

Enrique S Quintana-Ort

List of Publications by Citations

Source: <https://exaly.com/author-pdf/5007113/enrique-s-quintana-orti-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

234
papers

2,436
citations

25
h-index

41
g-index

256
ext. papers

2,887
ext. citations

1.8
avg, IF

5.04
L-index

#	Paper	IF	Citations
234	iMODS: internal coordinates normal mode analysis server. <i>Nucleic Acids Research</i> , 2014 , 42, W271-6	20.1	219
233	rCUDA: Reducing the number of GPU-based accelerators in high performance clusters 2010 ,		117
232	The science of deriving dense linear algebra algorithms. <i>ACM Transactions on Mathematical Software</i> , 2005 , 31, 1-26	2.3	88
231	Solving stable generalized Lyapunov equations with the matrix sign function. <i>Numerical Algorithms</i> , 1999 , 20, 75-100	2.1	88
230	Programming matrix algorithms-by-blocks for thread-level parallelism. <i>ACM Transactions on Mathematical Software</i> , 2009 , 36, 1-26	2.3	79
229	Supermatrix out-of-order scheduling of matrix operations for SMP and multi-core architectures 2007 ,		64
228	An Extension of the StarSs Programming Model for Platforms with Multiple GPUs. <i>Lecture Notes in Computer Science</i> , 2009 , 851-862	0.9	55
227	A complete and efficient CUDA-sharing solution for HPC clusters. <i>Parallel Computing</i> , 2014 , 40, 574-588	1	48
226	Parallelizing dense and banded linear algebra libraries using SMPSSs. <i>Concurrency Computation Practice and Experience</i> , 2009 , 21, 2438-2456	1.4	48
225	Extending OpenMP to Survive the Heterogeneous Multi-Core Era. <i>International Journal of Parallel Programming</i> , 2010 , 38, 440-459	1.5	45
224	Evaluation and tuning of the Level 3 CUBLAS for graphics processors. <i>Parallel and Distributed Processing Symposium (IPDPS), Proceedings of the International Conference on</i> , 2008 ,		43
223	Enabling CUDA acceleration within virtual machines using rCUDA 2011 ,		40
222	Exploiting the capabilities of modern GPUs for dense matrix computations. <i>Concurrency Computation Practice and Experience</i> , 2009 , 21, 2457-2477	1.4	40
221	Updating an LU Factorization with Pivoting. <i>ACM Transactions on Mathematical Software</i> , 2008 , 35, 1-16	2.3	40
220	The libflame Library for Dense Matrix Computations. <i>Computing in Science and Engineering</i> , 2009 , 11, 56-63	1.5	39
219	Tools for Power-Energy Modelling and Analysis of Parallel Scientific Applications 2012 ,		39
218	Analytical Modeling Is Enough for High-Performance BLIS. <i>ACM Transactions on Mathematical Software</i> , 2016 , 43, 1-18	2.3	38

217	Balanced Truncation Model Reduction of Large-Scale Dense Systems on Parallel Computers. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2000 , 6, 383-405	1	36
216	Representing linear algebra algorithms in code: the FLAME application program interfaces. <i>ACM Transactions on Mathematical Software</i> , 2005 , 31, 27-59	2.3	34
215	Solving Dense Linear Systems on Graphics Processors. <i>Lecture Notes in Computer Science</i> , 2008 , 739-748	0.9	34
214	Solving dense linear systems on platforms with multiple hardware accelerators. <i>ACM SIGPLAN Notices</i> , 2009 , 44, 121-130	0.2	33
213	A Proposal to Extend the OpenMP Tasking Model for Heterogeneous Architectures. <i>Lecture Notes in Computer Science</i> , 2009 , 154-167	0.9	33
212	SuperMatrix 2008 ,		32
211	Parallel Computation of 3-D Soil-Structure Interaction in Time Domain with a Coupled FEM/SBFEM Approach. <i>Journal of Scientific Computing</i> , 2012 , 52, 446-467	2.3	31
210	Model Reduction Based on Spectral Projection Methods 2005 , 5-48		29
209	Performance of CUDA Virtualized Remote GPUs in High Performance Clusters 2011 ,		23
208	Solving Stable Sylvester Equations via Rational Iterative Schemes. <i>Journal of Scientific Computing</i> , 2006 , 28, 51-83	2.3	23
207	Formal derivation of algorithms. <i>ACM Transactions on Mathematical Software</i> , 2003 , 29, 218-243	2.3	23
206	Adaptive precision in block-Jacobi preconditioning for iterative sparse linear system solvers. <i>Concurrency Computation Practice and Experience</i> , 2019 , 31, e4460	1.4	23
205	Spectral division methods for block generalized Schur decompositions. <i>Mathematics of Computation</i> , 2004 , 73, 1827-1848	1.6	22
204	Accumulating Householder transformations, revisited. <i>ACM Transactions on Mathematical Software</i> , 2006 , 32, 169-179	2.3	21
203	NUMERICAL SOLUTION OF DISCRETE STABLE LINEAR MATRIX EQUATIONS ON MULTICOMPUTERS. <i>International Journal of Parallel, Emergent and Distributed Systems</i> , 2002 , 17, 127-146		21
202	Efficient Implementation of Hyperspectral Anomaly Detection Techniques on GPUs and Multicore Processors. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2014 , 7, 2256-2266	4.7	20
201	An Efficient Implementation of GPU Virtualization in High Performance Clusters. <i>Lecture Notes in Computer Science</i> , 2010 , 385-394	0.9	19
200	Solving dense linear systems on platforms with multiple hardware accelerators 2008 ,		19

199	Efficient algorithms for generalized algebraic Bernoulli equations based on the matrix sign function. <i>Numerical Algorithms</i> , 2007 , 46, 351-368	2.1	18
198	Solving linear-quadratic optimal control problems on parallel computers. <i>Optimization Methods and Software</i> , 2008 , 23, 879-909	1.3	17
197	Satisfying your dependencies with SuperMatrix 2007 ,		17
196	The FLAME approach: From dense linear algebra algorithms to high-performance multi-accelerator implementations. <i>Journal of Parallel and Distributed Computing</i> , 2012 , 72, 1134-1143	4.4	16
195	Condensed forms for the symmetric eigenvalue problem on multi-threaded architectures. <i>Concurrency Computation Practice and Experience</i> , 2011 , 23, 694-707	1.4	15
194	Scheduling of QR Factorization Algorithms on SMP and Multi-Core Architectures 2008 ,		15
193	PARALLEL DISTRIBUTED SOLVERS FOR LARGE STABLE GENERALIZED LYAPUNOV EQUATIONS. <i>Parallel Processing Letters</i> , 1999 , 09, 147-158	0.3	15
192	SLURM Support for Remote GPU Virtualization: Implementation and Performance Study 2014 ,		14
191	Analysis and optimization of power consumption in the iterative solution of sparse linear systems on multi-core and many-core platforms 2011 ,		14
190	LARGE SCALE SIMULATION OF WAVE PROPAGATION IN SOILS INTERACTING WITH STRUCTURES USING FEM AND SBFEM. <i>Journal of Computational Acoustics</i> , 2011 , 19, 75-93		14
189	Parallelization of Multilevel ILU Preconditioners on Distributed-Memory Multiprocessors. <i>Lecture Notes in Computer Science</i> , 2012 , 162-172	0.9	14
188	Real-Time Endmember Extraction on Multicore Processors. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2011 , 8, 924-928	4.1	13
187	Assessing Power Monitoring Approaches for Energy and Power Analysis of Computers. <i>Sustainable Computing: Informatics and Systems</i> , 2014 , 4, 68-82	3	12
186	Solving Some Mysteries in Power Monitoring of Servers: Take Care of Your Wattmeters!. <i>Lecture Notes in Computer Science</i> , 2013 , 3-18	0.9	12
185	Exploring large macromolecular functional motions on clusters of multicore processors. <i>Journal of Computational Physics</i> , 2013 , 246, 275-288	4.1	11
184	Reducing Energy Consumption of Dense Linear Algebra Operations on Hybrid CPU-GPU Platforms 2012 ,		11
183	Improving power efficiency of dense linear algebra algorithms on multi-core processors via slack control 2011 ,		11
182	The Generalized Newton Iteration for the Matrix Sign Function. <i>SIAM Journal of Scientific Computing</i> , 2002 , 24, 669-683	2.6	11

181	Using Hybrid CPU-GPU Platforms to Accelerate the Computation of the Matrix Sign Function. <i>Lecture Notes in Computer Science</i> , 2010 , 132-139	0.9	11
180	Reduction to Condensed Forms for Symmetric Eigenvalue Problems on Multi-core Architectures. <i>Lecture Notes in Computer Science</i> , 2010 , 387-395	0.9	11
179	Batched Gauss-Jordan Elimination for Block-Jacobi Preconditioner Generation on GPUs 2017 ,		10
178	Improving the user experience of the rCUDA remote GPU virtualization framework. <i>Concurrency Computation Practice and Experience</i> , 2015 , 27, 3746-3770	1.4	10
177	Performance versus energy consumption of hyperspectral unmixing algorithms on multi-core platforms. <i>Eurasip Journal on Advances in Signal Processing</i> , 2013 , 2013,	1.9	10
176	Modeling power and energy of the task-parallel Cholesky factorization on multicore processors. <i>Computer Science - Research and Development</i> , 2014 , 29, 105-112		10
175	DVFS-control techniques for dense linear algebra operations on multi-core processors. <i>Computer Science - Research and Development</i> , 2012 , 27, 289-298		10
174	Parallel codes for computing the numerical rank. <i>Linear Algebra and Its Applications</i> , 1998 , 275-276, 451-470		10
173	Architecture-aware configuration and scheduling of matrix multiplication on asymmetric multicore processors. <i>Cluster Computing</i> , 2016 , 19, 1037-1051	2.1	10
172	Reformulated Conjugate Gradient for the Energy-Aware Solution of Linear Systems on GPUs 2013 ,		9
171	Unveiling the performance-energy trade-off in iterative linear system solvers for multithreaded processors. <i>Concurrency Computation Practice and Experience</i> , 2015 , 27, 885-904	1.4	9
170	Assessing the impact of the CPU power-saving modes on the task-parallel solution of sparse linear systems. <i>Cluster Computing</i> , 2014 , 17, 1335-1348	2.1	9
169	A Review of Lightweight Thread Approaches for High Performance Computing 2016 ,		9
168	Balancing task- and data-level parallelism to improve performance and energy consumption of matrix computations on the Intel Xeon Phi. <i>Computers and Electrical Engineering</i> , 2015 , 46, 95-111	4.3	8
167	Accelerating the Lyapack library using GPUs. <i>Journal of Supercomputing</i> , 2013 , 65, 1114-1124	2.5	8
166	Solving Matrix Equations on Multi-Core and Many-Core Architectures. <i>Algorithms</i> , 2013 , 6, 857-870	1.8	8
165	Exploiting task and data parallelism in ILUPACKB preconditioned CG solver on NUMA architectures and many-core accelerators. <i>Parallel Computing</i> , 2016 , 54, 97-107	1	8
164	Toward a modular precision ecosystem for high-performance computing. <i>International Journal of High Performance Computing Applications</i> , 2019 , 33, 1069-1078	1.8	7

163	DMR API: Improving cluster productivity by turning applications into malleable. <i>Parallel Computing</i> , 2018 , 78, 54-66	1	7
162	Accelerating the SRP-PHAT algorithm on multi- and many-core platforms using OpenCL. <i>Journal of Supercomputing</i> , 2019 , 75, 1284-1297	2.5	7
161	Balanced CSR Sparse Matrix-Vector Product on Graphics Processors. <i>Lecture Notes in Computer Science</i> , 2017 , 697-709	0.9	7
160	Efficient Scalable Computing through Flexible Applications and Adaptive Workloads 2017 ,		7
159	Optimization of power consumption in the iterative solution of sparse linear systems on graphics processors. <i>Computer Science - Research and Development</i> , 2012 , 27, 299-307		7
158	Solving dense generalized eigenproblems on multi-threaded architectures. <i>Applied Mathematics and Computation</i> , 2012 , 218, 11279-11289	2.7	7
157	Saving Energy in the LU Factorization with Partial Pivoting on Multi-core Processors 2012 ,		7
156	A Runtime System for Programming Out-of-Core Matrix Algorithms-by-Tiles on Multithreaded Architectures. <i>ACM Transactions on Mathematical Software</i> , 2012 , 38, 1-25	2.3	7
155	Efficient Solution Of The Rank-Deficient Linear Least Squares Problem. <i>SIAM Journal of Scientific Computing</i> , 1998 , 20, 1155-1163	2.6	7
154	Rapid Development of High-Performance Out-of-Core Solvers. <i>Lecture Notes in Computer Science</i> , 2006 , 413-422	0.9	7
153	A portable subroutine library for solving linear control problems on distributed memory computers 1999 , 61-87		7
152	GPU-Based Dynamic Wave Field Synthesis Using Fractional Delay Filters and Room Compensation. <i>IEEE/ACM Transactions on Audio Speech and Language Processing</i> , 2017 , 25, 435-447	3.6	6
151	. <i>IEEE Access</i> , 2019 , 7, 17617-17633	3.5	6
150	Task-Parallel LU Factorization of Hierarchical Matrices Using OmpSs 2017 ,		6
149	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2014 , 7, 2297-2304	4.7	6
148	Energy-efficient execution of dense linear algebra algorithms on multi-core processors. <i>Cluster Computing</i> , 2013 , 16, 497-509	2.1	6
147	Adaptive precision solvers for sparse linear systems 2015 ,		6
146	Systematic Fusion of CUDA Kernels for Iterative Sparse Linear System Solvers. <i>Lecture Notes in Computer Science</i> , 2015 , 675-686	0.9	6

145	High Performance Matrix Inversion on a Multi-core Platform with Several GPUs 2011 ,		6
144	Parallel Model Reduction of Large Linear Descriptor Systems via Balanced Truncation. <i>Lecture Notes in Computer Science</i> , 2005 , 340-353	0.9	6
143	EnergySaving Cluster Roll: Power Saving System for Clusters. <i>Lecture Notes in Computer Science</i> , 2010 , 162-173	0.9	6
142	GLTO: On the Adequacy of Lightweight Thread Approaches for OpenMP Implementations 2017 ,		5
141	Leveraging Data-Parallelism in ILUPACK using Graphics Processors 2014 ,		5
140	Assessing the Performance-Energy Balance of Graphics Processors for Spectral Unmixing. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2014 , 7, 2305-2316	4.7	5
139	Tuning stationary iterative solvers for fault resilience 2015 ,		5
138	A dynamic pipeline for RNA sequencing on multicore processors 2013 ,		5
137	Power Consumption of Mixed Precision in the Iterative Solution of Sparse Linear Systems 2011 ,		5
136	GLT: A Unified API for Lightweight Thread Libraries. <i>Lecture Notes in Computer Science</i> , 2017 , 470-481	0.9	5
135	Out-of-Core Computation of the QR Factorization on Multi-core Processors. <i>Lecture Notes in Computer Science</i> , 2009 , 809-820	0.9	5
134	Variable-size batched Gauss-Jordan elimination for block-Jacobi preconditioning on graphics processors. <i>Parallel Computing</i> , 2019 , 81, 131-146	1	5
133	Programming parallel dense matrix factorizations with look-ahead and OpenMP. <i>Cluster Computing</i> , 2020 , 23, 359-375	2.1	5
132	Communication in task-parallel ILU-preconditioned CG solvers using MPI+DmpSs. <i>Concurrency Computation Practice and Experience</i> , 2017 , 29, e4280	1.4	4
131	Fast and Reliable Noise Estimation for Hyperspectral Subspace Identification. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2015 , 12, 1199-1203	4.1	4
130	Energy balance between voltage-frequency scaling and resilience for linear algebra routines on low-power multicore architectures. <i>Parallel Computing</i> , 2018 , 73, 28-39	1	4
129	Deriving dense linear algebra libraries. <i>Formal Aspects of Computing</i> , 2013 , 25, 933-945	1.2	4
128	Modeling power consumption of 3D MPDATA and the CG method on ARM and Intel multicore architectures. <i>Journal of Supercomputing</i> , 2017 , 73, 4373-4389	2.5	4

127	Automatic detection of power bottlenecks in parallel scientific applications. <i>Computer Science - Research and Development</i> , 2014 , 29, 221-229		4
126	Applying OOC Techniques in the Reduction to Condensed Form for Very Large Symmetric Eigenproblems on GPUs 2012 ,		4
125	Analysis of Strategies to Save Energy for Message-Passing Dense Linear Algebra Kernels 2012 ,		4
124	Retargeting PLAPACK to clusters with hardware accelerators 2010 ,		4
123	Evaluation of the Energy Performance of Dense Linear Algebra Kernels on Multi-core and Many-Core Processors 2011 ,		4
122	Parallel solution of Riccati matrix equations with the matrix sign function. <i>Automatica</i> , 1998 , 34, 151-156;		4
121	2020 ,		4
120	Parallel Solution of Hierarchical Symmetric Positive Definite Linear Systems. <i>Applied Mathematics and Nonlinear Sciences</i> , 2017 , 2, 201-212	4	4
119	DMRlib: Easy-Coding and Efficient Resource Management for Job Malleability. <i>IEEE Transactions on Computers</i> , 2021 , 70, 1443-1457	2.5	4
118	Solving Stable Stein Equations on Distributed Memory Computers?. <i>Lecture Notes in Computer Science</i> , 1999 , 1120-1123	0.9	4
117	Accelerating multi-channel filtering of audio signal on ARM processors. <i>Journal of Supercomputing</i> , 2017 , 73, 203-214	2.5	3
116	Exploiting nested task-parallelism in the H-LU factorization. <i>Journal of Computational Science</i> , 2019 , 33, 20-33	3.4	3
115	Are our dense linear algebra libraries energy-friendly?. <i>Computer Science - Research and Development</i> , 2015 , 30, 187-196		3
114	Reducing the cost of power monitoring with DC wattmeters. <i>Computer Science - Research and Development</i> , 2015 , 30, 107-114		3
113	Optimized Fundamental Signal Processing Operations For Energy Minimization on Heterogeneous Mobile Devices. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2018 , 65, 1614-1627	3.9	3
112	Multi-threaded dense linear algebra libraries for low-power asymmetric multicore processors. <i>Journal of Computational Science</i> , 2018 , 25, 140-151	3.4	3
111	A fast bandKrylov eigensolver for macromolecular functional motion simulation on multicore architectures and graphics processors. <i>Journal of Computational Physics</i> , 2016 , 309, 314-323	4.1	3
110	FaST-LMM for Two-Way Epistasis Tests on High-Performance Clusters. <i>Journal of Computational Biology</i> , 2018 , 25, 862-870	1.7	3

109	Variable-Size Batched LU for Small Matrices and Its Integration into Block-Jacobi Preconditioning 2017 ,		3
108	Variable-Size Batched Gauss-Huard for Block-Jacobi Preconditioning. <i>Procedia Computer Science</i> , 2017 , 108, 1783-1792	1.6	3
107	2017 ,		3
106	Vectorization of binaural sound virtualization on the ARM Cortex-A15 architecture 2015 ,		3
105	Exploring the Suitability of Remote GPGPU Virtualization for the OpenACC Programming Model Using rCUDA 2015 ,		3
104	Modeling power and energy consumption of dense matrix factorizations on multicore processors. <i>Concurrency Computation Practice and Experience</i> , 2014 , 26, 2743-2757	1.4	3
103	Parallel Algorithms for Computing Rank-Revealing QR Factorizations. <i>Lecture Notes in Control and Information Sciences</i> , 1997 , 122-137	0.5	3
102	Design, Tuning and Evaluation of Parallel Multilevel ILU Preconditioners. <i>Lecture Notes in Computer Science</i> , 2008 , 314-327	0.9	3
101	Accelerating Band Linear Algebra Operations on GPUs with Application in Model Reduction. <i>Lecture Notes in Computer Science</i> , 2014 , 386-400	0.9	3
100	Revisiting the Gauss-Huard Algorithm for the Solution of Linear Systems on Graphics Accelerators. <i>Lecture Notes in Computer Science</i> , 2016 , 505-514	0.9	3
99	Attaining High Performance in General-Purpose Computations on Current Graphics Processors. <i>Lecture Notes in Computer Science</i> , 2008 , 406-419	0.9	3
98	Accelerating Model Reduction of Large Linear Systems with Graphics Processors. <i>Lecture Notes in Computer Science</i> , 2012 , 88-97	0.9	3
97	Leveraging Task-Parallelism in Energy-Efficient ILU Preconditioners. <i>Lecture Notes in Computer Science</i> , 2012 , 55-63	0.9	3
96	Integration and exploitation of intra-routine malleability in BLIS. <i>Journal of Supercomputing</i> , 2020 , 76, 2860-2875	2.5	3
95	Adaptive Precision Block-Jacobi for High Performance Preconditioning in the Ginkgo Linear Algebra Software. <i>ACM Transactions on Mathematical Software</i> , 2021 , 47, 1-28	2.3	3
94	High-Performance GPU Implementation of PageRank with Reduced Precision Based on Mantissa Segmentation 2018 ,		3
93	Adapting concurrency throttling and voltage-frequency scaling for dense eigensolvers. <i>Journal of Supercomputing</i> , 2017 , 73, 29-43	2.5	2
92	Time and energy modeling of a high-performance multi-threaded Cholesky factorization. <i>Journal of Supercomputing</i> , 2017 , 73, 139-151	2.5	2

91	Solving Weighted Least Squares (WLS) problems on ARM-based architectures. <i>Journal of Supercomputing</i> , 2017 , 73, 530-542	2.5	2
90	Dynamic look-ahead in the reduction to band form for the singular value decomposition. <i>Parallel Computing</i> , 2019 , 81, 22-31	1	2
89	Hierarchical approach for deriving a reproducible unblocked LU factorization. <i>International Journal of High Performance Computing Applications</i> , 2019 , 33, 791-803	1.8	2
88	Accelerating the task/data-parallel version of ILUPACK BiCG in multi-CPU/GPU configurations. <i>Parallel Computing</i> , 2019 , 85, 79-87	1	2
87	Real-time Sound Source Localization on an Embedded GPU Using a Spherical Microphone Array. <i>Procedia Computer Science</i> , 2015 , 51, 201-210	1.6	2
86	Time and energy modeling of high-performance Level-3 BLAS on x86 architectures. <i>Simulation Modelling Practice and Theory</i> , 2015 , 55, 77-94	3.9	2
85	Systematic derivation of time and power models for linear algebra kernels on multicore architectures. <i>Sustainable Computing: Informatics and Systems</i> , 2015 , 7, 24-40	3	2
84	Scalable RNA Sequencing on Clusters of Multicore Processors 2015 ,		2
83	Binding Performance and Power of Dense Linear Algebra Operations 2012 ,		2
82	A simulator to assess energy saving strategies and policies in HPC workloads. <i>Operating Systems Review (ACM)</i> , 2012 , 46, 2-9	0.8	2
81	Acceleration of PageRank with Customized Precision Based on Mantissa Segmentation. <i>ACM Transactions on Parallel Computing</i> , 2020 , 7, 1-19	1.4	2
80	Solving Linear Systems on the Intel Xeon-Phi Accelerator via the Gauss-Huard Algorithm. <i>Communications in Computer and Information Science</i> , 2015 , 107-117	0.3	2
79	Exploiting Task-Parallelism in Message-Passing Sparse Linear System Solvers Using OmpSs. <i>Lecture Notes in Computer Science</i> , 2016 , 631-643	0.9	2
78	Accelerating FaST-LMM for Epistasis Tests. <i>Lecture Notes in Computer Science</i> , 2017 , 548-557	0.9	2
77	An Algorithm-by-Blocks for SuperMatrix Band Cholesky Factorization. <i>Lecture Notes in Computer Science</i> , 2008 , 228-239	0.9	2
76	Refactoring Conventional Task Schedulers to Exploit Asymmetric ARM big.LITTLE Architectures in Dense Linear Algebra 2016 ,		2
75	An efficient GPU version of the preconditioned GMRES method. <i>Journal of Supercomputing</i> , 2019 , 75, 1455-1469	2.5	2
74	The libflame Library for Dense Matrix Computations. <i>Computing in Science and Engineering</i> , 2019 , 1-1	1.5	2

73	Fine-grained bit-flip protection for relaxation methods. <i>Journal of Computational Science</i> , 2019 , 36, 1005-1033	3.3	2
72	Exploring the interoperability of remote GPGPU virtualization using rCUDA and directive-based programming models. <i>Journal of Supercomputing</i> , 2018 , 74, 5628-5642	2.5	2
71	Ginkgo : A Modern Linear Operator Algebra Framework for High Performance Computing. <i>ACM Transactions on Mathematical Software</i> , 2022 , 48, 1-33	2.3	2
70	A BLIS-like matrix multiplication for machine learning in the RISC-V ISA-based GAP8 processor. <i>Journal of Supercomputing</i> ,	2.5	2
69	Extending the Gauss-Huard method for the solution of Lyapunov matrix equations and matrix inversion. <i>Concurrency Computation Practice and Experience</i> , 2017 , 29, e4076	1.4	1
68	Evaluating the Potential of Low Power Systems for Headphone-based Spatial Audio Applications. <i>Procedia Computer Science</i> , 2015 , 51, 191-200	1.6	1
67	Extending lyapack for the solution of band Lyapunov equations on hybrid CPU+GPU platforms. <i>Journal of Supercomputing</i> , 2015 , 71, 740-750	2.5	1
66	A framework for genomic sequencing on clusters of multicore and manycore processors. <i>International Journal of High Performance Computing Applications</i> , 2018 , 32, 393-406	1.8	1
65	Evaluating fault tolerance on asymmetric multicore systems-on-chip using iso-metrics. <i>IET Computers and Digital Techniques</i> , 2016 , 10, 85-92	0.9	1
64	Performance and Energy Analysis of the Iterative Solution of Sparse Linear Systems on Multicore and Manycore Architectures. <i>Lecture Notes in Computer Science</i> , 2014 , 772-782	0.9	1
63	On the Use of a GPU-Accelerated Mobile Device Processor for Sound Source Localization. <i>Procedia Computer Science</i> , 2017 , 108, 586-595	1.6	1
62	Reduction to Tridiagonal Form for Symmetric Eigenproblems on Asymmetric Multicore Processors 2017 ,		1
61	Exploiting Task-Parallelism on GPU Clusters via OmpSs and rCUDA Virtualization 2015 ,		1
60	Solving dense linear systems with hybrid ARM+GPU platforms 2015 ,		1
59	Concurrent and Accurate Short Read Mapping on Multicore Processors. <i>IEEE/ACM Transactions on Computational Biology and Bioinformatics</i> , 2015 , 12, 995-1007	3	1
58	Adaptive Downtime for Live Migration of Virtual Machines 2014 ,		1
57	Enhancing performance and energy consumption of runtime schedulers for dense linear algebra. <i>Concurrency Computation Practice and Experience</i> , 2014 , 26, 2591-2611	1.4	1
56	Leveraging task-parallelism in message-passing dense matrix factorizations using SMPSSs. <i>Parallel Computing</i> , 2014 , 40, 113-128	1	1

55	A factored variant of the Newton iteration for the solution of algebraic Riccati equations via the matrix sign function. <i>Numerical Algorithms</i> , 2014 , 66, 363-377	2.1	1
54	High Performance Implementations of the BST Method on Hybrid CPU-GPU Platforms 2012 ,		1
53	Increasing data locality and introducing Level-3 BLAS in the Neville elimination. <i>Applied Mathematics and Computation</i> , 2011 , 218, 3348-3358	2.7	1
52	Solving large dense matrix problems on multi-core processors 2009 ,		1
51	Out-of-core solution of linear systems on graphics processors. <i>International Journal of Parallel, Emergent and Distributed Systems</i> , 2009 , 24, 521-538	1	1
50	Using Graphics Processors to Accelerate the Solution of Out-of-Core Linear Systems 2009 ,		1
49	Fast development of dense linear algebra codes on graphics processors 2009 ,		1
48	Design of scalable dense linear algebra libraries for multithreaded architectures: the LU factorization. <i>Parallel and Distributed Processing Symposium (IPDPS), Proceedings of the International Conference on</i> , 2008 ,		1
47	Specialized Spectral Division Algorithms for Generalized Eigenproblems Via the Inverse-Free Iteration 2007 , 157-166		1
46	Rapid Development of High-Performance Linear Algebra Libraries. <i>Lecture Notes in Computer Science</i> , 2006 , 376-384	0.9	1
45	Multiprecision Block-Jacobi for Iterative Triangular Solves. <i>Lecture Notes in Computer Science</i> , 2020 , 546-560	0.9	1
44	The Impact of Voltage-Frequency Scaling for the Matrix-Vector Product on the IBM POWER8. <i>Lecture Notes in Computer Science</i> , 2016 , 103-116	0.9	1
43	Design of a Task-Parallel Version of ILUPACK for Graphics Processors. <i>Communications in Computer and Information Science</i> , 2017 , 91-103	0.3	1
42	Solving Sparse Differential Riccati Equations on Hybrid CPU-GPU Platforms. <i>Lecture Notes in Computer Science</i> , 2017 , 116-132	0.9	1
41	Parallelizing Dense Linear Algebra Operations with Task Queues in llc. <i>Lecture Notes in Computer Science</i> , 2007 , 89-96	0.9	1
40	Runtime Scheduling of the LU Factorization: Performance and Energy. <i>Lecture Notes in Computer Science</i> , 2013 , 153-167	0.9	1
39	Efficient Symmetric Band Matrix-Matrix Multiplication on GPUs. <i>Communications in Computer and Information Science</i> , 2014 , 1-12	0.3	1
38	A Data-Parallel ILUPACK for Sparse General and Symmetric Indefinite Linear Systems. <i>Lecture Notes in Computer Science</i> , 2017 , 121-133	0.9	1

37	Accelerating BST Methods for Model Reduction with Graphics Processors. <i>Lecture Notes in Computer Science</i> , 2012 , 549-558	0.9	1
36	Unleashing CPU-GPU Acceleration for Control Theory Applications. <i>Lecture Notes in Computer Science</i> , 2013 , 102-111	0.9	1
35	Fast block QR update in digital signal processing. <i>Journal of Supercomputing</i> , 2019 , 75, 1051-1064	2.5	1
34	Factorized solution of generalized stable Sylvester equations using many-core GPU accelerators. <i>Journal of Supercomputing</i> , 2021 , 77, 10152-10164	2.5	1
33	Resiliency in numerical algorithm design for extreme scale simulations. <i>International Journal of High Performance Computing Applications</i> , 2022 , 36, 251-285	1.8	1
32	Reproducibility of parallel preconditioned conjugate gradient in hybrid programming environments. <i>International Journal of High Performance Computing Applications</i> , 2020 , 34, 502-518	1.8	0
31	Revisiting conventional task schedulers to exploit asymmetry in multi-core architectures for dense linear algebra operations. <i>Parallel Computing</i> , 2017 , 68, 59-76	1	0
30	Out-of-core macromolecular simulations on multithreaded architectures. <i>Concurrency Computation Practice and Experience</i> , 2015 , 27, 1540-1550	1.4	0
29	Parallel Implementation of LQG Balanced Truncation for Large-Scale Systems. <i>Lecture Notes in Computer Science</i> , 2008 , 227-234	0.9	0
28	Cholesky and Gram-Schmidt Orthogonalization for Tall-and-Skinny QR Factorizations on Graphics Processors. <i>Lecture Notes in Computer Science</i> , 2019 , 469-480	0.9	0
27	Compression and load balancing for efficient sparse matrix-vector product on multicore processors and graphics processing units. <i>Concurrency Computation Practice and Experience</i> , e6515	1.4	0
26	Look-ahead in the two-sided reduction to compact band forms for symmetric eigenvalue problems and the SVD. <i>Numerical Algorithms</i> , 2019 , 80, 635-660	2.1	0
25	Low precision matrix multiplication for efficient deep learning in NVIDIA Carmel processors. <i>Journal of Supercomputing</i> , 2021 , 77, 11257-11269	2.5	0
24	High performance and energy efficient inference for deep learning on multicore ARM processors using general optimization techniques and BLIS. <i>Journal of Systems Architecture</i> , 2022 , 125, 102459	5.5	0
23	Architecture-aware optimization of an HEVC decoder on asymmetric multicore processors. <i>Journal of Real-Time Image Processing</i> , 2017 , 13, 25-38	1.9	
22	Unleashing GPU acceleration for symmetric band linear algebra kernels and model reduction. <i>Cluster Computing</i> , 2015 , 18, 1351-1362	2.1	
21	Tall-and-skinny QR factorization with approximate Householder reflectors on graphics processors. <i>Journal of Supercomputing</i> , 2020 , 76, 8771-8786	2.5	
20	Two-sided orthogonal reductions to condensed forms on asymmetric multicore processors. <i>Parallel Computing</i> , 2018 , 78, 85-100	1	

19	Evaluating the NVIDIA Tegra Processor as a Low-Power Alternative for Sparse GPU Computations. <i>Communications in Computer and Information Science</i> , 2018 , 111-122	0.3
18	Static scheduling of the LU factorization with look-ahead on asymmetric multicore processors. <i>Parallel Computing</i> , 2018 , 76, 18-27	1
17	Characterizing the efficiency of multicore and manycore processors for the solution of sparse linear systems. <i>Computer Science - Research and Development</i> , 2016 , 31, 175-183	
16	Noise estimation for hyperspectral subspace identification on FPGAs. <i>Journal of Supercomputing</i> , 2019 , 75, 1323-1335	2.5
15	Solution of Few-Body Coulomb Problems with Latent Matrices on Multicore Processors. <i>Procedia Computer Science</i> , 2017 , 108, 1743-1752	1.6
14	The Implementation of BLAS for Band Matrices 2007 , 668-677	
13	Stabilizing large-scale generalized systems on parallel computers using multithreading and message-passing. <i>Concurrency Computation Practice and Experience</i> , 2007 , 19, 531-542	1.4
12	Parallel solvers for discrete-time algebraic Riccati equations. <i>Concurrency Computation Practice and Experience</i> , 2001 , 13, 153-162	1.4
11	Efficient Algorithms for the Block Hessenberg Form. <i>Journal of Supercomputing</i> , 2001 , 20, 55-66	2.5
10	Parallel Solution of Band Linear Systems in Model Reduction 2008 , 678-687	
9	Structure-Aware Calculation of Many-Electron Wave Function Overlaps on Multicore Processors. <i>Lecture Notes in Computer Science</i> , 2020 , 13-24	0.9
8	Stabilizing large control linear systems on multicomputers. <i>Lecture Notes in Computer Science</i> , 1997 , 338-364	3.4
7	A Parallel Multi-threaded Solver for Symmetric Positive Definite Bordered-Band Linear Systems. <i>Lecture Notes in Computer Science</i> , 2016 , 96-105	0.9
6	The Impact of Panel Factorization on the Gauss-Huard Algorithm for the Solution of Linear Systems on Modern Architectures. <i>Lecture Notes in Computer Science</i> , 2016 , 405-416	0.9
5	Tuning the Blocksize for Dense Linear Algebra Factorization Routines with the Roofline Model. <i>Lecture Notes in Computer Science</i> , 2016 , 18-29	0.9
4	Out-of-Core Solution of Eigenproblems for Macromolecular Simulations. <i>Lecture Notes in Computer Science</i> , 2014 , 490-499	0.9
3	Balanced and Compressed Coordinate Layout for the Sparse Matrix-Vector Product on GPUs. <i>Lecture Notes in Computer Science</i> , 2021 , 83-95	0.9
2	On the performance of a GPU-based SoC in a distributed spatial audio system. <i>Journal of Supercomputing</i> , 2021 , 77, 6920-6935	2.5

- 1 Approximate Computing for Scientific Applications **2022**, 415-465