

Theo Mary

List of Publications by Year in descending order

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20
papers

508
citations

758635

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887659

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20
all docs

20
docs citations

20
times ranked

357
citing authors

#	ARTICLE	IF	CITATIONS
1	Solving block low-rank linear systems by LU factorization is numerically stable. IMA Journal of Numerical Analysis, 2022, 42, 951-980.	1.5	6
2	Stochastic rounding: implementation, error analysis and applications. Royal Society Open Science, 2022, 9, 211631.	1.1	17
3	Mixed precision algorithms in numerical linear algebra. Acta Numerica, 2022, 31, 347-414.	6.3	29
4	Stochastic Rounding and Its Probabilistic Backward Error Analysis. SIAM Journal of Scientific Computing, 2021, 43, A566-A585.	1.3	26
5	Block Low-Rank Matrices with Shared Bases: Potential and Limitations of the BLR ² Format. SIAM Journal on Matrix Analysis and Applications, 2021, 42, 990-1010.	0.7	4
6	Sharper Probabilistic Backward Error Analysis for Basic Linear Algebra Kernels with Random Data. SIAM Journal of Scientific Computing, 2020, 42, A3427-A3446.	1.3	14
7	Mixed Precision Block Fused Multiply-Add: Error Analysis and Application to GPU Tensor Cores. SIAM Journal of Scientific Computing, 2020, 42, C124-C141.	1.3	29
8	A Class of Fast and Accurate Summation Algorithms. SIAM Journal of Scientific Computing, 2020, 42, A1541-A1557.	1.3	22
9	A New Approach to Probabilistic Rounding Error Analysis. SIAM Journal of Scientific Computing, 2019, 41, A2815-A2835.	1.3	50
10	Bridging the Gap Between Flat and Hierarchical Low-Rank Matrix Formats: The Multilevel Block Low-Rank Format. SIAM Journal of Scientific Computing, 2019, 41, A1414-A1442.	1.3	18
11	A New Preconditioner that Exploits Low-Rank Approximations to Factorization Error. SIAM Journal of Scientific Computing, 2019, 41, A59-A82.	1.3	17
12	Performance and Scalability of the Block Low-Rank Multifrontal Factorization on Multicore Architectures. ACM Transactions on Mathematical Software, 2019, 45, 1-26.	1.6	135
13	Robust and Accurate Stopping Criteria for Adaptive Randomized Sampling in Matrix-Free Hierarchically Semiseparable Construction. SIAM Journal of Scientific Computing, 2019, 41, S61-S85.	1.3	6
14	Improving the Complexity of Block Low-Rank Factorizations with Fast Matrix Arithmetic. SIAM Journal on Matrix Analysis and Applications, 2019, 40, 1478-1496.	0.7	4
15	Large-scale 3-D EM modelling with a Block Low-Rank multifrontal direct solver. Geophysical Journal International, 2017, 209, 1558-1571.	1.0	25
16	On the Complexity of the Block Low-Rank Multifrontal Factorization. SIAM Journal of Scientific Computing, 2017, 39, A1710-A1740.	1.3	40
17	Fast 3D frequency-domain full-waveform inversion with a parallel block low-rank multifrontal direct solver: Application to OBC data from the North Sea. Geophysics, 2016, 81, R363-R383.	1.4	55
18	Performance of random sampling for computing low-rank approximations of a dense matrix on GPUs. , 2015, , .		4

#	ARTICLE	IF	CITATIONS
19	Access-averse framework for computing low-rank matrix approximations. , 2014, , .		3
20	Block low-rank single precision coarse grid solvers for extreme scale multigrid methods. Numerical Linear Algebra With Applications, 0, , e2407.	0.9	4