluids, 2022, 244, 105575.	1.3	1
941	A conservative finite element solver for the induction equation of resistive MHD: Vector potential method and constraint preconditioning. Journal of Computational Physics, 2022, 466, 111416.	1.9	2
942	A stochastic Galerkin method with adaptive time-stepping for the Navierâ€"Stokes equations. Journal of Computational Physics, 2022, 468, 111456.	1.9	1
943	Finite Element Methods for Large-Strain Poroelasticity/Chemotaxis Models Simulating the Formation of Myocardial Oedema. Journal of Scientific Computing, 2022, 92, .	1.1	2
944	An Augmented Lagrangian Preconditioner for the Magnetohydrodynamics Equations at High Reynolds and Coupling Numbers. SIAM Journal of Scientific Computing, 2022, 44, B1018-B1044.	1.3	10
945	A Robust Algebraic Multilevel Domain Decomposition Preconditioner for Sparse Symmetric Positive Definite Matrices. SIAM Journal of Scientific Computing, 2022, 44, A2582-A2598.	1.3	1
946	A New Type of Variable Preconditioning for a Generalized Minimum Residual Scheme. International Journal of Computational Methods, 0, , .	0.8	1
947	Multigrid-Augmented Deep Learning Preconditioners for the Helmholtz Equation. SIAM Journal of Scientific Computing, 2023, 45, S127-S151.	1.3	3

#	Article	IF	Citations
948	Time-series forecasting using manifold learning, radial basis function interpolation, and geometric harmonics. Chaos, 2022, 32, .	1.0	5
949	A matrix-free multilevel preconditioner for the generalized Stokes problem with discontinuous viscosity. Journal of Computational Science, 2022, 63, 101804.	1.5	2
950	102 PFLOPS lattice QCD quark solver on Fugaku. Computer Physics Communications, 2023, 282, 108510.	3.0	4
951	Convection Linearization of Energy Conservative Implicit Method for Incompressible Turbulence Simulations. SSRN Electronic Journal, 0, , .	0.4	0
952	Iterative Solvers for Mixed Problems. Lecture Notes in Mathematics, 2022, , 19-41.	0.1	0
953	Numerical Analysis of a Discontinuous Galerkin Method for the Borrvall--Petersson Topology Optimization Problem. SIAM Journal on Numerical Analysis, 2022, 60, 2538-2564.	1.1	1
954	A new mixed finite-element method for H2 elliptic problems. Computers and Mathematics With Applications, 2022, 128, 300-319.	1.4	0
955	A computational aeroelastic framework based on high-order structural models and high-fidelity aerodynamics. Aerospace Science and Technology, 2023, 132, 108069.	2.5	2
956	A multilevel block preconditioner for the HDG trace system applied to incompressible resistive MHD. Computer Methods in Applied Mechanics and Engineering, 2023, 404, 115775.	3.4	1
957	Updates in <i>SASfit</i> for fitting analytical expressions and numerical models to small-angle scattering patterns. Journal of Applied Crystallography, 2022, 55, 1677-1688.	1.9	17
958	Iterative solution methods for 3D controlled-source electromagnetic forward modelling of geophysical exploration scenarios. Computational Geosciences, 0, , .	1.2	0
959	A scalable DG solver for the electroneutral Nernst-Planck equations. Journal of Computational Physics, 2022, , 111859.	1.9	2
960	Some numerical aspects of Arnoldi-Tikhonov regularization. Applied Numerical Mathematics, 2022, , .	1.2	0
961	Convection linearization of energy conservative implicit method for incompressible turbulence simulations. Journal of Computational Physics, 2022, , 111867.	1.9	0
962	Inexact inner–outer Golub–Kahan bidiagonalization method: A relaxation strategy. Numerical Linear Algebra With Applications, 0, , .	0.9	0
963	A block triangular preconditioner for a class of three-by-three block saddle point problems. Japan Journal of Industrial and Applied Mathematics, 2023, 40, 1015-1030.	0.5	3
964	A nonhydrostatic oceanic regional model, ORCTM v1, for internal solitary wave simulation. Geoscientific Model Development, 2023, 16, 109-133.	1.3	0
966	GMRES algorithms over 35 years. Applied Mathematics and Computation, 2023, 445, 127869.	1.4	3

#	Article	IF	Citations
967	Iterative Subregion Correction Preconditioners with Adaptive Tolerance for Problems with Geometrically Localized Stiffness. Communications on Applied Mathematics and Computation, 0, , .	0.7	0
968	Monolithic multigrid for implicit Runge–Kutta discretizations of incompressible fluid flow. Journal of Computational Physics, 2023, 478, 111961.	1.9	4
969	Turbulence in waked wind turbine wakes: Similarity and empirical formulae. Renewable Energy, 2023, 209, 27-41.	4.3	4
970	Stein-based preconditioners for weak-constraint 4D-var. Journal of Computational Physics, 2023, 482, 112068.	1.9	0
971	A comparison of manufacturing constraints in 3D topologically optimized heat sinks for forced air cooling. Engineering With Computers, 2023, 39, 1711-1733.	3.5	0
972	Scalability analysis of direct and iterative solvers used to model charging of superconducting pancake solenoids. Engineering Research Express, 2023, 5, 015045.	0.8	0
973	Hybrid-Kinetic Approach: Massless Electrons. , 2023, , 63-91.		2
974	An Adaptive Coloring Scheme for Graphics Processing Unit Preconditioners. , 2023, , .		0
975	Preconditioned Bminpert Algorithms for Matrix Equation &lt;i&gt;AX&lt;/i&gt; = &lt;i&gt;B&lt;/i&gt; and Their Applications in Color Image Restoration. Open Journal of Applied Sciences, 2023, 13, 461-471.	0.2	0
976	Time–continuous and time–discontinuous space–time finite elements for advection–diffusion problems. International Journal for Numerical Methods in Engineering, 2023, 124, 3117-3144.	1.5	4
977	On the solution of the distributed optimal control problem with time–periodic parabolic equations. Mathematical Methods in the Applied Sciences, 0, , .	1.2	0
978	On Preconditioners of the FFT-JVIE for Inhomogeneous Dielectric Objects. IEEE Transactions on Antennas and Propagation, 2023, , 1-1.	3.1	0
981	Geometrically Nonlinear High-fidelity Aerostructural Optimization Including Geometric Design Variables. , 2023, , .		1
1008	Solving Sparse Linear Systems via Flexible GMRES with In-Memory Analog Preconditioning. , 2023, , .		0