Jörg Stiller

List of Publications by Year
in descending order

27 papers	255 citations	933447 10 h-index	940533 16 g-index
27 all docs	27 docs citations	27 times ranked	260 citing authors

#	Article	IF	Citations
1	Large-Eddy Simulation of Inhomogeneous Canopy Flows Using High Resolution Terrestrial Laser Scanning Data. Boundary-Layer Meteorology, 2012, 142, 223-243.	2.3	39
2	A method to estimate the planar, instantaneous body force distribution from velocity field measurements. Physics of Fluids, 2011, 23, .	4.0	38
3	Large-Eddy Simulation Study of the Effects on Flow of a Heterogeneous Forest at Sub-Tree Resolution. Boundary-Layer Meteorology, 2015, 154, 27-56.	2.3	32
4	A fast spectral element solver combining static condensation and multigrid techniques. Journal of Computational Physics, 2013, 255, 384-395.	3.8	18
5	Robust multigrid for high-order discontinuous Galerkin methods: A fast Poisson solver suitable for high-aspect ratio Cartesian grids. Journal of Computational Physics, 2016, 327, 317-336.	3.8	16
6	STABILIZED DISCONTINUOUS GALERKIN METHODS FOR FLOW–SOUND INTERACTION. Journal of Computational Acoustics, 2007, 15, 123-143.	1.0	13
7	A Hardware/Software Stack for Heterogeneous Systems. IEEE Transactions on Multi-Scale Computing Systems, 2018, 4, 243-259.	2.4	12
8	Scaling to the stars – a linearly scaling elliptic solver for p-multigrid. Journal of Computational Physics, 2019, 398, 108868.	3.8	12
9	Nonuniformly Weighted Schwarz Smoothers for Spectral Element Multigrid. Journal of Scientific Computing, 2017, 72, 81-96.	2.3	11
10	Factorizing the factorization – a spectral-element solver for elliptic equations with linear operation count. Journal of Computational Physics, 2017, 346, 437-448.	3.8	11
11	Two-level parallelization of a fluid mechanics algorithm exploiting hardware heterogeneity. Computers and Fluids, 2015, 117, 114-124.	2.5	9
12	Point-normal interpolation schemes reproducing spheres, cylinders and cones. Computer Aided Geometric Design, 2007, 24, 286-301.	1.2	8
13	Improvement of Airport Local Air Quality Modeling. Journal of Aircraft, 2017, 54, 1750-1759.	2.4	8
14	Deriving forces from 2D velocity field measurements. European Physical Journal: Special Topics, 2013, 220, 91-100.	2.6	4
15	Sum factorization of the static condensed Helmholtz equation in a three-dimensional spectral element discretization. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 969-970.	0.2	4
16	Efficient high-order spectral element discretizations for building block operators of CFD. Computers and Fluids, 2020, 197, 104386.	2.5	4
17	Robust Multigrid for Cartesian Interior Penalty DG Formulations of the Poisson Equation in 3D. Lecture Notes in Computational Science and Engineering, 2017, , 189-201.	0.3	3
18	Using Semantics-aware Composition and Weaving for Multi-variant Progressive Parallelization. Procedia Computer Science, 2016, 80, 1554-1565.	2.0	2

#	Article	IF	Citations
19	Building blocks for a leading edge high-order flow solver. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 129-132.	0.2	2
20	Load Balancing for CPU-GPU Coupling in Computational Fluid Dynamics. Lecture Notes in Computer Science, 2018, , 337-347.	1.3	2
21	Optimizing triangular high-order surface meshes by energy-minimization. Engineering With Computers, 2018, 34, 659-670.	6.1	2
22	A spectral deferred correction method for incompressible flow with variable viscosity. Journal of Computational Physics, 2020, 423, 109840.	3.8	2
23	Factorization Techniques for Nodal Spectral Elements in Curved Domains. SIAM Journal of Scientific Computing, 2008, 30, 2286-2301.	2.8	1
24	INFLUENCE OF PENALIZATION AND BOUNDARY TREATMENT ON THE STABILITY AND ACCURACY OF HIGH-ORDER DISCONTINUOUS GALERKIN SCHEMES FOR THE COMPRESSIBLE NAVIER-STOKES EQUATIONS. Journal of Computational Acoustics, 2013, 21, 1250019.	1.0	1
25	Cascadic Multigrid in a Spectralâ€Element Context. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 841-842.	0.2	1
26	Largeâ€Eddy Simulations of Inhomogeneous Canopy Flows. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 453-454.	0.2	0
27	Towards compositional and generative tensor optimizations. ACM SIGPLAN Notices, 2017, 52, 169-175.	0.2	0