Zhaoli Guo

List of Publications by Year in descending order

229 papers	13,108 citations	34105 52 h-index	26613 107 g-index
232 all docs	232 docs citations	232 times ranked	4361 citing authors

#	Article	IF	Citations
1	Molecular insight into oil displacement by CO2 flooding on rough silica surface. Journal of Supercritical Fluids, 2022, 181, 105507.	3.2	9
2	Improved well-balanced free-energy lattice Boltzmann model for two-phase flow with high Reynolds number and large viscosity ratio. Physics of Fluids, 2022, 34, .	4.0	19
3	Graded thermal conductivity in 2D and 3D homogeneous hotspot systems. Materials Today Physics, 2022, 22, 100605.	6.0	18
4	Simulation of three-dimensional forced compressible isotropic turbulence by a redesigned discrete unified gas kinetic scheme. Physics of Fluids, 2022, 34, 025106.	4.0	8
5	Molecular kinetic modelling of nanoscale slip flow using a continuum approach. Journal of Fluid Mechanics, 2022, 939, .	3.4	8
6	Molecular insight into replacement dynamics of CO2 enhanced oil recovery in nanopores. Chemical Engineering Journal, 2022, 440, 135796.	12.7	22
7	Discrete unified gas-kinetic scheme for the conservative Allen-Cahn equation. Physical Review E, 2022, 105, 045317.	2.1	5
8	Well-balanced discrete unified gas-kinetic scheme for two-phase systems. Physics of Fluids, 2022, 34, .	4.0	8
9	Evaluation of different particle-actuation modes in molecular dynamics and their impact on nanoscale flow behaviors. Physics of Fluids, 2022, 34, .	4.0	6
10	Progress of discrete unified gas-kinetic scheme for multiscale flows. Advances in Aerodynamics, 2021, 3, .	2.5	46
11	Oscillatory Couette flow of rarefied binary gas mixtures. Physics of Fluids, 2021, 33, .	4.0	11
12	Well-balanced lattice Boltzmann model for two-phase systems. Physics of Fluids, 2021, 33, .	4.0	33
13	On the formulations of interfacial force in the phaseâ€fieldâ€based lattice Boltzmann method. International Journal for Numerical Methods in Fluids, 2021, 93, 2225-2248.	1.6	6
14	Laminar to turbulent flow transition inside the boundary layer adjacent to isothermal wall of natural convection flow in a cubical cavity. International Journal of Heat and Mass Transfer, 2021, 167, 120822.	4.8	13
15	Pore-scale study of miscible density-driven mixing flow in porous media. Physics of Fluids, 2021, 33, .	4.0	13
16	Designing a consistent implementation of the discrete unified gas-kinetic scheme for the simulation of three-dimensional compressible natural convection. Physics of Fluids, 2021, 33, .	4.0	15
17	A Coupled Discrete Unified Gas-Kinetic Scheme for Convection Heat Transfer in Porous Media. Communications in Computational Physics, 2021, 29, 265-291.	1.7	2
18	Pore-scale study of non-ideal gas dynamics under tight confinement considering rarefaction, denseness and molecular interactions. Journal of Natural Gas Science and Engineering, 2021, 90, 103916.	4.4	8

#	Article	IF	Citations
19	Oscillatory square cavity flows of binary gas mixtures. Physics of Fluids, 2021, 33, 067121.	4.0	6
20	An improved discrete unified gas kinetic scheme for simulating compressible natural convection flows. Journal of Computational Physics: X, 2021, 11, 100088.	0.7	4
21	Development of unsteady natural convection in a square cavity under large temperature difference. Physics of Fluids, 2021, 33, .	4.0	14
22	A fast synthetic iterative scheme for the stationary phonon Boltzmann transport equation. International Journal of Heat and Mass Transfer, 2021, 174, 121308.	4.8	12
23	Contribution quantification of nanoscale gas transport in shale based on strongly inhomogeneous kinetic model. Energy, 2021, 228, 120545.	8.8	22
24	Heat vortices of ballistic and hydrodynamic phonon transport in two-dimensional materials. International Journal of Heat and Mass Transfer, 2021, 176, 121282.	4.8	10
25	Lattice-Boltzmann model for van der Waals fluids with liquid-vapor phase transition. International Journal of Heat and Mass Transfer, 2021, 179, 121741.	4.8	8
26	A transient heat conduction phenomenon to distinguish the hydrodynamic and (quasi) ballistic phonon transport. International Journal of Heat and Mass Transfer, 2021, 181, 121847.	4.8	9
27	Sub-nanometre pore adsorption of methane in kerogen. Chemical Engineering Journal, 2021, 426, 130984.	12.7	12
28	An exact non-equilibrium extrapolation scheme for pressure and velocity boundary conditions with large gradients in the lattice Boltzmann method. Computers and Fluids, 2021, 231, 105163.	2.5	9
29	Laxâ€“Wendroff type solver for two-phase system to restrain parasitic currents. Physics of Fluids, 2021, 33, 107113.	4.0	0
30	Discrete unified gas kinetic scheme for steady multiscale neutron transport. Journal of Computational Physics, 2020, 423, 109767.	3.8	8
31	Perturbation theory of thermal rectification. Physical Review E, 2020, 102, 042106.	2.1	5
32	Radial thermal rectification in concentric silicon ring from ballistic to diffusive regime. International Journal of Heat and Mass Transfer, 2020, 153, 119665.	4.8	5
33	Heat vortex in hydrodynamic phonon transport of two-dimensional materials. Scientific Reports, 2020, 10, 8272.	3.3	21
34	A multiscale study of density-driven flow with dissolution in porous media. Advances in Water Resources, 2020, 142, 103640.	3.8	7
35	Molecular Insight into Microbehaviors of n-Decane and CO₂ in Mineral Nanopores. Energy & Fuels, 2020, 34, 2925-2935.	5.1	17
36	Local reactive boundary scheme for irregular geometries in lattice Boltzmann method. International Journal of Heat and Mass Transfer, 2020, 150, 119314.	4.8	12

#	Article	IF	Citations
37	Discrete unified gas kinetic scheme for all Knudsen number flows. IV. Strongly inhomogeneous fluids. Physical Review E, 2020, 101, 043303.	2.1	10
38	Simulation of three-dimensional compressible decaying isotropic turbulence using a redesigned discrete unified gas kinetic scheme. Physics of Fluids, 2020, 32, .	4.0	29
39	Discrete unified gas kinetic scheme for multiscale anisotropic radiative heat transfer. Advances in Aerodynamics, 2020, 2, .	2.5	10
40	A Well-Balanced Gas Kinetic Scheme for Navier-Stokes Equations with Gravitational Potential. Communications in Computational Physics, 2020, 28, 902-926.	1.7	3
41	Effects of heat transfer on flame stability limits in a planar micro-combustor partially filled with porous medium. Proceedings of the Combustion Institute, 2019, 37, 5645-5654.	3.9	67
42	High-order lattice-Boltzmann model for the Cahn-Hilliard equation. Physical Review E, 2019, 99, 043310.	2.1	22
43	Review of micro seepage mechanisms in shale gas reservoirs. International Journal of Heat and Mass Transfer, 2019, 139, 144-179.	4.8	51
44	A fractional step lattice Boltzmann model for two-phase flow with large density differences. International Journal of Heat and Mass Transfer, 2019, 138, 1128-1141.	4.8	24
45	Pore-scale simulations of rarefied gas flows in ultra-tight porous media. Fuel, 2019, 249, 341-351.	6.4	24
46	Discrete unified gas kinetic scheme for multiscale heat transfer with arbitrary temperature difference. International Journal of Heat and Mass Transfer, 2019, 134, 1127-1136.	4.8	21
47	Effect of interaction between a particle cluster and a single particle on particle motion and distribution during sedimentation: A numerical study. Physics of Fluids, 2019, 31, .	4.0	25
48	GPU acceleration of an iterative scheme for gas-kinetic model equations with memory reduction techniques. Computer Physics Communications, 2019, 245, 106861.	7.5	8
49	Spontaneous shrinkage of droplet on a wetting surface in the phase-field model. Physical Review E, 2019, 100, 061302.	2.1	9
50	A multi-level parallel solver for rarefied gas flows in porous media. Computer Physics Communications, 2019, 234, 14-25.	7.5	37
51	Validation of a two-dimensional gas-kinetic scheme for compressible natural convection on structured and unstructured meshes. International Journal of Thermal Sciences, 2019, 136, 299-315.	4.9	9
52	An implicit kinetic scheme for multiscale heat transfer problem accounting for phonon dispersion and polarization. International Journal of Heat and Mass Transfer, 2019, 130, 1366-1376.	4.8	29
53	Discrete unified gas kinetic scheme for flows of binary gas mixture based on the McCormack model. Physics of Fluids, 2019, 31, .	4.0	34
54	Application of discrete unified gas kinetic scheme to thermally induced nonequilibrium flows. Computers and Fluids, 2019, 193, 103613.	2.5	24

#	Article	IF	Citations
55	A lattice-BGK model for the Navierâ€“Stokes equations based on a rectangular grid. Computers and Mathematics With Applications, 2019, 78, 1076-1094.	2.7	6
56	A lattice-Boltzmann scheme of the Navierâ€“Stokes equation on a three-dimensional cuboid lattice. Computers and Mathematics With Applications, 2019, 78, 1053-1075.	2.7	9
57	An inverse design analysis of mesoscopic implementation of non-uniform forcing in MRT lattice Boltzmann models. Computers and Mathematics With Applications, 2019, 78, 1095-1114.	2.7	4
58	Lattice Boltzmann model for high-order nonlinear partial differential equations. Physical Review E, 2018, 97, 013304.	2.1	29
59	Molecular dynamics study of interfacial properties in CO 2 enhanced oil recovery. Fluid Phase Equilibria, 2018, 467, 25-32.	2.5	51
60	Numerical study on mass transfer from a composite particle settling in a vertical channel. International Journal of Heat and Mass Transfer, 2018, 117, 132-142.	4.8	2
61	Direct numerical simulation of turbulent pipe flow using the lattice Boltzmann method. Journal of Computational Physics, 2018, 357, 16-42.	3.8	40
62	A comparative study of discrete velocity methods for low-speed rarefied gas flows. Computers and Fluids, 2018, 161, 33-46.	2.5	70
63	Preconditioned multiple-relaxation-time lattice Boltzmann equation model for incompressible flow in porous media. Physical Review E, 2018, 98, .	2.1	9
64	Molecular dynamics simulation to estimate minimum miscibility pressure for oil with pure and impure CO₂. Journal of Physics Communications, 2018, 2, 115028.	1.2	21
65	Molecular Modeling of CO2 and n-Octane in Solubility Process and Î±-Quartz Nanoslit. Energies, 2018, 11, 3045.	3.1	7
66	A combined immersed boundary and discrete unified gas kinetic scheme for particleâ€“fluid flows. Journal of Computational Physics, 2018, 375, 498-518.	3.8	45
67	Discrete unified gas kinetic scheme for all Knudsen number flows. III. Binary gas mixtures of Maxwell molecules. Physical Review E, 2018, 97, 053306.	2.1	37
68	Numerical investigation of dilute aerosol particle transport and deposition in oscillating multi-cylinder obstructions. Advanced Powder Technology, 2018, 29, 2003-2018.	4.1	13
69	A discrete unified gas-kinetic scheme for immiscible two-phase flows. International Journal of Heat and Mass Transfer, 2018, 126, 1326-1336.	4.8	36
70	Issues associated with Galilean invariance on a moving solid boundary in the lattice Boltzmann method. Physical Review E, 2017, 95, 013301.	2.1	9
71	A numerical study on the migration of a neutrally buoyant particle in a Poiseuille flow with thermal convection. International Journal of Heat and Mass Transfer, 2017, 108, 2158-2168.	4.8	23
72	DUGKS simulations of three-dimensional Taylorâ€“Green vortex flow and turbulent channel flow. Computers and Fluids, 2017, 155, 9-21.	2.5	51

#	Article	IF	Citations
73	Numerical study of nonequilibrium gas flow in a microchannel with a ratchet surface. Physical Review E, 2017, 95, 023113.	2.1	23
74	CFD study on stability limits of hydrogen/air premixed flames in planar micro-combustors with catalytic walls. Applied Thermal Engineering, 2017, 121, 325-335.	6.0	24
75	Numerical study of three-dimensional natural convection in a cubical cavity at high Rayleigh numbers. International Journal of Heat and Mass Transfer, 2017, 113, 217-228.	4.8	78
76	Numerical study on the sedimentation of single and multiple slippery particles in a Newtonian fluid. Powder Technology, 2017, 315, 126-138.	4.2	25
77	Performance evaluation of the general characteristics based off-lattice Boltzmann scheme and DUGKS for low speed continuum flows. Journal of Computational Physics, 2017, 333, 227-246.	3.8	42
78	A unified implicit scheme for kinetic model equations. Part I. Memory reduction technique. Science Bulletin, 2017, 62, 119-129.	9.0	31
79	An efficient unified iterative scheme for moving boundaries in lattice Boltzmann method. Computers and Fluids, 2017, 144, 34-43.	2.5	18
80	dugksFoam: An open source OpenFOAM solver for the Boltzmann model equation. Computer Physics Communications, 2017, 213, 155-164.	7.5	43
81	Gasâ€Solid Drag Coefficient for Ordered Arrays of Monodisperse Microspheres in Slip Flow Regime. Chemical Engineering and Technology, 2017, 40, 1758-1766.	1.5	7
82	Lattice Boltzmann model capable of mesoscopic vorticity computation. Physical Review E, 2017, 96, 053304.	2.1	8
83	Drag correlation for micro spherical particles at finite Reynolds and Knudsen numbers by lattice Boltzmann simulations. Journal of Aerosol Science, 2017, 103, 105-116.	3.8	18
84	Pore-scale study on reactive mixing of miscible solutions with viscous fingering in porous media. Computers and Fluids, 2017, 155, 146-160.	2.5	24
85	Unified implicit kinetic scheme for steady multiscale heat transfer based on the phonon Boltzmann transport equation. Physical Review E, 2017, 96, 063311.	2.1	18
86	Thermally induced rarefied gas flow in a three-dimensional enclosure with square cross-section. Physical Review Fluids, 2017, 2, .	2.5	8
87	Lattice Boltzmann simulation of separation phenomenon in a binary gaseous flow through a microchannel. Journal of Applied Physics, 2016, 120, .	2.5	14
88	Boundary scheme for linear heterogeneous surface reactions in the lattice Boltzmann method. Physical Review E, 2016, 94, 053307.	2.1	18
89	A Multiple-Relaxation-Time Lattice Boltzmann Model for General Nonlinear Anisotropic Convectionâ€“Diffusion Equations. Journal of Scientific Computing, 2016, 69, 355-390.	2.3	122
90	Localized lattice Boltzmann equation model for simulating miscible viscous displacement in porous media. International Journal of Heat and Mass Transfer, 2016, 100, 767-778.	4.8	30

#	Article	IF	Citations
91	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.	4.8	92
92	A semi-implicit gas-kinetic scheme for smooth flows. Computer Physics Communications, 2016, 205, 22-31.	7.5	5
93	Simplification of the unified gas kinetic scheme. Physical Review E, 2016, 94, 023313.	2.1	23
94	Discrete unified gas kinetic scheme for multiscale heat transfer based on the phonon Boltzmann transport equation. International Journal of Heat and Mass Transfer, 2016, 102, 944-958.	4.8	77
95	A hydrodynamically-consistent MRT lattice Boltzmann model on a 2D rectangular grid. Journal of Computational Physics, 2016, 326, 893-912.	3.8	18
96	Lattice Boltzmann method for binary fluids based on mass-conserving quasi-incompressible phase-field theory. Physical Review E, 2016, 93, 043303.	2.1	23
97	Numerical study on heat recirculation in a porous micro-combustor. Combustion and Flame, 2016, 171, 152-161.	5.2	88
98	Comparison of the lattice Boltzmann equation and discrete unified gas-kinetic scheme methods for direct numerical simulation of decaying turbulent flows. Physical Review E, 2016, 94, 043304.	2.1	41
99	Discrete unified gas kinetic scheme on unstructured meshes. Computers and Fluids, 2016, 127, 211-225.	2.5	83
100	An investigation on momentum exchange methods and refilling algorithms for lattice Boltzmann simulation of particulate flows. Computers and Fluids, 2016, 133, 1-14.	2.5	66
101	Flow Modulation by Finite-Size Neutrally Buoyant Particles in a Turbulent Channel Flow. Journal of Fluids Engineering, Transactions of the ASME, 2016, 138, .	1.5	35
102	A modified lattice Bhatnagarâ€“Grossâ€“Krook model for convection heat transfer in porous media. International Journal of Heat and Mass Transfer, 2016, 94, 269-291.	4.8	46
103	Implementation issues and benchmarking of lattice Boltzmann method for moving rigid particle simulations in a viscous flow. Computers and Mathematics With Applications, 2016, 72, 349-374.	2.7	70
104	Fundamental flame characteristics of premixed H2â€“air combustion in a planar porous micro-combustor. Chemical Engineering Journal, 2016, 283, 1187-1196.	12.7	115
105	Designing correct fluid hydrodynamics on a rectangular grid using MRT lattice Boltzmann approach. Computers and Mathematics With Applications, 2016, 72, 288-310.	2.7	15
106	Lattice Boltzmann simulation of particle-laden turbulent channel flow. Computers and Fluids, 2016, 124, 226-236.	2.5	65
107	Lattice Boltzmann study of wettability alteration in the displacement of nanoparticle-filled binary fluids. Computers and Fluids, 2016, 124, 157-169.	2.5	11
108	A coupled lattice Boltzmann model for fluid flow and diffusion in a porous medium. Wuli Xuebao/Acta Physica Sinica, 2016, 65, 014702.	0.5	9

#	Article	IF	Citations
109	Multiple-relaxation-time lattice Boltzmann model for incompressible miscible flow with large viscosity ratio and high PÃ©clet number. Physical Review E, 2015, 92, 043305.	2.1	47
110	Effects of combustor size and filling condition on stability limits of premixed H₂â€air flames in planar microcombustors. AIChE Journal, 2015, 61, 2571-2580.	3.6	6
111	A coupled discrete unified gas-kinetic scheme for Boussinesq flows. Computers and Fluids, 2015, 120, 70-81.	2.5	36
112	Numerical simulations of immiscible displacement in the cavities via lattice Boltzmann method. International Journal of Modern Physics C, 2015, 26, 1550074.	1.7	6
113	Interface-capturing lattice Boltzmann equation model for two-phase flows. Physical Review E, 2015, 91, 013302.	2.1	18
114	Multiple-relaxation-time lattice Boltzmann model for binary mixtures of nonideal fluids based on the Enskog kinetic theory. Science Bulletin, 2015, 60, 634-647.	9.0	8
115	Discrete unified gas kinetic scheme for all Knudsen number flows. II. Thermal compressible case. Physical Review E, 2015, 91, 033313.	2.1	183
116	Boundary condition for lattice Boltzmann modeling of microscale gas flows with curved walls in the slip regime. Physical Review E, 2015, 91, 043305.	2.1	50
117	A Comparative Study of LBE and DUGKS Methods for Nearly Incompressible Flows. Communications in Computational Physics, 2015, 17, 657-681.	1.7	67
118	Pore-Scale Study of the Non-Linear Mixing of Fluids with Viscous Fingering in Anisotropic Porous Media. Communications in Computational Physics, 2015, 17, 1019-1036.	1.7	7
119	A Localized Mass-Conserving Lattice Boltzmann Approach for Non-Newtonian Fluid Flows. Communications in Computational Physics, 2015, 17, 908-924.	1.7	30
120	Multi-GPU Based Lattice Boltzmann Method for Hemodynamic Simulation in Patient-Specific Cerebral Aneurysm. Communications in Computational Physics, 2015, 17, 960-974.	1.7	26
121	Volume-averaged macroscopic equation for fluid flow in moving porous media. International Journal of Heat and Mass Transfer, 2015, 82, 357-368.	4.8	57
122	A Lattice Boltzmann Model for Simulating Gas Flow in Kerogen Pores. Transport in Porous Media, 2015, 106, 285-301.	2.6	93
123	Numerical study on the fluid flow pass a square cylinder: The temperature-viscosity dependence. International Journal of Modern Physics C, 2014, 25, 1350101.	1.7	0
124	Phase-field-based lattice Boltzmann model for axisymmetric multiphase flows. Physical Review E, 2014, 90, 063311.	2.1	51
125	Shrinkage of bubbles and drops in the lattice Boltzmann equation method for nonideal gases. Physical Review E, 2014, 89, 033302.	2.1	33
126	Generalized second-order slip boundary condition for nonequilibrium gas flows. Physical Review E, 2014, 89, 013021.	2.1	31

#	Article	IF	Citations
127	Effects of density and force discretizations on spurious velocities in lattice Boltzmann equation for two-phase flows. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 195502.	2.1	5
128	Phase-field-based multiple-relaxation-time lattice Boltzmann model for incompressible multiphase flows. Physical Review E, 2014, 89, 053320.	2.1	166
129	Numerical study of heat transfer enhancement in a pipe filled with porous media by axisymmetric TLB model based on GPU. International Journal of Heat and Mass Transfer, 2014, 70, 1040-1049.	4.8	40
130	A Coupled Lattice Boltzmann Method to Solve Nernstâ€“Planck Model for Simulating Electro-osmotic Flows. Journal of Scientific Computing, 2014, 61, 222-238.	2.3	32
131	Drafting, kissing and tumbling process of two particles with different sizes. Computers and Fluids, 2014, 96, 20-34.	2.5	75
132	Rectangular Lattice Boltzmann Equation for Gaseous Microscale Flow. Advances in Applied Mathematics and Mechanics, 2014, 8, 306-330.	1.2	10
133	Lattice Boltzmann modeling of microscale oscillating Couette flow. Wuli Xuebao/Acta Physica Sinica, 2014, 63, 214703.	0.5	5
134	A lattice Boltzmann study of gas flows in a long micro-channel. Computers and Mathematics With Applications, 2013, 65, 186-193.	2.7	45
135	Discrete unified gas kinetic scheme for all Knudsen number flows: Low-speed isothermal case. Physical Review E, 2013, 88, 033305.	2.1	289
136	Evaluation of outflow boundary conditions for two-phase lattice Boltzmann equation. Physical Review E, 2013, 87, 063301.	2.1	131
137	Lattice Boltzmann method for simulations of gas-particle flows over a backward-facing step. Journal of Computational Physics, 2013, 239, 57-71.	3.8	30
138	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.	2.7	11
139	Effects of Prandtl number on mixing process in miscible Rayleighâ€“Taylor instability. International Journal of Numerical Methods for Heat and Fluid Flow, 2013, 23, 176-188.	2.8	12
140	Contour detection based on the contextual modulation of non-classical receptive field facilitation and suppression. Proceedings of SPIE, 2013, , .	0.8	1
141	Pressure Distribution of the Gaseous Flow in Microchannel: A Lattice Boltzmann Study. Communications in Computational Physics, 2013, 14, 1058-1072.	1.7	7
142	Gender recognition based on face geometric features. , 2013, , .		1
143	Lattice Boltzmann Study of Flow and Temperature Structures ofNon-Isothermal Laminar Impinging Streams. Communications in Computational Physics, 2013, 13, 835-850.	1.7	9
144	Evaluation of Three Lattice Boltzmann Models for Particulate Flows. Communications in Computational Physics, 2013, 13, 1151-1172.	1.7	28

#	Article	IF	Citations
145	Lattice Boltzmann simulation of the sedimentation of particles with thermal convection. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 084703.	0.5	6
146	Microscale boundary conditions of the lattice Boltzmann equation method for simulating microtube flows. Physical Review E, 2012, 86, 016712.	2.1	16
147	Immersed boundary lattice Boltzmann model based on multiple relaxation times. Physical Review E, 2012, 85, 016711.	2.1	40
148	Effects of force discretization on mass conservation in lattice Boltzmann equation for two-phase flows. Europhysics Letters, 2012, 99, 64005.	2.0	36
149	General bounce-back scheme for concentration boundary condition in the lattice-Boltzmann method. Physical Review E, 2012, 85, 016701.	2.1	189
150	Numerical simulation of particle capture process of fibrous filters using Lattice Boltzmann two-phase flow model. Powder Technology, 2012, 227, 111-122.	4.2	76
151	Force imbalance in lattice Boltzmann equation for two-phase flows. Physical Review E, 2011, 83, 036707.	2.1	114
152	Rectangular lattice Boltzmann model for nonlinear convectionâ€“diffusion equations. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2311-2319.	3.4	4
153	Velocity inversion of micro cylindrical Couette flow: A lattice Boltzmann study. Computers and Mathematics With Applications, 2011, 61, 3519-3527.	2.7	55
154	Numerical simulation of the flow around a porous covering square cylinder in a channel via lattice Boltzmann method. International Journal for Numerical Methods in Fluids, 2011, 65, 1217-1230.	1.6	19
155	Lattice Boltzmann simulation of some nonlinear convectionâ€“diffusion equations. Computers and Mathematics With Applications, 2011, 61, 3443-3452.	2.7	28
156	Mesoscopic methods in engineering and science. Computers and Mathematics With Applications, 2011, 61, 3401-3403.	2.7	0
157	Gas slippage effect on the permeability of circular cylinders in a square array. International Journal of Heat and Mass Transfer, 2011, 54, 3009-3014.	4.8	26
158	Multiple-relaxation-time lattice Boltzmann model for generalized Newtonian fluid flows. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 332-342.	2.4	97
159	Simultaneous incorporation of mass and force terms in the multi-relaxation-time framework for lattice Boltzmann schemes. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2219-2227.	3.4	24
160	Chequerboard effects on spurious currents in the lattice Boltzmann equation for two-phase flows. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2283-2291.	3.4	21
161	Multiple Temperature Gas Dynamic Equations for Non-equilibrium Flows. Journal of Computational Mathematics, 2011, 29, 639-660.	0.4	5
162	Gas Flow Through Square Arrays of Circular Cylinders with Klinkenberg Effect: a Lattice Boltzmann Study. Communications in Computational Physics, 2010, 8, 1052-1073.	1.7	66

#	Article	IF	Citations
163	Kinetic theory based lattice Boltzmann equation with viscous dissipation and pressure work for axisymmetric thermal flows. Journal of Computational Physics, 2010, 229, 5843-5856.	3.8	24
164	A lattice Boltzmann model for axisymmetric thermal flows through porous media. International Journal of Heat and Mass Transfer, 2010, 53, 5519-5527.	4.8	55
165	Lattice Boltzmann equation for axisymmetric thermal flows. Computers and Fluids, 2010, 39, 945-952.	2.5	48
166	Multi-relaxation-time lattice Boltzmann model for axisymmetric flows. Computers and Fluids, 2010, 39, 1542-1548.	2.5	38
167	Non-Darcy flow in disordered porous media: A lattice Boltzmann study. Computers and Fluids, 2010, 39, 2069-2077.	2.5	87
168	Finite-difference-based multiple-relaxation-times lattice Boltzmann model for binary mixtures. Physical Review E, 2010, 81, 016706.	2.1	9
169	Multicore computing of the lattice Boltzmann method: A backward-facing step flow example. , 2010, , .		0
170	NUMERICAL STUDY OF BÃ‰NARD CONVECTION WITH TEMPERATURE-DEPENDENT VISCOSITY IN A POROUS CAVITY VIA LATTICE BOLTZMANN METHOD. International Journal of Modern Physics C, 2010, 21, 1407-1419.	1.7	9
171	Lattice Boltzmann Method for Thermocapillary Flows. Advances in Applied Mathematics and Mechanics, 2010, 2, 677-684.	1.2	5
172	Lattice Boltzmann equation for microscale gas flows of binary mixtures. Physical Review E, 2009, 79, 026702.	2.1	28
173	Lattice Boltzmann model for the one-dimensional nonlinear Dirac equation. Physical Review E, 2009, 79, 066704.	2.1	15
174	GENERALIZED GAS DYNAMIC EQUATIONS WITH MULTIPLE TRANSLATIONAL TEMPERATURES. Modern Physics Letters B, 2009, 23, 237-240.	1.9	3
175	Numerical study on natural convection in a square enclosure containing a rectangular heated cylinder. Frontiers of Energy and Power Engineering in China, 2009, 3, 373-380.	0.4	10
176	Generalized Gas Dynamic Equations. , 2009, , .		3
177	Theory of the lattice Boltzmann equation: Lattice Boltzmann model for axisymmetric flows. Physical Review E, 2009, 79, 046708.	2.1	93
178	Lattice Boltzmann model for nonlinear convection-diffusion equations. Physical Review E, 2009, 79, 016701.	2.1	188
179	Incompressible lattice Boltzmann model for porous flows with large pressure gradient. Progress in Computational Fluid Dynamics, 2009, 9, 225.	0.2	7
180	Numerical Study on the Tortuosity of Porous Media via Lattice Boltzmann Method. Communications in Computational Physics, 2009, , 354-366.	1.7	12

#	Article	IF	Citations
181	A comparative study of the LBE and GKS methods for 2D near incompressible laminar flows. Journal of Computational Physics, 2008, 227, 4955-4976.	3.8	120
182	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
183	Lattice Boltzmann equation with multiple effective relaxation times for gaseous microscale flow. Physical Review E, 2008, 77, 036707.	2.1	161
184	Analysis of lattice Boltzmann equation for microscale gas flows: Relaxation times, boundary conditions and the Knudsen layer. International Journal of Computational Fluid Dynamics, 2008, 22, 465-473.	1.2	200
185	Lattice Boltzmann simulation of surface roughness effect on gaseous flow in a microchannel. Journal of Applied Physics, 2008, 104, .	2.5	73
186	Discrete effects on thermal boundary conditions for the thermal lattice Boltzmann method in simulating microscale gas flows. Europhysics Letters, 2008, 82, 44002.	2.0	14
187	Multiple-relaxation-time model for the correct thermohydrodynamic equations. Physical Review E, 2008, 78, 026705.	2.1	42
188	Lattice Boltzmann Simulation of Thermal Electro-Osmotic Flows in Micro/Nanochannels. Journal of Computational and Theoretical Nanoscience, 2008, 5, 236-246.	0.4	10
189	Thermal lattice Boltzmann equation for low Mach number flows: Decoupling model. Physical Review E, 2007, 75, 036704.	2.1	221
190	An extended Navier-Stokes formulation for gas flows in the Knudsen layer near a wall. Europhysics Letters, 2007, 80, 24001.	2.0	79
191	Lattice Boltzmann Simulation of Mixed Convection in a Driven Cavity Packed with Porous Medium. Lecture Notes in Computer Science, 2007, , 802-809.	1.3	4
192	Lattice Boltzmann simulation of dense gas flows in microchannels. Physical Review E, 2007, 76, 016707.	2.1	18
193	Study of electro-osmotic flows in microchannels packed with variable porosity media via lattice Boltzmann method. Journal of Applied Physics, 2007, 101, 104913.	2.5	28
194	Numerical Study of Cross Diffusion Effects on Double Diffusive Convection with Lattice Boltzmann Method. Lecture Notes in Computer Science, 2007, , 810-817.	1.3	5
195	Discrete effects on boundary conditions for the lattice Boltzmann equation in simulating microscale gas flows. Physical Review E, 2007, 76, 056704.	2.1	114
196	Lattice Boltzmann scheme for simulating thermal micro-flow. Physica A: Statistical Mechanics and Its Applications, 2007, 385, 59-68.	2.6	54
197	Generalized hydrodynamic model for fluid flows: From nanoscale to macroscale. Physics of Fluids, 2006, 18, 067107.	4.0	32
198	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

#	Article	IF	Citations
199	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
200	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
201	LATTICE BOLTZMANN SIMULATION ON NATURAL CONVECTION HEAT TRANSFER IN A TWO-DIMENSIONAL CAVITY FILLED WITH HETEROGENEOUSLY POROUS MEDIUM. International Journal of Modern Physics C, 2006, 17, 771-783.	1.7	29
202	THERMAL LATTICE BOLTZMANN MODEL WITH VISCOUS HEAT DISSIPATION IN THE INCOMPRESSIBLE LIMIT. International Journal of Modern Physics C, 2006, 17, 1131-1139.	1.7	5
203	LATTICE BOLTZMANN METHOD IN SIMULATION OF THERMAL MICRO-FLOW WITH TEMPERATURE JUMP. International Journal of Modern Physics C, 2006, 17, 603-614.	1.7	24
204	Lattice Boltzmann simulation of natural convection with temperature-dependent viscosity in a porous cavity. Progress in Computational Fluid Dynamics, 2005, 5, 110.	0.2	57
205	Finite-difference-based lattice Boltzmann model for dense binary mixtures. Physical Review E, 2005, 71, 026701.	2.1	54
206	Simple kinetic model for fluid flows in the nanometer scale. Physical Review E, 2005, 71, 035301.	2.1	35
207	Temperature dependence of the velocity boundary condition for nanoscale fluid flows. Physical Review E, 2005, 72, 036301.	2.1	22
208	A LATTICE BOLTZMANN MODEL FOR CONVECTION HEAT TRANSFER IN POROUS MEDIA. Numerical Heat Transfer, Part B: Fundamentals, 2005, 47, 157-177.	0.9	239
209	A lattice Boltzmann algorithm for electro-osmotic flows in microfluidic devices. Journal of Chemical Physics, 2005, 122, 144907.	3.0	72
210	Lattice-Boltzmann simulation of particle-laden flow over a backward-facing step. Chinese Physics B, 2004, 13, 1657-1664.	1.3	11
211	Preconditioned lattice-Boltzmann method for steady flows. Physical Review E, 2004, 70, 066706.	2.1	60
212	A unified incompressible lattice BGK model and its application to three-dimensional lid-driven cavity flow. Chinese Physics B, 2004, 13, 40-46.	1.3	18
213	Explicit finite-difference lattice Boltzmann method for curvilinear coordinates. Physical Review E, 2003, 67, 066709.	2.1	141
214	Discrete velocity and lattice Boltzmann models for binary mixtures of nonideal fluids. Physical Review E, 2003, 68, 035302.	2.1	44
215	THERMAL LATTICE BGK SIMULATION OF TURBULENT NATURAL CONVECTION DUE TO INTERNAL HEAT GENERATION. International Journal of Modern Physics B, 2003, 17, 173-177.	2.0	12
216	DOMAIN-DECOMPOSITION TECHNIQUE IN LATTICE BOLTZMANN METHOD. International Journal of Modern Physics B, 2003, 17, 129-133.	2.0	8

#	Article	IF	Citations
217	Lattice-BGK simulation of a two-dimensional channel flow around a square cylinder. Chinese Physics B, 2003, 12, 67-74.	1.3	40
218	LATTICE-BGK SIMULATION OF STRATIFIED FLOW OVER A BACKWARD-FACING STEP. International Journal of Modern Physics B, 2003, 17, 123-127.	2.0	2
219	Lattice Boltzmann Simulations of Fluid Flows. Lecture Notes in Computer Science, 2003, , 322-332.	1.3	3
220	Numerical and Experimental Investigation of a Streamwise Oscillating Cylinder Wake in the Presence of a Downstream Cylinder. Fluid Mechanics and Its Applications, 2003, , 415-424.	0.2	1
221	Lattice Boltzmann model for incompressible flows through porous media. Physical Review E, 2002, 66, 036304.	2.1	530
222	Non-equilibrium extrapolation method for velocity and pressure boundary conditions in the lattice Boltzmann method. Chinese Physics B, 2002, 11, 366-374.	1.3	685
223	An extrapolation method for boundary conditions in lattice Boltzmann method. Physics of Fluids, 2002, 14, 2007-2010.	4.0	674
224	Discrete lattice effects on the forcing term in the lattice Boltzmann method. Physical Review E, 2002, 65, 046308.	2.1	1,688
225	A coupled lattice BGK model for the Boussinesq equations. International Journal for Numerical Methods in Fluids, 2002, 39, 325-342.	1.6	490
226	Two new algorithms based on product system for discrete cosine transform. Signal Processing, 2001, 81, 1899-1908.	3.7	8
227	A Lattice BGK Scheme with General Propagation. Journal of Scientific Computing, 2001, 16, 569-585.	2.3	52
228	Lattice BGK Model for Incompressible Navierâ€“Stokes Equation. Journal of Computational Physics, 2000, 165, 288-306.	3.8	376
229	Parallel simulation of fluid flows and its visualization. , 0, , .		0