

# Erin C Carson

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2140730/publications.pdf>

Version: 2024-02-01

24  
papers

528  
citations

932766

10  
h-index

940134

16  
g-index

27  
all docs

27  
docs citations

27  
times ranked

246  
citing authors

#	ARTICLE	IF	CITATIONS
1	Accelerating the Solution of Linear Systems by Iterative Refinement in Three Precisions. SIAM Journal of Scientific Computing, 2018, 40, A817-A847.	1.3	109
2	Communication lower bounds and optimal algorithms for numerical linear algebra. Acta Numerica, 2014, 23, 1-155.	6.3	75
3	A New Analysis of Iterative Refinement and Its Application to Accurate Solution of Ill-Conditioned Sparse Linear Systems. SIAM Journal of Scientific Computing, 2017, 39, A2834-A2856.	1.3	70
4	A survey of numerical linear algebra methods utilizing mixed-precision arithmetic. International Journal of High Performance Computing Applications, 2021, 35, 344-369.	2.4	61
5	Avoiding Communication in Nonsymmetric Lanczos-Based Krylov Subspace Methods. SIAM Journal of Scientific Computing, 2013, 35, S42-S61.	1.3	34
6	A Residual Replacement Strategy for Improving the Maximum Attainable Accuracy of $s$ -Step Krylov Subspace Methods. SIAM Journal on Matrix Analysis and Applications, 2014, 35, 22-43.	0.7	23
7	Write-Avoiding Algorithms. , 2016, , .		22
8	Three-Precision GMRES-Based Iterative Refinement for Least Squares Problems. SIAM Journal of Scientific Computing, 2020, 42, A4063-A4083.	1.3	17
9	$s$ -Step Krylov Subspace Methods as Bottom Solvers for Geometric Multigrid. , 2014, , .		13
10	Trade-Offs Between Synchronization, Communication, and Computation in Parallel Linear Algebra Computations. ACM Transactions on Parallel Computing, 2016, 3, 1-47.	1.2	13
11	The Numerical Stability Analysis of Pipelined Conjugate Gradient Methods: Historical Context and Methodology. SIAM Journal of Scientific Computing, 2018, 40, A3549-A3580.	1.3	12
12	Block Gram-Schmidt algorithms and their stability properties. Linear Algebra and Its Applications, 2022, 638, 150-195.	0.4	12
13	Tradeoffs between synchronization, communication, and computation in parallel linear algebra computations. , 2014, , .		10
14	Accuracy of the $s$ -Step Lanczos Method for the Symmetric Eigenproblem in Finite Precision. SIAM Journal on Matrix Analysis and Applications, 2015, 36, 793-819.	0.7	10
15	On the cost of iterative computations. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190050.	1.6	9
16	The Stability of Block Variants of Classical Gram-Schmidt. SIAM Journal on Matrix Analysis and Applications, 2021, 42, 1365-1380.	0.7	8
17	Exploiting Data Sparsity in Parallel Matrix Powers Computations. Lecture Notes in Computer Science, 2014, , 15-25.	1.0	8
18	The Adaptive $s$ -Step Conjugate Gradient Method. SIAM Journal on Matrix Analysis and Applications, 2018, 39, 1318-1338.	0.7	7

#	ARTICLE	IF	CITATIONS
19	Mixed precision $\epsilon$ -step Lanczos and conjugate gradient algorithms. Numerical Linear Algebra With Applications, 2022, 29, .	0.9	5
20	Multistage mixed precision iterative refinement. Numerical Linear Algebra With Applications, 0, , .	0.9	2
21	Using flexible points in a developing simulation of selective dissolution in alloys. , 2007, , .		1
22	Predict-and-Recompute Conjugate Gradient Variants. SIAM Journal of Scientific Computing, 2020, 42, A3084-A3108.	1.3	1
23	Mixed Precision $\epsilon$ -step Conjugate Gradient with Residual Replacement on GPUs. , 2022, , .		1
24	Making tech more inclusive. Xrds, 2014, 20, 36-37.	0.2	0