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	Probabilistic Fracture Mechanics for Heavy-Duty Gas Turbine Rotor Forgings. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	1.1	10
2	Probabilistic Fracture Mechanics for Heavy Duty Gas Turbine Rotor Forgings. , 2017, , .		6
3	Shock-induced phase transformations in gallium single crystals by atomistic methods. Physical Review B, 2013, 88, .	3.2	15
4	Atomistic methods in fluid simulation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 1547-1560.	3.4	66
5	Breaking Strain of Neutron Star Crust and Gravitational Waves. Physical Review Letters, 2009, 102, 191102.	7.8	245
6	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
7	Predicting EXAFS signals from shock compressed iron by use of molecular dynamics simulations. High Energy Density Physics, 2009, 5, 44-50.	1.5	6
8	LARGE-SCALE MOLECULAR DYNAMICS SIMULATIONS OF THE FCC-FCC VOLUME COLLAPSE TRANSITION IN SHOCKED CESIUM. , 2009, , .		0
9	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
10	369 Tflop/s molecular dynamics simulations on the Roadrunner general-purpose heterogeneous supercomputer. , 2008, , .		10
11	TRILLION-ATOM MOLECULAR DYNAMICS BECOMES A REALITY. International Journal of Modern Physics C, 2008, 19, 1315-1319.	1.7	100
12	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
13	Scaling of atomistic fluid dynamics simulations. Physical Review E, 2008, 78, 045301.	2.1	18
14	SIMULATION OF FLUID INSTABILITIES USING ATOMISTIC METHODS. AIP Conference Proceedings, 2008, , .	0.4	1
15	SIMULATING EXAFS PATTERNS OF SHOCKED CRYSTALS. , 2008, , .		0
16	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
17	Shock Waves in Polycrystalline Iron. Physical Review Letters, 2007, 98, 135701.	7.8	138
18	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

#	Article	IF	Citations
19	A Molecular Dynamics Study of Solid Gallium Using a Modified Embedded Atom Model. AIP Conference Proceedings, 2006, , .	0.4	0
20	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
21	Atomistic simulations of shock-induced transformations and their orientation dependence in bcc Fe single crystals. Physical Review B, 2005, 72, .	3.2	174
22	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
23	LARGE-SCALE MOLECULAR-DYNAMICS SIMULATION OF 19 BILLION PARTICLES. International Journal of Modern Physics C, 2004, 15, 193-201.	1.7	69
24	Microscopic View of Structural Phase Transitions Induced by Shock Waves. Science, 2002, 296, 1681-1684.	12.6	435