Michael Bergdorf

List of Publications by Year
in descending order

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22 papers	901 citations	687363 13 h-index	940533 16 g-index
23 all docs	23 docs citations	23 times ranked	751 citing authors

#	Article	IF	Citations
1	Quantum chemical benchmark databases of gold-standard dimer interaction energies. Scientific Data, 2021, 8, 55.	5.3	34
2	Midtown splines: An optimal charge assignment for electrostatics calculations. Journal of Chemical Physics, 2020, 153, 224117.	3.0	1
3	MRAG-I2D: Multi-resolution adapted grids for remeshed vortex methods on multicore architectures. Journal of Computational Physics, 2015, 288, 1-18.	3.8	44
4	Particle Simulations of Growth: Application to Tumorigenesis. , 2012, , 261-303.		1
5	Particle Simulations of Growth: Application to Angiogenesis. , 2012, , 305-334.		0
6	Waveletâ€adaptive solvers on multiâ€core architectures for the simulation of complex systems. Concurrency Computation Practice and Experience, 2011, 23, 172-186.	2.2	6
7	A Lagrangian particle method for reactionâ€“diffusion systems on deforming surfaces. Journal of Mathematical Biology, 2010, 61, 649-663.	1.9	33
8	High order finite volume methods on wavelet-adapted grids with local time-stepping on multicore architectures for the simulation of shock-bubble interactions. Journal of Computational Physics, 2010, 229, 8364-8383.	3.8	48
9	GPU accelerated simulations of bluff body flows using vortex particle methods. Journal of Computational Physics, 2010, 229, 3316-3333.	3.8	73
10	Wavelet-Based Adaptive Solvers on Multi-core Architectures for the Simulation of Complex Systems. Lecture Notes in Computer Science, 2009, , 721-734.	1.3	0
11	Billion vortex particle direct numerical simulations of aircraft wakes. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 1296-1304.	6.6	111
12	A Hybrid Model for Three-Dimensional Simulations of Sprouting Angiogenesis. Biophysical Journal, 2008, 95, 3146-3160.	0.5	131
13	A Hybrid Model of Sprouting Angiogenesis. Lecture Notes in Computer Science, 2008, , 167-176.	1.3	2
14	Vortex Methods for Massively Parallel Computer Architectures. Lecture Notes in Computer Science, 2008, , 479-489.	1.3	0
15	Large Scale, Multiresolution Flow Simulations Using Remeshed Particle Methods. Lecture Notes in Computational Science and Engineering, 2008, , 35-46.	0.3	0
16	Direct numerical simulations of vortex rings at Reî“ = 7500. Journal of Fluid Mechanics, 2007, 581, 495-505.	3.4	43
17	Multiresolution Particle Methods. , 2007, , 49-61.		0
18	A Lagrangian Particleâ€Wavelet Method. Multiscale Modeling and Simulation, 2006, 5, 980-995.	1.6	65

#	Article	IF	Citations
19	PPM â€“ A highly efficient parallel particleâ€“mesh library for the simulation of continuum systems. Journal of Computational Physics, 2006, 215, 566-588.	3.8	153
20	Multilevel Adaptive Particle Methods for Convection-Diffusion Equations. Multiscale Modeling and Simulation, 2005, 4, 328-357.	1.6	61
21	Waterâ€“carbon interactions III: The influence of surface and fluid impurities. Physical Chemistry Chemical Physics, 2004, 6, 1988-1995.	2.8	28
22	Influence of cut-off truncation and artificial periodicity of electrostatic interactions in molecular simulations of solvated ions: A continuum electrostatics study. Journal of Chemical Physics, 2003, 119, 9129-9144.	3.0	67