Yong Shi

List of Publications by Year
in descending order

36 papers	**1,515** citations	430874 **18** h-index	414414 **32** g-index
36 all docs	**36** docs citations	**36** times ranked	**1440** citing authors

#	Article	IF	Citations
1	A review of data-driven approaches for prediction and classification of building energy consumption. Renewable and Sustainable Energy Reviews, 2018, 82, 1027-1047.	16.4	488
2	Physical symmetry, spatial accuracy, and relaxation time of the lattice Boltzmann equation for microgas flows. Journal of Applied Physics, 2006, 99, 074903.	2.5	165
3	Thermal lattice Bhatnagar-Gross-Krook model for flows with viscous heat dissipation in the incompressible limit. Physical Review E, 2004, 70, 066310.	2.1	111
4	A lithium-ion battery-thermal-management design based on phase-change-material thermal storage and spray cooling. Applied Thermal Engineering, 2020, 168, 114792.	6.0	98
5	A lattice Boltzmann algorithm for electro-osmotic flows in microfluidic devices. Journal of Chemical Physics, 2005, 122, 144907.	3.0	72
6	Preconditioned lattice-Boltzmann method for steady flows. Physical Review E, 2004, 70, 066706.	2.1	60
7	Finite difference-based lattice Boltzmann simulation of natural convection heat transfer in a horizontal concentric annulus. Computers and Fluids, 2006, 35, 1-15.	2.5	58
8	Cluster analysis for occupant-behavior based electricity load patterns in buildings: A case study in Shanghai residences. Building Simulation, 2017, 10, 889-898.	5.6	52
9	Heat-pipe based spray-cooling thermal management system for lithium-ion battery: Experimental study and optimization. International Journal of Heat and Mass Transfer, 2020, 163, 120494.	4.8	52
10	Simple kinetic model for fluid flows in the nanometer scale. Physical Review E, 2005, 71, 035301.	2.1	35
11	Generalized hydrodynamic model for fluid flows: From nanoscale to macroscale. Physics of Fluids, 2006, 18, 067107.	4.0	32
12	Accuracy of the lattice Boltzmann method for low-speed noncontinuum flows. Physical Review E, 2011, 83, 045701.	2.1	30
13	Lattice Boltzmann method for incompressible flows with large pressure gradients. Physical Review E, 2006, 73, 026704.	2.1	24
14	Analysis of Liquid–Liquid Droplets Fission and Encapsulation in Single/Two Layer Microfluidic Devices Fabricated by Xurographic Method. Micromachines, 2017, 8, 49.	2.9	24
15	Temperature dependence of the velocity boundary condition for nanoscale fluid flows. Physical Review E, 2005, 72, 036301.	2.1	22
16	Lattice Boltzmann method for oscillatory Stokes flow with applications to micro- and nanodevices. Physical Review E, 2010, 81, 036706.	2.1	21
17	Lattice Boltzmann simulation of flow and heat transfer in random porous media constructed by simulated annealing algorithm. Applied Thermal Engineering, 2017, 115, 1348-1356.	6.0	20
18	Synergetic treatment of dye contaminated wastewater using microparticles functionalized with carbon nanotubes/titanium dioxide nanocomposites. RSC Advances, 2020, 10, 9210-9225.	3.6	20

#	Article	IF	Citations
19	Lattice Boltzmann simulation of dense gas flows in microchannels. Physical Review E, 2007, 76, 016707.	2.1	18
20	Linearized lattice Boltzmann method for micro- and nanoscale flow and heat transfer. Physical Review E, 2015, 92, 013307.	2.1	16
21	Simulation of fluid flows in the nanometer: kinetic approach and molecular dynamic simulation. International Journal of Computational Fluid Dynamics, 2006, 20, 361-367.	1.2	15
22	Simplified model and lattice Boltzmann algorithm for microscale electro-osmotic flows and heat transfer. International Journal of Heat and Mass Transfer, 2008, 51, 586-596.	4.8	13
23	Lattice Boltzmann method for linear oscillatory noncontinuum flows. Physical Review E, 2014, 89, 033305.	2.1	12
24	Lattice Boltzmann Simulation of Thermal Electro-Osmotic Flows in Micro/Nanochannels. Journal of Computational and Theoretical Nanoscience, 2008, 5, 236-246.	0.4	10
25	Numerical simulations of the equilibrium shape of liquid droplets on gradient surfaces. Applied Thermal Engineering, 2009, 29, 372-379.	6.0	10
26	Bipolarly stacked electrolyser for energy and space efficient fabrication of supercapacitor electrodes. Journal of Power Sources, 2016, 307, 208-213.	7.8	9
27	Origin of spurious oscillations in lattice Boltzmann simulations of oscillatory noncontinuum gas flows. Physical Review E, 2019, 100, 053317.	2.1	6
28	Linearized lattice Boltzmann Method for time periodic electro-osmotic flows in micro- and nanochannels. Physics of Fluids, 2020, 32, 082006.	4.0	6
29	Newtonian flow inside carbon nanotube with permeable boundary taking into account van der Waals forces. Scientific Reports, 2019, 9, 12121.	3.3	5
30	Block iterative frequency-based lattice Boltzmann algorithm for microscale oscillatory flow. Computers and Fluids, 2018, 167, 196-205.	2.5	4
31	Separate-phase model and its lattice Boltzmann algorithm for liquid-vapor two-phase flows in porous media. Physical Review E, 2019, 99, 053302.	2.1	3
32	Thermophoretic collection of virus-laden (SARS-CoV-2) aerosols. Biomicrofluidics, 2021, 15, 024101.	2.4	3
33	LATTICE BOLTZMANN MIXTURE MODEL FOR LIQUID-VAPOR FLOW WITH PHASE CHANGE IN POROUS MEDIA. , 2018, , .		1
34	Numerical study on inertial effects on liquid-vapor flow using lattice Boltzmann method. Energy Procedia, 2019, 160, 428-435.	1.8	0
35	Data-Driven Approaches for Prediction and Classification of Building Energy Consumption. Sustainable Development Goals Series, 2021, , 11-45.	0.4	0
36	Advances in the Study on the Micro/Nanoscale Transport of DNA Molecule Fluids by Using Multi-scale Algorithm. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2010, 46, 143.	0.5	0