

George A Gravvanis

List of Publications by Year in descending order

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687363

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94
all docs

94
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94
times ranked

420
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	An adaptive cluster-based sparse autoregressive model for large-scale multi-step traffic forecasting. <i>Expert Systems With Applications</i> , 2021, 180, 115093.	7.6	8
3	On the Optimization of Self-Organization and Self-Management Hardware Resource Allocation for Heterogeneous Clouds. <i>Computers</i> , 2021, 10, 147.	3.3	0
4	Towards simulation and optimization of cache placement on large virtual content distribution networks. <i>Journal of Computational Science</i> , 2020, 39, 101052.	2.9	8
5	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
6	On the design of two-stage multiprojection methods for distributed memory systems. <i>Journal of Supercomputing</i> , 2020, 76, 9063-9094.	3.6	1
7	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
8	A class of Generic Approximate Sparse Pseudoinverse Matrix Techniques based on incomplete QR factorization. , 2020, , .		2
9	Manifold spirals, disc-halo interactions, and the secular evolution in N -body models of barred galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 484, 1487-1505.	4.4	8
10	Simulating Fog and Edge Computing Scenarios: An Overview and Research Challenges. <i>Future Internet</i> , 2019, 11, 55.	3.8	93
11	A parallel unified transform solver based on domain decomposition for solving linear elliptic PDEs. <i>Journal of Supercomputing</i> , 2019, 75, 4947-4985.	3.6	0
12	Distributed algebraic tearing and interconnecting techniques. <i>Numerical Algorithms</i> , 2019, 82, 809-842.	1.9	0
13	Special section: towards high performance computing in the cloud. <i>Journal of Supercomputing</i> , 2018, 74, 527-529.	3.6	2
14	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
15	A Hybrid Method for Solving Inhomogeneous Elliptic PDEs Based on Fokas Method. <i>Computational Methods in Applied Mathematics</i> , 2018, 18, 653-672.	0.8	1
16	A framework for simulating large scale cloud infrastructures. <i>Future Generation Computer Systems</i> , 2018, 79, 703-714.	7.5	15
17	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
18	Large-scale simulation of a self-organizing self-management cloud computing framework. <i>Journal of Supercomputing</i> , 2018, 74, 530-550.	3.6	16

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19	Parallel Schur Complement Techniques Based on Multiprojection Methods. SIAM Journal of Scientific Computing, 2018, 40, C634-C654.	2.8	3
20	Forecasting students' success in an open university. International Journal of Learning Technology, 2018, 13, 26.	0.2	15
21	On the power consumption modeling for the simulation of Heterogeneous HPC clouds. , 2017, , .		8
22	Parallel multi-projection preconditioned methods based on semi-aggregation techniques. Journal of Computational Science, 2017, 22, 45-54.	2.9	8
23	A parallel Self Mesh-Adaptive N-body method based on approximate inverses. Journal of Supercomputing, 2017, 73, 5197-5220.	3.6	2
24	Parallel Multi-Projection type methods on hybrid CPU/MIC cluster. , 2017, , .		1
25	A Generic Framework Supporting Self-Organisation and Self-Management in Hierarchical Systems. , 2017, , .		7
26	Parallel Multiprojection Preconditioned Methods Based on Subspace Compression. Mathematical Problems in Engineering, 2017, 2017, 1-11.	1.1	5
27	A comparative study of CPU power consumption models for cloud simulation frameworks. , 2017, , .		4
28	A note on the convergence rate of a class of Approximate Sparse Inverse Matrix Methods. , 2016, , .		1
29	On Issues Concerning Cloud Environments in Scope of Scalable Multi-Projection Methods. , 2016, , .		1
30	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
31	Parallel multilevel recursive approximate inverse techniques for solving general sparse linear systems. Journal of Supercomputing, 2016, 72, 2259-2282.	3.6	1
32	Structures induced by companions in galactic discs. Monthly Notices of the Royal Astronomical Society, 2016, 463, 2210-2228.	4.4	11
33	CLOUDLIGHTNING: A Framework for a Self-organising and Self-managing Heterogeneous Cloud. , 2016, , .		26
34	ParallelN-Body Simulation Based on the PM and P3M Methods Using Multigrid Schemes in conjunction with Generic Approximate Sparse Inverses. Mathematical Problems in Engineering, 2015, 2015, 1-12.	1.1	1
35	Deflation techniques in conjunction with generic factored approximate sparse inverse preconditioning. , 2015, , .		1
36	On the multigrid cycle strategy with approximate inverse smoothing. Engineering Computations, 2014, 31, 110-122.	1.4	3

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37	Parallel multigrid algorithms based on generic approximate sparse inverses: an SMP approach. Journal of Supercomputing, 2014, 67, 384-407.	3.6	6
38	GENERIC APPROXIMATE SPARSE INVERSE MATRIX TECHNIQUES. International Journal of Computational Methods, 2014, 11, 1350084.	1.3	13
39	Distributed generic approximate sparse inverses. Journal of Supercomputing, 2014, 70, 365-384.	3.6	3
40	Software rejuvenation and resource reservation policies for optimizing server resource availability using cyclic nonhomogeneous Markov chains. Applied Stochastic Models in Business and Industry, 2013, 29, 61-78.	1.5	1
41	A NOTE ON PARALLEL FINITE DIFFERENCE APPROXIMATE INVERSE PRECONDITIONING ON MULTICORE SYSTEMS USING POSIX THREADS. International Journal of Computational Methods, 2013, 10, 1350032.	1.3	4
42	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
43	An ontology-based mechanism for automatic categorization of web services. Concurrency Computation Practice and Experience, 2012, 24, 214-236.	2.2	6
44	Finite element approximate inverse preconditioning using POSIX threads on multicore systems. , 2010, , .		5
45	Design and implementation of parallel approximate inverse classes using OpenMP. Concurrency Computation Practice and Experience, 2009, 21, 115-131.	2.2	2
46	OpenMP based parallel normalized direct methods for sparse finite element linear systems. Journal of Supercomputing, 2009, 47, 44-52.	3.6	4
47	High Performance Inverse Preconditioning. Archives of Computational Methods in Engineering, 2009, 16, 77-108.	10.2	33
48	Special Section: Defining the grid, experiences and future trends. Future Generation Computer Systems, 2009, 25, 399-400.	7.5	1
49	Java multithreading-based parallel approximate arrow-type inverses. Concurrency Computation Practice and Experience, 2008, 20, 1151-1172.	2.2	1
50	High performance finite element approximate inverse preconditioning. Applied Mathematics and Computation, 2008, 201, 293-304.	2.2	14
51	An Improved Parallel Algorithm for Computing Approximate Inverses by Reducing Synchronizations. , 2008, , .		1
52	Java Multithreading based Parallel Preconditioned Generalized Conjugate Gradient type methods. , 2007, , .		0
53	Software rejuvenation for resource optimization based on explicit approximate inverse preconditioning. Applied Mathematics and Computation, 2007, 189, 163-177.	2.2	5
54	On the performance of parallel approximate inverse preconditioning using Java multithreading techniques. Applied Mathematics and Computation, 2007, 190, 255-270.	2.2	9

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55	Special section: Grid technology and applications. Future Generation Computer Systems, 2007, 23, 523-524.	7.5	0
56	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
57	Special issue on "Grid Technologies". Journal of Supercomputing, 2007, 42, 1-2.	3.6	0
58	Matching high performance approximate inverse preconditioning to architectural platforms. Journal of Supercomputing, 2007, 42, 145-163.	3.6	5
59	A performance study of normalized explicit finite element approximate inverse preconditioning on uniprocessor and multicomputer systems. Engineering Computations, 2006, 23, 192-217.	1.4	4
60	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
61	Parallel Exact and Approximate Arrow-Type Inverses on Symmetric Multiprocessor Systems. Lecture Notes in Computer Science, 2006, , 506-513.	1.3	7
62	Parallel Preconditioned Conjugate Gradient Square Method Based on Normalized Approximate Inverses. Scientific Programming, 2005, 13, 79-91.	0.7	1
63	ON THE RATE OF CONVERGENCE AND COMPLEXITY OF NORMALIZED IMPLICIT PRECONDITIONING FOR SOLVING FINITE DIFFERENCE EQUATIONS IN THREE SPACE VARIABLES. International Journal of Computational Methods, 2004, 01, 367-386.	1.3	2
64	Parallel and Systolic Solution of Normalized Explicit Approximate Inverse Preconditioning. Journal of Supercomputing, 2004, 30, 77-96.	3.6	5
65	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
66	Normalized explicit finite element approximate inverse preconditioning. Computers and Structures, 2004, 82, 2377-2388.	4.4	7
67	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
68	Solving Non-linear Finite Difference Systems by Normalized Approximate Inverses. Lecture Notes in Computer Science, 2004, , 111-117.	1.3	0
69	Title is missing!. Journal of Supercomputing, 2003, 25, 119-129.	3.6	7
70	Guest Editor's Editorial Computational Science and Scientific Computing. Journal of Supercomputing, 2003, 25, 107-108.	3.6	0
71	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
72	On the rate of convergence and complexity of finite element normalized explicit approximate inverse preconditioning. , 2003, , 1963-1967.		5

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73	Normalized finite element approximate inverse preconditioning for solving non-linear boundary value problems. , 2003, , 1958-1962.		2
74	Explicit approximate inverse preconditioning techniques. Archives of Computational Methods in Engineering, 2002, 9, 371-402.	10.2	42
75	Title is missing!. Mathematical Modelling and Algorithms, 2002, 1, 181-192.	0.5	6
76	Title is missing!. Mathematical Modelling and Algorithms, 2002, 1, 269-282.	0.5	10
77	A note on the rate of convergence and complexity of domain decomposition approximate inverse preconditioning. , 2001, , 1586-1589.		7
78	Explicit preconditioned conjugate gradient schemes for solving biharmonic equations. Engineering Computations, 2000, 17, 154-165.	1.4	3
79	Explicit isomorphic iterative methods for solving arrow-type linear systems. International Journal of Computer Mathematics, 2000, 74, 195-205.	1.8	14
80	Approximate inverse banded matrix techniques. Engineering Computations, 1999, 16, 337-366.	1.4	8
81	An approximate inverse matrix technique for arrowhead matrices. International Journal of Computer Mathematics, 1998, 70, 35-45.	1.8	24
82	An explicit sparse unsymmetric finite element solver. Communications in Numerical Methods in Engineering, 1996, 12, 21-29.	1.3	12
83	The rate of convergence of explicit approximate inverse preconditioning. International Journal of Computer Mathematics, 1996, 60, 77-89.	1.8	37
84	Explicit preconditioned iterative methods for solving large unsymmetric finite element systems. Computing (Vienna/New York), 1995, 54, 167-183.	4.8	21
85	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
86	A three-dimensional symmetric linear equation solver. Communications in Numerical Methods in Engineering, 1994, 10, 717-730.	1.3	4
87	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