

# Carsten Burstedde

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2319231/publications.pdf>

Version: 2024-02-01

19  
papers

1,133  
citations

1039406

9  
h-index

1125271

13  
g-index

19  
all docs

19  
docs citations

19  
times ranked

918  
citing authors

#	ARTICLE	IF	CITATIONS
1	Scalable Algorithms for Parallel Adaptive Mesh Refinement on Forests of Octrees. SIAM Journal of Scientific Computing, 2011, 33, 1103-1133.	1.3	491
2	Algorithms and data structures for massively parallel generic adaptive finite element codes. ACM Transactions on Mathematical Software, 2011, 38, 1-28.	1.6	135
3	Parallel scalable adjoint-based adaptive solution of variable-viscosity Stokes flow problems. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 1691-1700.	3.4	94
4	Multi-scale dynamics and rheology of mantle flow with plates. Journal of Geophysical Research, 2012, 117, .	3.3	65
5	Recursive Algorithms for Distributed Forests of Octrees. SIAM Journal of Scientific Computing, 2015, 37, C497-C531.	1.3	61
6	Extreme-Scale AMR. , 2010, , .		58
7	Parallel level-set methods on adaptive tree-based grids. Journal of Computational Physics, 2016, 322, 345-364.	1.9	57
8	Extreme-scale UQ for Bayesian inverse problems governed by PDEs. , 2012, , .		39
9	Parallel geometric-algebraic multigrid on unstructured forests of octrees. , 2012, , .		33
10	Slab stress and strain rate as constraints on global mantle flow. Geophysical Research Letters, 2010, 37, .	1.5	31
11	Low-Cost Parallel Algorithms for 2:1 Octree Balance. , 2012, , .		25
12	Direct numerical simulation of incompressible flows on parallel Octree grids. Journal of Computational Physics, 2021, 428, 110084.	1.9	11
13	ALPS: A framework for parallel adaptive PDE solution. Journal of Physics: Conference Series, 2009, 180, 012009.	0.3	10
14	Parallel Tree Algorithms for AMR and Non-Standard Data Access. ACM Transactions on Mathematical Software, 2020, 46, 1-31.	1.6	9
15	A Tetrahedral Space-Filling Curve for Nonconforming Adaptive Meshes. SIAM Journal of Scientific Computing, 2016, 38, C471-C503.	1.3	6
16	Coarse Mesh Partitioning for Tree-Based AMR. SIAM Journal of Scientific Computing, 2017, 39, C364-C392.	1.3	4
17	Structured Adaptive Mesh Refinement Adaptations to Retain Performance Portability With Increasing Heterogeneity. Computing in Science and Engineering, 2021, 23, 62-66.	1.2	4
18	Algorithmic strategies for full-waveform Inversion: 1D Experiments. , 2007, , .		0

#	ARTICLE	IF	CITATIONS
19	An Optimized, Parallel Computation of the Ghost Layer for Adaptive Hybrid Forest Meshes. SIAM Journal of Scientific Computing, 2021, 43, C359-C385.	1.3	0