

George A Gravvanis

List of Publications by Year in descending order

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687363

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94
all docs

94
docs citations

94
times ranked

420
citing authors

#	ARTICLE	IF	CITATIONS
1	Simulating Fog and Edge Computing Scenarios: An Overview and Research Challenges. Future Internet, 2019, 11, 55.	3.8	93
2	Explicit approximate inverse preconditioning techniques. Archives of Computational Methods in Engineering, 2002, 9, 371-402.	10.2	42
3	The rate of convergence of explicit approximate inverse preconditioning. International Journal of Computer Mathematics, 1996, 60, 77-89.	1.8	37
4	High Performance Inverse Preconditioning. Archives of Computational Methods in Engineering, 2009, 16, 77-108.	10.2	33
5	CLOUDLIGHTNING: A Framework for a Self-organising and Self-managing Heterogeneous Cloud. , 2016, ,		26
6	An approximate inverse matrix technique for arrowhead matrices. International Journal of Computer Mathematics, 1998, 70, 35-45.	1.8	24
7	On the optimization of free resources using non-homogeneous Markov chain software rejuvenation model. Reliability Engineering and System Safety, 2007, 92, 1724-1732.	8.9	23
8	Explicit preconditioned iterative methods for solving large unsymmetric finite element systems. Computing (Vienna/New York), 1995, 54, 167-183.	4.8	21
9	Solving finite difference linear systems on GPUs: CUDA based Parallel Explicit Preconditioned Biconjugate Conjugate Gradient type Methods. Journal of Supercomputing, 2012, 61, 590-604.	3.6	17
10	Large-scale simulation of a self-organizing self-management cloud computing framework. Journal of Supercomputing, 2018, 74, 530-550.	3.6	16
11	A class of generic factored and multi-level recursive approximate inverse techniques for solving general sparse systems. Engineering Computations, 2016, 33, 74-99.	1.4	15
12	A framework for simulating large scale cloud infrastructures. Future Generation Computer Systems, 2018, 79, 703-714.	7.5	15
13	Forecasting students' success in an open university. International Journal of Learning Technology, 2018, 13, 26.	0.2	15
14	Explicit isomorphic iterative methods for solving arrow-type linear systems. International Journal of Computer Mathematics, 2000, 74, 195-205.	1.8	14
15	High performance finite element approximate inverse preconditioning. Applied Mathematics and Computation, 2008, 201, 293-304.	2.2	14
16	GENERIC APPROXIMATE SPARSE INVERSE MATRIX TECHNIQUES. International Journal of Computational Methods, 2014, 11, 1350084.	1.3	13
17	A class of explicit preconditioned conjugate gradient methods for solving large finite element systems. International Journal of Computer Mathematics, 1992, 44, 189-206.	1.8	12
18	An explicit sparse unsymmetric finite element solver. Communications in Numerical Methods in Engineering, 1996, 12, 21-29.	1.3	12

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19	Structures induced by companions in galactic discs. Monthly Notices of the Royal Astronomical Society, 2016, 463, 2210-2228.	4.4	11
20	Explicit preconditioned methods for solving 3d boundary-value problems by approximate inverse finite element matrix techniques. International Journal of Computer Mathematics, 1995, 56, 77-93.	1.8	10
21	Title is missing!. Mathematical Modelling and Algorithms, 2002, 1, 269-282.	0.5	10
22	On the performance of parallel approximate inverse preconditioning using Java multithreading techniques. Applied Mathematics and Computation, 2007, 190, 255-270.	2.2	9
23	Approximate inverse banded matrix techniques. Engineering Computations, 1999, 16, 337-366.	1.4	8
24	On the power consumption modeling for the simulation of Heterogeneous HPC clouds. , 2017, , .		8
25	Parallel multi-projection preconditioned methods based on semi-aggregation techniques. Journal of Computational Science, 2017, 22, 45-54.	2.9	8
26	Manifold spirals, disc-halo interactions, and the secular evolution in N -body models of barred galaxies. Monthly Notices of the Royal Astronomical Society, 2019, 484, 1487-1505.	4.4	8
27	Towards simulation and optimization of cache placement on large virtual content distribution networks. Journal of Computational Science, 2020, 39, 101052.	2.9	8
28	An adaptive cluster-based sparse autoregressive model for large-scale multi-step traffic forecasting. Expert Systems With Applications, 2021, 180, 115093.	7.6	8
29	Title is missing!. Journal of Supercomputing, 2003, 25, 119-129.	3.6	7
30	Normalized explicit finite element approximate inverse preconditioning. Computers and Structures, 2004, 82, 2377-2388.	4.4	7
31	A Generic Framework Supporting Self-Organisation and Self-Management in Hierarchical Systems. , 2017, , .		7
32	Parallel Exact and Approximate Arrow-Type Inverses on Symmetric Multiprocessor Systems. Lecture Notes in Computer Science, 2006, , 506-513.	1.3	7
33	A note on the rate of convergence and complexity of domain decomposition approximate inverse preconditioning. , 2001, , 1586-1589.		7
34	Title is missing!. Mathematical Modelling and Algorithms, 2002, 1, 181-192.	0.5	6
35	A Two-Phase Cyclic Nonhomogeneous Markov Chain Performability Evaluation by Explicit Approximate Inverses Applied to a Replicated Database System. Mathematical Modelling and Algorithms, 2003, 2, 235-249.	0.5	6
36	Normalized explicit approximate inverse preconditioning for solving 3D boundary value problems on uniprocessor and distributed systems. International Journal for Numerical Methods in Engineering, 2006, 65, 84-110.	2.8	6

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37	An ontology-based mechanism for automatic categorization of web services. <i>Concurrency Computation Practice and Experience</i> , 2012, 24, 214-236.	2.2	6
38	Parallel multigrid algorithms based on generic approximate sparse inverses: an SMP approach. <i>Journal of Supercomputing</i> , 2014, 67, 384-407.	3.6	6
39	Parallel and Systolic Solution of Normalized Explicit Approximate Inverse Preconditioning. <i>Journal of Supercomputing</i> , 2004, 30, 77-96.	3.6	5
40	Software rejuvenation for resource optimization based on explicit approximate inverse preconditioning. <i>Applied Mathematics and Computation</i> , 2007, 189, 163-177.	2.2	5
41	Matching high performance approximate inverse preconditioning to architectural platforms. <i>Journal of Supercomputing</i> , 2007, 42, 145-163.	3.6	5
42	Finite element approximate inverse preconditioning using POSIX threads on multicore systems. , 2010, , .		5
43	Parallel Multiprojection Preconditioned Methods Based on Subspace Compression. <i>Mathematical Problems in Engineering</i> , 2017, 2017, 1-11.	1.1	5
44	On the rate of convergence and complexity of finite element normalized explicit approximate inverse preconditioning. , 2003, , 1963-1967.		5
45	A three-dimensional symmetric linear equation solver. <i>Communications in Numerical Methods in Engineering</i> , 1994, 10, 717-730.	1.3	4
46	A performance study of normalized explicit finite element approximate inverse preconditioning on uniprocessor and multicomputer systems. <i>Engineering Computations</i> , 2006, 23, 192-217.	1.4	4
47	OpenMP based parallel normalized direct methods for sparse finite element linear systems. <i>Journal of Supercomputing</i> , 2009, 47, 44-52.	3.6	4
48	A NOTE ON PARALLEL FINITE DIFFERENCE APPROXIMATE INVERSE PRECONDITIONING ON MULTICORE SYSTEMS USING POSIX THREADS. <i>International Journal of Computational Methods</i> , 2013, 10, 1350032.	1.3	4
49	A comparative study of CPU power consumption models for cloud simulation frameworks. , 2017, , .		4
50	Explicit preconditioned conjugate gradient schemes for solving biharmonic equations. <i>Engineering Computations</i> , 2000, 17, 154-165.	1.4	3
51	On the multigrid cycle strategy with approximate inverse smoothing. <i>Engineering Computations</i> , 2014, 31, 110-122.	1.4	3
52	Distributed generic approximate sparse inverses. <i>Journal of Supercomputing</i> , 2014, 70, 365-384.	3.6	3
53	Parallel Schur Complement Techniques Based on Multiprojection Methods. <i>SIAM Journal of Scientific Computing</i> , 2018, 40, C634-C654.	2.8	3
54	A note on parallel approximate pseudoinverse matrix techniques for solving linear least squares problems. <i>Journal of Computational Science</i> , 2020, 41, 101092.	2.9	3

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55	Evaluation of self-organizing and self-managing heterogeneous high performance computing clouds through discrete-time simulation. <i>Concurrency Computation Practice and Experience</i> , 2021, 33, e6326.	2.2	3
56	ON THE RATE OF CONVERGENCE AND COMPLEXITY OF NORMALIZED IMPLICIT PRECONDITIONING FOR SOLVING FINITE DIFFERENCE EQUATIONS IN THREE SPACE VARIABLES. <i>International Journal of Computational Methods</i> , 2004, 01, 367-386.	1.3	2
57	Design and implementation of parallel approximate inverse classes using OpenMP. <i>Concurrency Computation Practice and Experience</i> , 2009, 21, 115-131.	2.2	2
58	A parallel Self Mesh-Adaptive N-body method based on approximate inverses. <i>Journal of Supercomputing</i> , 2017, 73, 5197-5220.	3.6	2
59	Special section: towards high performance computing in the cloud. <i>Journal of Supercomputing</i> , 2018, 74, 527-529.	3.6	2
60	A Class of Symmetric Factored Approximate Inverses and Hybrid Two-Level Solver. <i>International Journal of Computational Methods</i> , 2018, 15, 1850050.	1.3	2
61	Toward the design of a novel hybrid parallel N-body method in scope of modern cloud architectures. <i>Journal of Supercomputing</i> , 2018, 74, 569-591.	3.6	2
62	Hybrid multi-projection method using sparse approximate inverses on GPU clusters. <i>International Journal of High Performance Computing Applications</i> , 2020, 34, 282-305.	3.7	2
63	Normalized finite element approximate inverse preconditioning for solving non-linear boundary value problems. , 2003, , 1958-1962.		2
64	A class of Generic Approximate Sparse Pseudoinverse Matrix Techniques based on incomplete QR factorization. , 2020, , .		2
65	Parallel Preconditioned Conjugate Gradient Square Method Based on Normalized Approximate Inverses. <i>Scientific Programming</i> , 2005, 13, 79-91.	0.7	1
66	Java multithreading-based parallel approximate row-type inverses. <i>Concurrency Computation Practice and Experience</i> , 2008, 20, 1151-1172.	2.2	1
67	An Improved Parallel Algorithm for Computing Approximate Inverses by Reducing Synchronizations. , 2008, , .		1
68	Special Section: Defining the grid, experiences and future trends. <i>Future Generation Computer Systems</i> , 2009, 25, 399-400.	7.5	1
69	Software rejuvenation and resource reservation policies for optimizing server resource availability using cyclic nonhomogeneous Markov chains. <i>Applied Stochastic Models in Business and Industry</i> , 2013, 29, 61-78.	1.5	1
70	Parallel N-Body Simulation Based on the PM and P3M Methods Using Multigrid Schemes in conjunction with Generic Approximate Sparse Inverses. <i>Mathematical Problems in Engineering</i> , 2015, 2015, 1-12.	1.1	1
71	Deflation techniques in conjunction with generic factored approximate sparse inverse preconditioning. , 2015, , .		1
72	A note on the convergence rate of a class of Approximate Sparse Inverse Matrix Methods. , 2016, , .		1

#	ARTICLE	IF	CITATIONS
73	On Issues Concerning Cloud Environments in Scope of Scalable Multi-Projection Methods. , 2016, , .		1
74	Parallel multilevel recursive approximate inverse techniques for solving general sparse linear systems. Journal of Supercomputing, 2016, 72, 2259-2282.	3.6	1
75	Parallel Multi-Projection type methods on hybrid CPU/MIC cluster. , 2017, , .		1
76	A Hybrid Method for Solving Inhomogeneous Elliptic PDEs Based on Fokas Method. Computational Methods in Applied Mathematics, 2018, 18, 653-672.	0.8	1
77	On the design of two-stage multiprojection methods for distributed memory systems. Journal of Supercomputing, 2020, 76, 9063-9094.	3.6	1
78	Guest Editor's Editorial Computational Science and Scientific Computing. Journal of Supercomputing, 2003, 25, 107-108.	3.6	0
79	Computing the Success Factors in Consistent Acquisition and Recognition of Objects in Color Digital Images by Explicit Preconditioning. Journal of Supercomputing, 2004, 30, 179-198.	3.6	0
80	The Journal of Parallel Algorithms and Applications: Special Issue on Parallel and Distributed Algorithms. International Journal of Parallel, Emergent and Distributed Systems, 2004, 19, 77-78.	0.4	0
81	Java Multithreading based Parallel Preconditioned Generalized Conjugate Gradient type methods. , 2007, , .		0
82	Special section: Grid technology and applications. Future Generation Computer Systems, 2007, 23, 523-524.	7.5	0
83	Special issue on "Grid Technologies" Journal of Supercomputing, 2007, 42, 1-2.	3.6	0
84	A parallel unified transform solver based on domain decomposition for solving linear elliptic PDEs. Journal of Supercomputing, 2019, 75, 4947-4985.	3.6	0
85	Distributed algebraic tearing and interconnecting techniques. Numerical Algorithms, 2019, 82, 809-842.	1.9	0
86	Solving Non-linear Finite Difference Systems by Normalized Approximate Inverses. Lecture Notes in Computer Science, 2004, , 111-117.	1.3	0
87	On the Optimization of Self-Organization and Self-Management Hardware Resource Allocation for Heterogeneous Clouds. Computers, 2021, 10, 147.	3.3	0