List of Publications by Year
in descending order

84 papers	2,871 citations	159358 30 h-index	182168 51 g-index
84 all docs	84 docs citations	84 times ranked	1409 citing authors

#	Article	IF	Citations
1	General bounce-back scheme for concentration boundary condition in the lattice-Boltzmann method. Physical Review E, 2012, 85, 016701.	0.8	189
2	A novel lattice Boltzmann model for the Poisson equation. Applied Mathematical Modelling, 2008, 32, 2050-2058.	2.2	161
3	Lattice Boltzmann model for the convection-diffusion equation. Physical Review E, 2013, 87, 063309.	0.8	159
4	A Multiple-Relaxation-Time Lattice Boltzmann Model for General Nonlinear Anisotropic Convection–Diffusion Equations. Journal of Scientific Computing, 2016, 69, 355-390.	1.1	122
5	Phase-field-based lattice Boltzmann modeling of large-density-ratio two-phase flows. Physical Review E, 2018, 97, 033309.	0.8	112
6	Multiple-relaxation-time lattice Boltzmann model for generalized Newtonian fluid flows. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 332-342.	1.0	97
7	A comparative study on the lattice Boltzmann models for predicting effective diffusivity of porous media. International Journal of Heat and Mass Transfer, 2016, 98, 687-696.	2.5	92
8	Non-Darcy flow in disordered porous media: A lattice Boltzmann study. Computers and Fluids, 2010, 39, 2069-2077.	1.3	87
9	Effect of the forcing term in the multiple-relaxation-time lattice Boltzmann equation on the shear stress or the strain rate tensor. Physical Review E, 2012, 86, 016705.	0.8	81
10	A comparative study of local and nonlocal Allen-Cahn equations with mass conservation. International Journal of Heat and Mass Transfer, 2018, 122, 631-642.	2.5	77
11	Multiple-relaxation-time lattice Boltzmann method for the Navier-Stokes and nonlinear convection-diffusion equations: Modeling, analysis, and elements. Physical Review E, 2020, 102, 023306.	0.8	77
12	Lattice Boltzmann simulation of surface roughness effect on gaseous flow in a microchannel. Journal of Applied Physics, 2008, 104, .	1.1	73
13	Gas Flow Through Square Arrays of Circular Cylinders with Klinkenberg Effect: a Lattice Boltzmann Study. Communications in Computational Physics, 2010, 8, 1052-1073.	0.7	66
14	Effects of temperature-dependent properties on natural convection of power-law nanofluids in rectangular cavities with sinusoidal temperature distribution. International Journal of Heat and Mass Transfer, 2019, 128, 688-699.	2.5	62
15	Lattice Boltzmann method for contact-line motion of binary fluids with high density ratio. Physical Review E, 2019, 99, 063306.	0.8	55
16	A lattice Boltzmann analysis of the conjugate natural convection in a square enclosure with a circular cylinder. Applied Mathematical Modelling, 2019, 71, 31-44.	2.2	54
17	Nonequilibrium scheme for computing the flux of the convection-diffusion equation in the framework of the lattice Boltzmann method. Physical Review E, 2014, 90, 013305.	0.8	50
18	Lattice Boltzmann modeling of wall-bounded ternary fluid flows. Applied Mathematical Modelling, 2019, 73, 487-513.	2.2	50

#	Article	IF	Citations
19	Deformation and breakup of a liquid droplet past a solid circular cylinder: A lattice Boltzmann study. Physical Review E, 2014, 90, 043015.	0.8	47
20	Hybrid lattice Boltzmann-TVD simulation of natural convection of nanofluids in a partially heated square cavity using Buongiorno's model. Applied Thermal Engineering, 2019, 146, 318-327.	3.0	43
21	Simulation of electro-osmotic flow in microchannel with lattice Boltzmann method. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 364, 183-188.	0.9	42
22	A Lattice Boltzmann Model for Two-Phase Flow in Porous Media. SIAM Journal of Scientific Computing, 2019, 41, B746-B772.	1.3	42
23	A lattice Boltzmann modelling of electrohydrodynamic conduction phenomenon in dielectric liquids. Applied Mathematical Modelling, 2021, 95, 361-378.	2.2	41
24	Regularized lattice Boltzmann simulation of double-diffusive convection of power-law nanofluids in rectangular enclosures. International Journal of Heat and Mass Transfer, 2016, 102, 381-395.	2.5	39
25	Discrete effect on the halfway bounce-back boundary condition of multiple-relaxation-time lattice Boltzmann model for convection-diffusion equations. Physical Review E, 2016, 93, 043311.	0.8	38
26	Slip boundary condition for lattice Boltzmann modeling of liquid flows. Computers and Fluids, 2018, 161, 60-73.	1.3	37
27	Discrete unified gas kinetic scheme with a force term for incompressible fluid flows. Computers and Mathematics With Applications, 2016, 71, 2608-2629.	1.4	36
28	A phase-field-based lattice Boltzmann modeling of two-phase electro-hydrodynamic flows. Physics of Fluids, 2019, 31, .	1.6	35
29	Regularized lattice Boltzmann model for a class of convection-diffusion equations. Physical Review E, 2015, 92, 043311.	0.8	34
30	Finite-difference lattice Boltzmann model for nonlinear convection-diffusion equations. Applied Mathematics and Computation, 2017, 309, 334-349.	1.4	33
31	A Coupled Lattice Boltzmann Method to Solve Nernst–Planck Model for Simulating Electro-osmotic Flows. Journal of Scientific Computing, 2014, 61, 222-238.	1.1	32
32	Simulation of Power-Law Fluid Flows in Two-Dimensional Square Cavity Using Multi-Relaxation-Time Lattice Boltzmann Method. Communications in Computational Physics, 2014, 15, 265-284.	0.7	32
33	Lattice Boltzmann simulation of lid-driven flow in trapezoidal cavities. Computers and Fluids, 2010, 39, 1977-1989.	1.3	30
34	Generalized modification in the lattice Bhatnagar-Gross-Krook model for incompressible Navier-Stokes equations and convection-diffusion equations. Physical Review E, 2014, 90, 013309.	0.8	30
35	A unified lattice Boltzmann model for some nonlinear partial differential equations. Chaos, Solitons and Fractals, 2008, 36, 874-882.	2.5	29
36	Lattice Boltzmann model for high-order nonlinear partial differential equations. Physical Review E, 2018, 97, 013304.	0.8	29

#	Article	IF	Citations
37	Effects of temperature-dependent properties on natural convection of nanofluids in a partially heated cubic enclosure. Applied Thermal Engineering, 2018, 128, 204-213.	3.0	29
38	Gas slippage effect on the permeability of circular cylinders in a square array. International Journal of Heat and Mass Transfer, 2011, 54, 3009-3014.	2.5	26
39	Multi-GPU Based Lattice Boltzmann Method for Hemodynamic Simulation in Patient-Specific Cerebral Aneurysm. Communications in Computational Physics, 2015, 17, 960-974.	0.7	26
40	Lattice Boltzmann model for a class of convection–diffusion equations with variable coefficients. Computers and Mathematics With Applications, 2015, 70, 548-561.	1.4	25
41	Lattice Boltzmann simulation of melting in a cubical cavity with a local heat-flux source. International Journal of Heat and Mass Transfer, 2018, 127, 497-506.	2.5	25
42	Maxwell-Stefan-theory-based lattice Boltzmann model for diffusion in multicomponent mixtures. Physical Review E, 2019, 99, 023312.	0.8	25
43	Numerical investigation of electro–thermo-convection with a solid–liquid interface via the lattice Boltzmann method. Physics of Fluids, 2021, 33, .	1.6	25
44	Comparative study of natural convection melting inside a cubic cavity using an improved two-relaxation-time lattice Boltzmann model. International Journal of Heat and Mass Transfer, 2019, 143, 118449.	2.5	23
45	Non-Newtonian Effect on Hemodynamic Characteristics of Blood Flow in Stented Cerebral Aneurysm. Communications in Computational Physics, 2013, 13, 916-928.	0.7	19
46	Regularized lattice Boltzmann model for double-diffusive convection in vertical enclosures with heating and salting from below. Applied Thermal Engineering, 2016, 103, 365-376.	3.0	19
47	Coupled lattice Boltzmann method for generalized Keller–Segel chemotaxis model. Computers and Mathematics With Applications, 2014, 68, 1653-1670.	1.4	17
48	Effects of temperature-dependent viscosity on natural convection in a porous cavity with a circular cylinder under local thermal non-equilibrium condition. International Journal of Thermal Sciences, 2021, 159, 106570.	2.6	17
49	General propagation lattice Boltzmann model for nonlinear advection-diffusion equations. Physical Review E, 2018, 97, 043310.	0.8	16
50	A phase-field-based lattice Boltzmann model for multiphase flows involving N immiscible incompressible fluids. Physics of Fluids, 2022, 34, .	1.6	15
51	A novel lattice Boltzmann model for the coupled viscous Burgers' equations. Applied Mathematics and Computation, 2015, 250, 948-957.	1.4	14
52	Lattice Boltzmann method for filtering and contour detection of the natural images. Computers and Mathematics With Applications, 2014, 68, 257-268.	1.4	13
53	A block triple-relaxation-time lattice Boltzmann model for nonlinear anisotropic convection–diffusion equations. Computers and Mathematics With Applications, 2020, 79, 2550-2573.	1.4	13
54	A lattice Boltzmann model for the conjugate heat transfer. International Journal of Heat and Mass Transfer, 2021, 165, 120682.	2.5	12

#	Article	IF	Citations
55	Lattice Boltzmann study of flow and mixing characteristics of two-dimensional confined impinging streams with uniform and non-uniform inlet jets. Computers and Mathematics With Applications, 2013, 65, 638-647.	1.4	11
56	Lattice Boltzmann Simulation of Magnetic Field Effect on Natural Convection of Power-Law Nanofluids in Rectangular Enclosures. Advances in Applied Mathematics and Mechanics, 2017, 9, 1094-1110.	0.7	11
57	Lattice Boltzmann model for time sub-diffusion equation in Caputo sense. Applied Mathematics and Computation, 2019, 358, 80-90.	1.4	11
58	A generalized lattice Boltzmann model for solid–liquid phase change with variable density and thermophysical properties. Applied Mathematics Letters, 2020, 104, 106250.	1.5	11
59	Phase-field-based lattice Boltzmann model for immiscible incompressible N -phase flows. Physical Review E, 2020, 101, 063310.	0.8	11
60	Improved phase-field-based lattice Boltzmann method for thermocapillary flow. Physical Review E, 2022, 105, 015314.	0.8	11
61	An Efficient Lattice Boltzmann Model for Steady Convection–Diffusion Equation. Journal of Scientific Computing, 2014, 61, 308-326.	1.1	10
62	Lattice Boltzmann models for two-dimensional coupled Burgers' equations. Computers and Mathematics With Applications, 2018, 75, 864-875.	1.4	10
63	Discrete unified gas kinetic scheme for nonlinear convection-diffusion equations. Physical Review E, 2020, 101, 023306.	0.8	10
64	Lattice Boltzmann Study of Flow and Temperature Structures ofNon-Isothermal Laminar Impinging Streams. Communications in Computational Physics, 2013, 13, 835-850.	0.7	9
65	Dynamic behavior of droplet through a confining orifice:A lattice Boltzmann study. Computers and Mathematics With Applications, 2019, 77, 2640-2658.	1.4	9
66	A generalized lattice Boltzmann model for fluid flow system and its application in two-phase flows. Computers and Mathematics With Applications, 2020, 79, 1759-1780.	1.4	9
67	A modified regularized lattice Boltzmann model for convection–diffusion equation with a source term. Applied Mathematics Letters, 2021, 112, 106766.	1.5	9
68	Mixed bounce-back boundary scheme of the general propagation lattice Boltzmann method for advection-diffusion equations. Physical Review E, 2019, 99, 063316.	0.8	7
69	Multiple-relaxation-time lattice Boltzmann model-based four-level finite-difference scheme for one-dimensional diffusion equations. Physical Review E, 2021, 104, 015312.	0.8	7
70	A lattice Boltzmann based local feedback control approach for spiral wave. Computers and Mathematics With Applications, 2017, 74, 2330-2340.	1.4	6
71	Lattice Boltzmann modeling of the capillary rise of non‐Newtonian power‐law fluids. International Journal for Numerical Methods in Fluids, 2022, 94, 251-271.	0.9	6
72	A lattice Boltzmann model for the coupled cross-diffusion-fluid system. Applied Mathematics and Computation, 2021, 400, 126105.	1.4	5

#	Article	IF	Citations
73	Lattice Boltzmann method for n-dimensional nonlinear hyperbolic conservation laws with the source term. Chaos, 2011, 21, 013120.	1.0	4
74	Rectangular lattice Boltzmann model for nonlinear convection–diffusion equations. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2311-2319.	1.6	4
75	A finite-difference lattice Boltzmann method with second-order accuracy of time and space for incompressible flow. Computers and Mathematics With Applications, 2020, 80, 3066-3081.	1.4	4
76	A lattice Boltzmann model for the viscous shallow water equations with source terms. Journal of Hydrology, 2021, 598, 126428.	2.3	4
77	Discrete unified gas kinetic scheme for incompressible Navier-Stokes equations. Computers and Mathematics With Applications, 2021, 97, 45-60.	1.4	4
78	A lattice Boltzmann model for the nonlinear thermistor equations. International Journal of Modern Physics C, 2020, 31, 2050043.	0.8	4
79	A two-relaxation-time lattice Boltzmann study on the Soret and Dufour effects of double-diffusive convection over a rough surface. Applied Mathematical Modelling, 2022, 106, 1-29.	2.2	4
80	A lattice Boltzmann study of the asymmetry effect on the hemodynamics in stented fusiform aneurysms. Computers and Mathematics With Applications, 2016, 71, 328-348.	1.4	2
81	Multiple-relaxation-time finite-difference lattice Boltzmann model for the nonlinear convection-diffusion equation. Physical Review E, 2021, 104, 035308.	0.8	2
82	Discrete effects on some boundary schemes of multiple-relaxation-time lattice Boltzmann model for convection–diffusion equations. Computers and Mathematics With Applications, 2020, 80, 531-551.	1.4	2
83	The computation of strain rate tensor in multiple-relaxation-time lattice Boltzmann model. Computers and Mathematics With Applications, 2018, 75, 2888-2902.	1.4	1
84	A recursive finite-difference lattice Boltzmann model for the convection–diffusion equation with a source term. Applied Mathematics Letters, 2022, 132, 108139.	1.5	1