Peter Minev

List of Publications by Year
in descending order

27 papers	418 citations	840776 11 h-index	713466 21 g-index
28 all docs	28 docs citations	28 times ranked	332 citing authors

#	Article	IF	Citations
1	A fictitious domain/finite element method for particulate flows. Journal of Computational Physics, 2003, 192, 105-123.	3.8	64
2	A fictitious domain formulation for flows with rigid particles: A non-Lagrange multiplier version. Journal of Computational Physics, 2007, 224, 867-879.	3.8	55
3	A finite element technique for multifluid incompressible flow using Eulerian grids. Journal of Computational Physics, 2003, 187, 255-273.	3.8	45
4	High-Order Time Stepping for the Incompressible Navier--Stokes Equations. SIAM Journal of Scientific Computing, 2015, 37, A2656-A2681.	2.8	41
5	A new class of massively parallel direction splitting for the incompressible Navierâ€“Stokes equations. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 2083-2093.	6.6	37
6	High-order time stepping for the Navierâ€“Stokes equations with minimal computational complexity. Journal of Computational and Applied Mathematics, 2017, 310, 92-103.	2.0	27
7	A projection scheme for incompressible multiphase flow using adaptive Eulerian grid. International Journal for Numerical Methods in Fluids, 2004, 45, 1-19.	1.6	25
8	High-Order Adaptive Time Stepping for the Incompressible Navier--Stokes Equations. SIAM Journal of Scientific Computing, 2019, 41, A770-A788.	2.8	19
9	Sixth order compact finite difference schemes for Poisson interface problems with singular sources. Computers and Mathematics With Applications, 2021, 99, 2-25.	2.7	16
10	Remarks on the links between lowâ€order DG methods and some finiteâ€difference schemes for the Stokes problem. International Journal for Numerical Methods in Fluids, 2008, 58, 307-317.	1.6	14
11	A locally DIV-free projection scheme for incompressible flows based on non-conforming finite elements. International Journal for Numerical Methods in Fluids, 2005, 49, 549-568.	1.6	12
12	A time splitting fictitious domain algorithm for fluidâ€“structure interaction problems (A fictitious) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.4	9
13	A scalable parallel algorithm for the direct numerical simulation of three-dimensional incompressible particulate flow. International Journal of Computational Fluid Dynamics, 2009, 23, 427-437.	1.2	7
14	A Compressible Fluid Flow Model Coupling Channel and Porous Media Flows and Its Application to Fuel Cell Materials. Transport in Porous Media, 2020, 134, 351-386.	2.6	7
15	Splitting schemes for unsteady problems involving the grad-div operator. Applied Numerical Mathematics, 2018, 124, 130-139.	2.1	6
16	Splitting schemes for phase-field models. Applied Numerical Mathematics, 2020, 156, 192-209.	2.1	6
17	A Finite Element Method for an Averaged Multiphase Flow Model. International Journal of Computational Fluid Dynamics, 2004, 18, 111-123.	1.2	4
18	A projection scheme for incompressible multiphase flow using adaptive Eulerian grid: 3D validation. International Journal for Numerical Methods in Fluids, 2005, 48, 455-466.	1.6	4

#	Article	IF	Citations
19	Multiscale direction-splitting algorithms for parabolic equations with highly heterogeneous coefficients. Computers and Mathematics With Applications, 2016, 72, 1641-1654.	2.7	4
20	Flux formulation of parabolic equations with highly heterogeneous coefficients. Journal of Computational and Applied Mathematics, 2018, 340, 582-601.	2.0	4
21	A direction splitting scheme for Navierâ€“Stokesâ€“Boussinesq system in spherical shell geometries. International Journal for Numerical Methods in Fluids, 2021, 93, 3507-3523.	1.6	3
22	A high order compact finite difference scheme for elliptic interface problems with discontinuous and high-contrast coefficients. Applied Mathematics and Computation, 2022, 431, 127314.	2.2	3
23	A fast algorithm for 3D simulation of thermal stratification in containment pools of nuclear power plants. Computers and Mathematics With Applications, 2014, 67, 2228-2239.	2.7	2
24	An operator-splitting scheme for the stream functionâ€“vorticity formulation of the unsteady Navierâ€“Stokes equations. Journal of Computational and Applied Mathematics, 2016, 293, 147-163.	2.0	2
25	Splitting schemes for the stress formulation of the incompressible Navierâ€“Stokes equations. Journal of Computational and Applied Mathematics, 2018, 344, 807-818.	2.0	2
26	An efficient algorithm for weakly compressible flows in spherical geometries. International Journal for Numerical Methods in Fluids, 2021, 93, 1359-1377.	1.6	0
27	Splitting schemes for the stress formulation of fluidâ€“structure interaction problems. Applications in Engineering Science, 2022, 9, 100082.	0.8	0