Kai Kadau

List of Publications by Year
in descending order

24	3,103	567281 15	794594 19
papers	citations	h-index	g-index

24	24	24	3082
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mitigation strategies for pandemic influenza in the United States. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 5935-5940.	7.1	904
2	Modeling targeted layered containment of an influenza pandemic in the United States. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 4639-4644.	7.1	570
3	Microscopic View of Structural Phase Transitions Induced by Shock Waves. Science, 2002, 296, 1681-1684.	12.6	435
4	Breaking Strain of Neutron Star Crust and Gravitational Waves. Physical Review Letters, 2009, 102, 191102.	7.8	245
5	Atomistic simulations of shock-induced transformations and their orientation dependence in bcc Fe single crystals. Physical Review B, 2005, 72, .	3.2	174
6	Shock Waves in Polycrystalline Iron. Physical Review Letters, 2007, 98, 135701.	7.8	138
7	MOLECULAR DYNAMICS COMES OF AGE: 320 BILLION ATOM SIMULATION ON BlueGene/L. International Journal of Modern Physics C, 2006, 17, 1755-1761.	1.7	126
8	TRILLION-ATOM MOLECULAR DYNAMICS BECOMES A REALITY. International Journal of Modern Physics C, 2008, 19, 1315-1319.	1.7	100
9	Nanohydrodynamics simulations: An atomistic view of the Rayleigh-Taylor instability. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 5851-5855.	7.1	98
10	The importance of fluctuations in fluid mixing. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 7741-7745.	7.1	76
11	LARGE-SCALE MOLECULAR-DYNAMICS SIMULATION OF 19 BILLION PARTICLES. International Journal of Modern Physics C, 2004, 15, 193-201.	1.7	69
12	Atomistic methods in fluid simulation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 1547-1560.	3.4	66
13	Simulating picosecond x-ray diffraction from shocked crystals using post-processing molecular dynamics calculations. Journal of Physics Condensed Matter, 2008, 20, 505203.	1.8	21
14	Scaling of atomistic fluid dynamics simulations. Physical Review E, 2008, 78, 045301.	2.1	18
15	369 Tflop/s molecular dynamics simulations on the petaflop hybrid supercomputer â€˜Roadrunnerâ€™. Concurrency Computation Practice and Experience, 2009, 21, 2143-2159.	2.2	15
16	Shock-induced phase transformations in gallium single crystals by atomistic methods. Physical Review B, 2013, 88, .	3.2	15
17	369 Tflop/s molecular dynamics simulations on the Roadrunner general-purpose heterogeneous supercomputer. , 2008, , .		10
18	Probabilistic Fracture Mechanics for Heavy-Duty Gas Turbine Rotor Forgings. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	1.1	10

#	Article	IF	Citations
19	Predicting EXAFS signals from shock compressed iron by use of molecular dynamics simulations. High Energy Density Physics, 2009, 5, 44-50.	1.5	6
20	Probabilistic Fracture Mechanics for Heavy Duty Gas Turbine Rotor Forgings. , 2017, , .		6
21	SIMULATION OF FLUID INSTABILITIES USING ATOMISTIC METHODS. AIP Conference Proceedings, 2008, , .	0.4	1
22	A Molecular Dynamics Study of Solid Gallium Using a Modified Embedded Atom Model. AIP Conference Proceedings, 2006, , .	0.4	0
23	SIMULATING EXAFS PATTERNS OF SHOCKED CRYSTALS. , 2008, , .		0
24	LARGE-SCALE MOLECULAR DYNAMICS SIMULATIONS OF THE FCC-FCC VOLUME COLLAPSE TRANSITION IN SHOCKED CESIUM. , 2009, , .		0