Hiroaki Yoshida

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5881325/publications.pdf

Version: 2024-02-01

36	1,102	471509 17	395702 33
papers	citations	h-index	g-index

37	37	37	1252
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multiple-relaxation-time lattice Boltzmann model for the convection and anisotropic diffusion equation. Journal of Computational Physics, 2010, 229, 7774-7795.	3.8	278
2	Numerical simulation of thermal behavior of lithium-ion secondary batteries using the enhanced single particle model. Journal of Power Sources, 2014, 252, 214-228.	7.8	79
3	Molecular dynamics simulation of electrokinetic flow of an aqueous electrolyte solution in nanochannels. Journal of Chemical Physics, 2014, 140, 214701.	3.0	54
4	Inverted velocity profile in the cylindrical Couette flow of a rarefied gas. Physical Review E, 2003, 68, 016302.	2.1	51
5	Labyrinthine water flow across multilayer graphene-based membranes: Molecular dynamics versus continuum predictions. Journal of Chemical Physics, 2016, 144, 234701.	3.0	51
6	Carbon membranes for efficient water-ethanol separation. Journal of Chemical Physics, 2016, 145, 124708.	3.0	50
7	Dripplons as localized and superfast ripples of water confined between graphene sheets. Nature Communications, 2018, 9, 1496.	12.8	50
8	Coupled lattice Boltzmann method for simulating electrokinetic flows: A localized scheme for the Nernstâ€“Plank model. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 3570-3590.	3.3	44
9	Boundary condition at a two-phase interface in the lattice Boltzmann method for the convection-diffusion equation. Physical Review E, 2014, 90, 013303.	2.1	41
10	Osmotic and diffusio-osmotic flow generation at high solute concentration. I. Mechanical approaches. Journal of Chemical Physics, 2017, 146, 194701.	3.0	41
11	Traffic signal optimization on a square lattice with quantum annealing. Scientific Reports, 2021, 11, 3303.	3.3	39
12	Osmotic and diffusio-osmotic flow generation at high solute concentration. II. Molecular dynamics simulations. Journal of Chemical Physics, 2017, 146, 194702.	3.0	34
13	Diffusion models for Knudsen compressors. Physics of Fluids, 2007, 19, .	4.0	33
14	A Diffusion Model for Rarefied Flows in Curved Channels. Multiscale Modeling and Simulation, 2008, 6, 1281-1316.	1.6	30
15	Dynamic viscosity recovery of electrospinning solution for stabilizing elongated ultrafine polymer nanofiber by TEMPO-CNF. Scientific Reports, 2020, 10, 13427.	3.3	29
16	Lattice Boltzmann method for the convectionâ€“diffusion equation in curvilinear coordinate systems. Journal of Computational Physics, 2014, 257, 884-900.	3.8	28
17	Transmissionâ€“Reflection Coefficient in the Lattice Boltzmann Method. Journal of Statistical Physics, 2014, 155, 277-299.	1.2	19
18	Linear stability of the cylindrical Couette flow of a rarefied gas. Physical Review E, 2006, 73, 021201.	2.1	17

#	Article	IF	Citations
19	Shear thinning behavior of nanometer-thick perfluoropolyether films confined between corrugated solid surfaces: a coarse-grained molecular dynamics study. Tribology International, 2016, 93, 163-171.	5.9	17
20	Analysis of electro-osmotic flow in a microchannel with undulated surfaces. Computers and Fluids, 2016, 124, 237-245.	2.5	16
21	Local and global force balance for diffusiophoretic transport. Journal of Fluid Mechanics, 2020, 892, .	3.4	13
22	Rarefied gas flows through a curved channel: Application of a diffusion-type equation. Physics of Fluids, 2010, 22, 112001.	4.0	12
23	Model Predictive Control for Finite Input Systems using the D-Wave Quantum Annealer. Scientific Reports, 2020, 10, 1591.	3.3	11
24	Optimal Transport-Based Coverage Control for Swarm Robot Systems: Generalization of the Voronoi Tessellation-Based Method. , 2021, 5, 1483-1488.		11
25	Structure of polyelectrolyte brushes studied by coarse grain simulations. Friction, 2014, 2, 73-81.	6.4	10
26	Generic transport coefficients of a confined electrolyte solution. Physical Review E, 2014, 90, 052113.	2.1	9
27	Studying polymer diffusiophoresis with non-equilibrium molecular dynamics. Journal of Chemical Physics, 2020, 152, 164901.	3.0	6
28	Membranes for spontaneous separation of pedestrian counterflows. Europhysics Letters, 2020, 129, 50005.	2.0	5
29	Cylindrical Couette flow of a vapor-gas mixture: Ghost effect and bifurcation in the continuum limit. Physics of Fluids, 2006, 18, 087103.	4.0	4
30	Coarse-grained simulations of polyelectrolyte brushes using a hybrid model. Colloid and Polymer Science, 2018, 296, 441-449.	2.1	4
31	Numerical simulation method for Brownian particles dispersed in incompressible fluids. Chemical Physics Letters, 2019, 737, 136809.	2.6	4
32	Separation of pedestrian counter flows with an array of obstacles. Artificial Life and Robotics, 2020, 25, 529-536.	1.2	3
33	Optimal Transport-based Coverage Control for Swarm Robot Systems: Generalization of the Voronoi Tessellation-based Method. , 2021, , .		3
34	Polarizable Dissipative Particle Dynamics Simulation of Electrolyte Solutions. , 2014, , .		2
35	Electro-osmotic diode based on colloidal nano-valves between double membranes. Physical Review Research, 2021, 3, .	3.6	2
36	Coarse-Grain Simulation of Lubricant Polymer Solutions. , 2018, , .		0