Daniel Ruprecht

List of Publications by Year
in descending order

35	449	840728 11	752679 20
papers	citations	h-index	g-index

38	38	38	415
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Performance of the BGSDC integrator for computing fast ion trajectories in nuclear fusion reactors. Computer Physics Communications, 2021, 264, 107876.	7.5	1
2	Thermodynamic modelling of a stratified charge spark ignition engine. International Journal of Engine Research, 2020, 21, 801-810.	2.3	7
3	Parareal with a learned coarse model for robotic manipulation. Computing and Visualization in Science, 2020, 23, 1.	1.2	4
4	Performance of parallel-in-time integration for Rayleigh BÃ©nard convection. Computing and Visualization in Science, 2020, 23, 1.	1.2	4
5	Parallel-in-time integration of kinematic dynamos. Journal of Computational Physics: X, 2020, 7, 100057.	0.7	6
6	An arbitrary order time-stepping algorithm for tracking particles in inhomogeneous magnetic fields. Journal of Computational Physics: X, 2019, 4, 100036.	0.7	1
7	Toward transient finite element simulation of thermal deformation of machine tools in real-time. Computational Mechanics, 2018, 62, 929-942.	4.0	10
8	Wave propagation characteristics of Parareal. Computing and Visualization in Science, 2018, 19, 1-17.	1.2	32
9	Toward fault-tolerant parallel-in-time integration with PFASST. Parallel Computing, 2017, 62, 20-37.	2.1	6
10	Time-parallel gravitational collapse simulation. Communications in Applied Mathematics and Computational Science, 2017, 12, 109-128.	1.8	2
11	Shared Memory Pipelined Parareal. Lecture Notes in Computer Science, 2017, , 669-681.	1.3	6
12	Holistic data centres: Next generation data and thermal energy infrastructures. , 2016, , .		2
13	Spectral Deferred Corrections with Fast-wave Slow-wave Splitting. SIAM Journal of Scientific Computing, 2016, 38, A2535-A2557.	2.8	18
14	Parareal for Diffusion Problems with Space- and Time-Dependent Coefficients. Lecture Notes in Computational Science and Engineering, 2016, , 371-378.	0.3	2
15	Inexact Spectral Deferred Corrections. Lecture Notes in Computational Science and Engineering, 2016, , 389-396.	0.3	6
16	Interweaving PFASST and Parallel Multigrid. SIAM Journal of Scientific Computing, 2015, 37, S244-S263.	2.8	36
17	EWE: Toward electro-mechanical cardiac simulations with MOOSE. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 683-684.	0.2	0
18	Does Boris-SDC conserve phase space volume?. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 687-688.	0.2	2

#	Article	IF	Citations
19	Verification of cardiac mechanics software: benchmark problems and solutions for testing active and passive material behaviour. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20150641.	2.1	80
20	A high-order Boris integrator. Journal of Computational Physics, 2015, 295, 456-474.	3.8	17
21	A stencil-based implementation of Parareal in the C++ domain specific embedded language STELLA. Applied Mathematics and Computation, 2015, 267, 727-741.	2.2	10
22	A multi-level spectral deferred correction method. BIT Numerical Mathematics, 2015, 55, 843-867.	2.0	46
23	Numerical simulation of skin transport using Parareal. Computing and Visualization in Science, 2015, 17, 99-108.	1.2	16
24	Convergence of Parareal for the Navier-Stokes Equations Depending on the Reynolds Number. Lecture Notes in Computational Science and Engineering, 2015, , 195-202.	0.3	17
25	Parallel-in-Space-and-Time Simulation of the Three-Dimensional, Unsteady Navier-Stokes Equations for Incompressible Flow. , 2014, , 13-23.		5
26	Convergence of Parareal with spatial coarsening. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 1031-1034.	0.2	15
27	Integrating an N-Body Problem with SDC and PFASST. Lecture Notes in Computational Science and Engineering, 2014, , 637-645.	0.3	3
28	Hybrid Spaceâ€“Time Parallel Solution of Burgersâ€™ Equation. Lecture Notes in Computational Science and Engineering, 2014, , 647-655.	0.3	3
29	Transparent boundary conditions based on the pole condition for timeâ€dependent, twoâ€dimensional problems. Numerical Methods for Partial Differential Equations, 2013, 29, 1367-1390.	3.6	3
30	Optimal parameter choice for the pole condition. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 455-456.	0.2	0
31	Explicit parallel-in-time integration of a linear acoustic-advection system. Computers and Fluids, 2012, 59, 72-83.	2.5	49
32	A model for nonlinear interactions of internal gravity waves with saturated regions. Meteorologische Zeitschrift, 2011, 20, 243-252.	1.0	5
33	Modulation of Internal Gravity Waves in a Multiscale Model for Deep Convection on Mesoscales. Journals of the Atmospheric Sciences, 2010, 67, 2504-2519.	1.7	9
34	Transparent Boundary Conditions for Time-Dependent Problems. SIAM Journal of Scientific Computing, 2008, 30, 2358-2385.	2.8	14
35	A Comparison of EGR Correction Factor Models Based on SI Engine Data. SAE International Journal of Engines, 0, 12, 203-217.	0.4	1