Siegfried Cools

List of Publications by Year
in descending order

11 papers	**120** citations	1684188 **5** h-index	1372567 **10** g-index
11 all docs	**11** docs citations	**11** times ranked	**106** citing authors

#	Article	IF	Citations
1	Local Fourier analysis of the complex shifted Laplacian preconditioner for Helmholtz problems. Numerical Linear Algebra With Applications, 2013, 20, 575-597.	1.6	33
2	The communication-hiding pipelined BiCGstab method for the parallel solution of large unsymmetric linear systems. Parallel Computing, 2017, 65, 1-20.	2.1	28
3	Analyzing the Effect of Local Rounding Error Propagation on the Maximal Attainable Accuracy of the Pipelined Conjugate Gradient Method. SIAM Journal on Matrix Analysis and Applications, 2018, 39, 426-450.	1.4	18
4	Numerically Stable Recurrence Relations for the Communication Hiding Pipelined Conjugate Gradient Method. IEEE Transactions on Parallel and Distributed Systems, 2019, 30, 2507-2522.	5.6	12
5	A new level-dependent coarse grid correction scheme for indefinite Helmholtz problems. Numerical Linear Algebra With Applications, 2014, 21, 513-533.	1.6	10
6	An Efficient Multigrid Calculation of the Far Field Map for Helmholtz and Schrödinger Equations. SIAM Journal of Scientific Computing, 2014, 36, B367-B395.	2.8	5
7	On rounding error resilience, maximal attainable accuracy and parallel performance of the pipelined Conjugate Gradients method for large-scale linear systems in PETSc. , 2016, , .		5
8	A fast and robust computational method for the ionization cross sections of the driven Schrödinger equation using an O(N) multigrid-based scheme. Journal of Computational Physics, 2016, 308, 20-39.	3.8	3
9	A multi-level preconditioned Krylov method for the efficient solution of algebraic tomographic reconstruction problems. Journal of Computational and Applied Mathematics, 2015, 283, 1-16.	2.0	2
10	On the Optimality of Shifted Laplacian in a Class of Polynomial Preconditioners for the Helmholtz Equation. Geosystems Mathematics, 2017, , 53-81.	0.0	2
11	A Bottom-Up Volume Reconstruction Method for Atom Probe Tomography. Microscopy and Microanalysis, 2022, 28, 1102-1115.	0.4	2