Frederic Magoules

List of Publications by Year
in descending order

156 papers	4,063 citations	257450 24 h-index	138484 58 g-index
174 all docs	174 docs citations	174 times ranked	3300 citing authors

#	Article	IF	Citations
1	Asynchronous iterations of HSS method for non-Hermitian linear systems. International Journal of Computer Mathematics, 2022, 99, 1105-1123.	1.8	1
2	Asynchronous Multiplicative Coarse-Space Correction. SIAM Journal of Scientific Computing, 2022, 44, C237-C259.	2.8	2
3	Asynchronous time-parallel method based on Laplace transform. International Journal of Computer Mathematics, 2021, 98, 179-194.	1.8	1
4	Fast gradient methods with alignment for symmetric linear systems without using Cauchy step. Journal of Computational and Applied Mathematics, 2021, 381, 113033.	2.0	5
5	Optimal Absorption of Acoustic Waves by a Boundary. SIAM Journal on Control and Optimization, 2021, 59, 561-583.	2.1	4
6	On the existence of optimal shapes in architecture. Applied Mathematical Modelling, 2021, 94, 676-687.	4.2	8
7	Asynchronous substructuring method with alternating local and global iterations. Journal of Computational and Applied Mathematics, 2021, 393, 113531.	2.0	3
8	Synchronous and asynchronous optimized Schwarz methods for one‐way subdivision of bounded domains. Numerical Linear Algebra With Applications, 2020, 27, e2279.	1.6	3
9	Reducing the effect of global synchronization in delayed gradient methods for symmetric linear systems. Advances in Engineering Software, 2020, 147, 102837.	3.8	2
10	Impact of laparoscopic Roux-en-Y gastric bypass and sleeve gastrectomy on gut microbiota: a metagenomic comparative analysis. Surgery for Obesity and Related Diseases, 2020, 16, 852-862.	1.2	38
11	Parameter estimation in the Hermitian and skew‐Hermitian splitting method using gradient iterations. Numerical Linear Algebra With Applications, 2020, 27, e2304.	1.6	2
12	Protocol-free asynchronous iterations termination. Advances in Engineering Software, 2020, 146, 102827.	3.8	8
13	On Extensions of Limited Memory Steepest Descent Method. , 2019, , .		0
14	Using Asynchronous Simulation Approach for Interactive Simulation. , 2019, , .		0
15	Recent Developments in Iterative Methods for Reducing Synchronization. , 2019, , .		1
16	Interactive 3D Fluid Simulation: Steering the Simulation in Progress Using Lattice Boltzmann Method. , 2019, , .		2
17	MSPminer: abundance-based reconstitution of microbial pan-genomes from shotgun metagenomic data. Bioinformatics, 2019, 35, 1544-1552.	4.1	82
18	Three-dimensional dispersion analysis and stabilized finite element methods for acoustics. Computer Methods in Applied Mechanics and Engineering, 2018, 335, 563-583.	6.6	12

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19	Superlinear convergence using block preconditioners for the real system formulation of complex Helmholtz equations. Journal of Computational and Applied Mathematics, 2018, 340, 424-431.	2.0	7
20	JACK2: An MPI-based communication library with non-blocking synchronization for asynchronous iterations. Advances in Engineering Software, 2018, 119, 116-133.	3.8	23
21	Distributed Convergence Detection Based on Global Residual Error Under Asynchronous Iterations. IEEE Transactions on Parallel and Distributed Systems, 2018, 29, 819-829.	5.6	20
22	Asynchronous iterative sub-structuring methods. Mathematics and Computers in Simulation, 2018, 145, 34-49.	4.4	24
23	Asynchronous Parareal Time Discretization For Partial Differential Equations. SIAM Journal of Scientific Computing, 2018, 40, C704-C725.	2.8	11
24	Convergence Detection of Asynchronous Iterations Based on Modified Recursive Doubling. , 2018, , .		0
25	A New Cyclic Gradient Method Adapted to Large-Scale Linear Systems. , 2018, , .		3
26	Correction to â€œK Nearest Neighbour Joins for Big Data on MapReduce: A Theoretical and Experimental Analysisâ€. IEEE Transactions on Knowledge and Data Engineering, 2018, 30, 1824-1824.	5.7	0
27	Asynchronous Iterations of Parareal Algorithm for Option Pricing Models. Mathematics, 2018, 6, 45.	2.2	14
28	Convergence of Asynchronous Optimized Schwarz Methods in the Plane. Lecture Notes in Computational Science and Engineering, 2018, , 333-341.	0.3	3
29	Optimized Schwarz Method for Poissonâ€™s Equation in Rectangular Domains. Lecture Notes in Computational Science and Engineering, 2018, , 533-541.	0.3	2
30	STRATIFICATION EFFECT ON FREE CONVECTIVE DARCY FOR CHHEIMER BOUNDARY LAYER FLOW UNDER MULTIPLE INTERACTING FORCES. Computational Thermal Sciences, 2018, 10, 47-65.	0.9	0
31	Efficient implementation of Jacobi iterative method for large sparse linear systems on graphic processing units. Journal of Supercomputing, 2017, 73, 3411-3432.	3.6	15
32	JACK: an asynchronous communication kernel library for iterative algorithms. Journal of Supercomputing, 2017, 73, 3468-3487.	3.6	23
33	Energy efficiency of VM consolidation in IaaS clouds. Journal of Supercomputing, 2017, 73, 782-809.	3.6	37
34	A Probabilistic Estimation Method of Reactive Power Controlled by PCS using Measurement Data of Switchgears with Sensors. Electrical Engineering in Japan (English Translation of Denki Gakkai) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 137		0
35	Embedded multi-core computing and applications. Journal of Supercomputing, 2017, 73, 3327-3332.	3.6	1
36	Asynchronous optimized Schwarz methods with and without overlap. Numerische Mathematik, 2017, 137, 199-227.	1.9	32

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37	Conjugate gradient method with graphics processing unit acceleration: CUDA vs OpenCL. Advances in Engineering Software, 2017, 111, 32-42.	3.8	15
38	GPU Accelerated Contactless Human Machine Interface for Driving Car. , 2017, , .		1
39	DDSoR: A Dependency Aware Dynamic Service Replication Strategy for Efficient Execution of Service-Oriented Applications in the Cloud. , 2017, , .		1
40	A Novel Contactless Human Machine Interface Based on Machine Learning. , 2017, , .		3
41	Asynchronous Parareal Algorithm Applied to European Option Pricing. , 2017, , .		3
42	Asynchronous Communications Library for the Parallel-in-Time Solution of Black-Scholes Equation. , 2017, , .		2
43	DOUBLE DIFFUSIVE FREE CONVECTION ALONG A VERTICAL SURFACE IN A DOUBLY STRATIFIED POROUS MEDIUM WITH SORET AND DUFOUR EFFECTS UNDER MHD FORCES. Journal of Porous Media, 2017, 20, 865-879.	1.9	1
44	Galerkin Least Square Method for Time-Harmonic Acoustics in Royaumont Abbey. , 2016, , .		0
45	On the Stability and Performance of the Solution of Sparse Linear Systems by Partitioned Procedures. , 2016, , .		0
46	Multi-objective Optimization Design of Dispensing Valves in Semiconductor Packaging Systems. , 2016, , .		0
47	GPU Accelerated Substructuring Methods for Sparse Linear Systems. , 2016, , .		3
48	Speedup of parallel computing by parareal method in transient stability analysis of Japanese power system. , 2016, , .		2
49	K Nearest Neighbour Joins for Big Data on MapReduce: A Theoretical and Experimental Analysis. IEEE Transactions on Knowledge and Data Engineering, 2016, 28, 2376-2392.	5.7	36
50	Galerkin Gradient Least Square Method for Sound Holography in Royaumont Abbey. , 2016, , .		0
51	Support Vector Regression for Electricity Consumption Prediction in a Building in Japan. , 2016, , .		10
52	Embedded multicore computing and applications. Concurrency Computation Practice and Experience, 2016, 28, 4211-4214.	2.2	0
53	Spectral Domain Decomposition Method for Physically-Based Rendering of Royaumont Abbey. , 2016, , .		0
54	Automatic Matrix Partitioning Algorithm Underlying Iterative Substructuring Methods for Finite Element Analysis. , 2016, , .		0

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55	Green computing on graphics processing units. Concurrency Computation Practice and Experience, 2016, 28, 4305-4325.	2.2	10
56	Ray‐tracing domain decomposition methods for real‐time simulation on multi‐core and multi‐processor systems. Concurrency Computation Practice and Experience, 2016, 28, 4352-4364.	2.2	4
57	Node Scaling Analysis for Power-Aware Real-Time Tasks Scheduling. IEEE Transactions on Computers, 2016, 65, 2510-2521.	3.4	8
58	Optimized Schwarz method without overlap for the gravitational potential equation on cluster of graphics processing unit. International Journal of Computer Mathematics, 2016, 93, 955-980.	1.8	14
59	A Probabilistic Estimation Method of Reactive Power Controlled by PCS using Measurement Data of Switchgears with Sensors. IEEJ Transactions on Power and Energy, 2016, 136, 410-423.	0.2	2
60	Fast Iterative Solvers for Large Compressed-Sparse Row Linear Systems on Graphics Processing Unit. Pollack Periodica, 2015, 10, 3-18.	0.4	6
61	MUS: a novel deadline-constrained scheduling algorithm for Hadoop. International Journal of Computational Science and Engineering, 2015, 11, 360.	0.5	7
62	A Partitioning Technique for a Waveform Relaxation Method Using Eigenvectors in the Transient Stability Analysis of Power Systems. IEEE Transactions on Power Systems, 2015, 30, 2867-2879.	6.5	4
63	Alinea: An Advanced Linear Algebra Library for Massively Parallel Computations on Graphics Processing Units. International Journal of High Performance Computing Applications, 2015, 29, 284-310.	3.7	24
64	Solutions for Processing K Nearest Neighbor Joins for Massive Data on MapReduce. , 2015, , .		18
65	Innovative Algorithms for Extreme Scale Computing. International Journal of High Performance Computing Applications, 2015, 29, 247-248.	3.7	0
66	Auto-tuned Krylov methods on cluster of graphics processing unit. International Journal of Computer Mathematics, 2015, 92, 1222-1250.	1.8	14
67	Fast iterative solvers for large compressed-sparse row linear systems on graphics processing unit. Pollack Periodica, 2015, 10, 3-18.	0.4	1
68	Power Consumption Analysis of Parallel Algorithms on GPUs. , 2014, , .		2
69	Global initialization technique in waveform relaxation method for transient stability analysis of a Japanese power system. , 2014, , .		0
70	Iterative Krylov Methods for Acoustic Problems on Graphics Processing Unit. , 2014, , .		3
71	Energy Consumption Analysis on Graphics Processing Units. , 2014, , .		3
72	Accelerated Solution of Helmholtz Equation with Iterative Krylov Methods on GPU. , 2014, , .		0

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73	Spectral Domain Decomposition Method for Natural Lighting and Medieval Glass Rendering. , 2014, , .		2
74	Parallel Sub-structuring Methods for Solving Sparse Linear Systems on a Cluster of GPUs. , 2014, , .		2
75	Fast and Green Computing with Graphics Processing Units for Solving Sparse Linear Systems. , 2014, , .		2
76	Coupling and Simulation of Fluid-Structure Interaction Problems for Automotive Sun-Roof on Graphics Processing Unit. , 2014, , .		0
77	Spectral Domain Decomposition Method for Physically-Based Rendering of Photochromic/Electrochromic Glass Windows. , 2014, , .		3
78	Beam-Tracing Domain Decomposition Method for Urban Acoustic Pollution. , 2014, , .		3
79	An Energy-Efficient VM Placement in Cloud Datacenter. , 2014, , .		5
80	A novel real-time scheduling algorithm and performance analysis of a MapReduce-based cloud. Journal of Supercomputing, 2014, 69, 739-765.	3.6	14
81	Preconditioners for Schwarz relaxation methods applied to differential algebraic equations. International Journal of Computer Mathematics, 2014, 91, 1775-1789.	1.8	2
82	A hybrid multigrid method for convection–diffusion problems. Journal of Computational and Applied Mathematics, 2014, 259, 711-719.	2.0	10
83	Coarse space construction based on Chebyshev polynomials for graphic analysis. Pollack Periodica, 2014, 9, 3-14.	0.4	6
84	Parallelizing Multiple Group-by queries using MapReduce: optimization and cost estimation. Telecommunication Systems, 2013, 52, 635-645.	2.5	8
85	Iterative Krylov Methods for Gravity Problems on Graphics Processing Unit. , 2013, , .		11
86	A Beam-Tracing Domain Decomposition Method for Sound Holography in Church Acoustics. , 2013, , .		7
87	Schwarz Method with Two-Sided Transmission Conditions for the Gravity Equations on Graphics Processing Unit. , 2013, , .		11
88	A Hadoop MapReduce Performance Prediction Method. , 2013, , .		35
89	Coarse Space Correction for Graphic Analysis. , 2013, , .		0
90	Development of an RDP neural network for building energy consumption fault detection and diagnosis. Energy and Buildings, 2013, 62, 133-138.	6.7	75

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91	A Schur Complement Method for Compressible Navier-Stokes Equations. Lecture Notes in Computational Science and Engineering, 2013, , 543-550.	0.3	1
92	Feature Selection for Predicting Building Energy Consumption Based on Statistical Learning Method. Journal of Algorithms and Computational Technology, 2012, 6, 59-77.	0.7	69
93	MapReduce-Based Parallel Algorithms for Multidimensionnal Data Analysis. Journal of Algorithms and Computational Technology, 2012, 6, 325-350.	0.7	1
94	Fast sparse matrix-vector multiplication on graphics processing unit for finite element analysis. , 2012, , .		21
95	Iterative Methods for Sparse Linear Systems on Graphics Processing Unit. , 2012, , .		21
96	Color reproduction by means of a Compactly Supported Radial Basis Function space mapping. , 2012, , .		0
97	Detection of Concept Drift for Learning from Stream Data. , 2012, , .		14
98	Parallel domain decomposition methods for beam-tracing. Pollack Periodica, 2012, 7, 3-23.	0.4	3
99	A review on the prediction of building energy consumption. Renewable and Sustainable Energy Reviews, 2012, 16, 3586-3592.	16.4	1,451
100	Natural Lighting and Medieval Glass â€" Scientific Data Acquisition, Methodology and Physically Based Rendering. Lecture Notes in Computer Science, 2012, , 636-643.	1.3	5
101	Coupling the Parareal Algorithm with the Waveform Relaxation Method for the Solution of Differential Algebraic Equations. , 2011, , .		9
102	Parallel Domain Decomposition Methods for Ray-Tracing on Multi-cores and Multi-processors. , 2011, , .		4
103	New parallel support vector regression for predicting building energy consumption. , 2011, , .		9
104	SimMapReduce: A Simulator for Modeling MapReduce Framework. , 2011, , .		25
105	Natural Convection of Temperature-Sensitive Magnetic Fluids in Porous Media. Advances in Applied Mathematics and Mechanics, 2011, 3, 121-130.	1.2	9
106	Speed-up the computing efficiency of waveform relaxation method for power system transient stability. , 2011, , .		4
107	Feature selection for support vector regression in the application of building energy prediction. , 2011, , .		14
108	Accelerated Waveform Relaxation methods for power systems. , 2011, , .		12

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109	Coupling Parareal and Waveform Relaxation methods for power systems. , 2011, , .		5
110	Parallel Support Vector Machines on Multi-Core and Multiprocessor Systems. , 2011, , .		17
111	An Aggregation Based Algebraic Multigrid Method Applied to Convection-Diffusion Operators. Springer Proceedings in Mathematics, 2011, , 597-604.	0.5	1
112	Reliability Comparison of Schedulability Test in Ubiquitous Computing. Lecture Notes in Computer Science, 2011, , 550-562.	1.3	0
113	Parallel Support Vector Machines Applied to the Prediction of Multiple Buildings Energy Consumption. Journal of Algorithms and Computational Technology, 2010, 4, 231-249.	0.7	100
114	Executing multiple group-by query in a MapReduce approach. , 2010, , .		3
115	Parallelizing multiple group-by query in share-nothing environment. , 2010, , .		11
116	A New Game Theoretical Resource Allocation Algorithm for Cloud Computing. Lecture Notes in Computer Science, 2010, , 321-330.	1.3	65
117	Resource Pricing and Equilibrium Allocation Policy in Cloud Computing. , 2010, , .		95
118	Executing Multiple Group by Query Using MapReduce Approach: Implementation and Optimization. Lecture Notes in Computer Science, 2010, , 652-661.	1.3	3
119	Bi-vector balance hierarchical multicast architecture algorithms for Data Grid. , 2009, , .		0
120	Game and Balance Multicast Architecture Algorithms for Sensor Grid. Sensors, 2009, 9, 7177-7202.	3.8	9
121	Service scheduling and rescheduling in an applications integration framework. Advances in Engineering Software, 2009, 40, 941-946.	3.8	11
122	Supporting dynamic access to virtualized data resources via WSRF-based services. Advances in Engineering Software, 2009, 40, 947-955.	3.8	0
123	Autonomic Data Management System in Grid Environment. Journal of Algorithms and Computational Technology, 2009, 3, 155-177.	0.7	5
124	Future of grids resources management. Chapman & Hall/CRC Numerical Analysis and Scientific Computing, 2009, , 125-142.	0.0	1
125	Vapnik's learning theory applied to energy consumption forecasts in residential buildings. International Journal of Computer Mathematics, 2008, 85, 1563-1588.	1.8	60
126	Linear Optimal Hierarchical Multicast Tree Algorithms for P2P Database. , 2008, , .		1

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127	Innovative algorithms in science and engineering. International Journal of Computer Mathematics, 2008, 85, iii-iv.	1.8	0
128	426 ADVANCED DATA ANALYSIS APPLIED TO ENERGY EFFICIENCY IN DISTRICT HEATING(International) Tj ETQq0 0 rgBT /Overlock 10 T	0.6	0
129	Analysis of Patch Substructuring Methods. International Journal of Applied Mathematics and Computer Science, 2007, 17, 395-402.	1.5	24
130	Algebraic approach to absorbing boundary conditions for the Helmholtz equation. International Journal of Computer Mathematics, 2007, 84, 231-240.	1.8	24
131	Optimal convergence properties of the FETI domain decomposition method. International Journal for Numerical Methods in Fluids, 2007, 55, 1-14.	1.6	20
132	An optimized Schwarz method with two-sided Robin transmission conditions for the Helmholtz equation. International Journal for Numerical Methods in Fluids, 2007, 55, 163-175.	1.6	88
133	Optimized Schwarz methods without overlap for highly heterogeneous media. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 1541-1553.	6.6	40
134	Visualization of large data sets by mixing Tcl and C++ interfaces to the VTK library. Computers and Structures, 2007, 85, 536-552.	4.4	5
135	High Performance Computing for Computational Mechanics. Computers and Structures, 2007, 85, 487-488.	4.4	2
136	High Performance Computing in Science and Engineering. Advances in Engineering Software, 2007, 38, 285-286.	3.8	0
137	Efficient preconditioning for image reconstruction with radial basis functions. Advances in Engineering Software, 2007, 38, 320-327.	3.8	15
138	Analysis of a conjugated infinite element method for acoustic scattering. Computers and Structures, 2007, 85, 518-525.	4.4	19
139	GRAVY: Towards Virtual File System for the Grid. , 2007, , 567-578.		1
140	A Framework for Dynamic Deployment of Scientific Applications Based on WSRF. , 2007, , 579-589.		1
141	NUMERICAL ANALYSIS OF A COUPLED FINITE-INFINITE ELEMENT METHOD FOR EXTERIOR HELMHOLTZ PROBLEMS. Journal of Computational Acoustics, 2006, 14, 21-43.	1.0	14
142	Improved ad hoc interface conditions for Schwarz solution procedure tuned to highly heterogeneous media. Applied Mathematical Modelling, 2006, 30, 731-743.	4.2	31
143	Algebraic approximation of Dirichlet-to-Neumann maps for the equations of linear elasticity. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 3742-3759.	6.6	41
144	Absorbing interface conditions for domain decomposition methods: A general presentation. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 3880-3900.	6.6	54

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145	Lagrangian formulation of domain decomposition methods: A unified theory. Applied Mathematical Modelling, 2006, 30, 593-615.	4.2	63
146	Algebraic Dirichlet-to-Neumann mapping for linear elasticity problems with extreme contrasts in the coefficients. Applied Mathematical Modelling, 2006, 30, 702-713.	4.2	25
147	Studies of an infinite element method for acoustical radiation. Applied Mathematical Modelling, 2006, 30, 641-655.	4.2	20
148	A Two-Level Iterative Method for Image Reconstruction with Radial Basis Functions. JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing, 2005, 48, 149-158.	0.3	7
149	Non-overlapping additive Schwarz methods tuned to highly heterogeneous media. Comptes Rendus Mathematique, 2005, 341, 701-705.	0.3	16
150	OPTIMAL CONVERGENCE OF NON-OVERLAPPING SCHWARZ METHODS FOR THE HELMHOLTZ EQUATION. Journal of Computational Acoustics, 2005, 13, 525-545.	1.0	10
151	ALGEBRAIC WAY TO DERIVE ABSORBING BOUNDARY CONDITIONS FOR THE HELMHOLTZ EQUATION. Journal of Computational Acoustics, 2005, 13, 433-454.	1.0	28
152	Numerical investigations of stabilized finite element computations for acoustics. Wave Motion, 2004, 39, 339-349.	2.0	77
153	Optimal Discrete Transmission Conditions for a Nonoverlapping Domain Decomposition Method for the Helmholtz Equation. SIAM Journal of Scientific Computing, 2004, 25, 1497-1515.	2.8	52
154	Optimized Schwarz Methods without Overlap for the Helmholtz Equation. SIAM Journal of Scientific Computing, 2002, 24, 38-60.	2.8	275
155	Two-level domain decomposition methods with Lagrange multipliers for the fast iterative solution of acoustic scattering problems. Computer Methods in Applied Mechanics and Engineering, 2000, 184, 213-239.	6.6	109
156	APPLICATION OF A DOMAIN DECOMPOSITION METHOD WITH LAGRANGE MULTIPLIERS TO ACOUSTIC PROBLEMS ARISING FROM THE AUTOMOTIVE INDUSTRY. Journal of Computational Acoustics, 2000, 08, 503-521.	1.0	24