

# Yan Wang

## List of Publications by Year in descending order

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55  
papers

1,819  
citations

257450

24  
h-index

265206

42  
g-index

56  
all docs

56  
docs citations

56  
times ranked

903  
citing authors

#	ARTICLE	IF	CITATIONS
1	Multiphase lattice Boltzmann flux solver for incompressible multiphase flows with large density ratio. <i>Journal of Computational Physics</i> , 2015, 280, 404-423.	3.8	174
2	Development of Lattice Boltzmann Flux Solver for Simulation of Incompressible Flows. <i>Advances in Applied Mathematics and Mechanics</i> , 2014, 6, 436-460.	1.2	120
3	Robust active flow control over a range of Reynolds numbers using an artificial neural network trained through deep reinforcement learning. <i>Physics of Fluids</i> , 2020, 32, .	4.0	114
4	An immersed boundary-lattice Boltzmann flux solver and its applications to fluid-structure interaction problems. <i>Journal of Fluids and Structures</i> , 2015, 54, 440-465.	3.4	108
5	Coupled double-distribution-function lattice Boltzmann method for the compressible Navier-Stokes equations. <i>Physical Review E</i> , 2007, 76, 056705.	2.1	103
6	An improved multiphase lattice Boltzmann flux solver for three-dimensional flows with large density ratio and high Reynolds number. <i>Journal of Computational Physics</i> , 2015, 302, 41-58.	3.8	82
7	Thermal lattice Boltzmann flux solver and its application for simulation of incompressible thermal flows. <i>Computers and Fluids</i> , 2014, 94, 98-111.	2.5	77
8	A mass-conserved diffuse interface method and its application for incompressible multiphase flows with large density ratio. <i>Journal of Computational Physics</i> , 2015, 290, 336-351.	3.8	77
9	A Simplified Lattice Boltzmann Method without Evolution of Distribution Function. <i>Advances in Applied Mathematics and Mechanics</i> , 2017, 9, 1-22.	1.2	68
10	AN IMPROVED THERMAL LATTICE BOLTZMANN MODEL FOR FLOWS WITHOUT VISCOUS HEAT DISSIPATION AND COMPRESSION WORK. <i>International Journal of Modern Physics C</i> , 2008, 19, 125-150.	1.7	44
11	Simulation of three-component fluid flows using the multiphase lattice Boltzmann flux solver. <i>Journal of Computational Physics</i> , 2016, 314, 228-243.	3.8	43
12	Numerical simulation of flows from free molecular regime to continuum regime by a DVM with streaming and collision processes. <i>Journal of Computational Physics</i> , 2016, 306, 291-310.	3.8	42
13	From Lattice Boltzmann Method to Lattice Boltzmann Flux Solver. <i>Entropy</i> , 2015, 17, 7713-7735.	2.2	41
14	Development of LBGK and incompressible LBGK-based lattice Boltzmann flux solvers for simulation of incompressible flows. <i>International Journal for Numerical Methods in Fluids</i> , 2014, 75, 344-364.	1.6	39
15	An immersed boundary-simplified sphere function-based gas kinetic scheme for simulation of 3D incompressible flows. <i>Physics of Fluids</i> , 2017, 29, .	4.0	39
16	Boundary condition-enforced immersed boundary-lattice Boltzmann flux solver for thermal flows with Neumann boundary conditions. <i>Journal of Computational Physics</i> , 2016, 306, 237-252.	3.8	38
17	Three-Dimensional Lattice Boltzmann Flux Solver and Its Applications to Incompressible Isothermal and Thermal Flows. <i>Communications in Computational Physics</i> , 2015, 18, 593-620.	1.7	33
18	Explicit formulations of gas-kinetic flux solver for simulation of incompressible and compressible viscous flows. <i>Journal of Computational Physics</i> , 2015, 300, 492-519.	3.8	31

#	ARTICLE	IF	CITATIONS
19	A free energy-based surface tension force model for simulation of multiphase flows by level-set method. <i>Journal of Computational Physics</i> , 2017, 345, 404-426.	3.8	30
20	A fractional step axisymmetric lattice Boltzmann flux solver for incompressible swirling and rotating flows. <i>Computers and Fluids</i> , 2014, 96, 204-214.	2.5	29
21	An efficient immersed boundary-lattice Boltzmann flux solver for simulation of 3D incompressible flows with complex geometry. <i>Computers and Fluids</i> , 2016, 124, 54-66.	2.5	29
22	An adaptive mesh refinement-multiphase lattice Boltzmann flux solver for simulation of complex binary fluid flows. <i>Physics of Fluids</i> , 2017, 29, .	4.0	28
23	Development of a discrete gas-kinetic scheme for simulation of two-dimensional viscous incompressible and compressible flows. <i>Physical Review E</i> , 2016, 93, 033311.	2.1	27
24	Comparative study of discrete velocity method and high-order lattice Boltzmann method for simulation of rarefied flows. <i>Computers and Fluids</i> , 2017, 146, 125-142.	2.5	26
25	An improved multiphase lattice Boltzmann flux solver for the simulation of incompressible flow with large density ratio and complex interface. <i>Physics of Fluids</i> , 2021, 33, 033306.	4.0	26
26	Development of discrete gas kinetic scheme for simulation of 3D viscous incompressible and compressible flows. <i>Journal of Computational Physics</i> , 2016, 319, 129-144.	3.8	24
27	A decoupling multiple-relaxation-time lattice Boltzmann flux solver for non-Newtonian power-law fluid flows. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2016, 235, 20-28.	2.4	24
28	A simple mass-conserved level set method for simulation of multiphase flows. <i>Physics of Fluids</i> , 2018, 30, .	4.0	24
29	Numerical simulations of gas resonant oscillations in a closed tube using lattice Boltzmann method. <i>International Journal of Heat and Mass Transfer</i> , 2008, 51, 3082-3090.	4.8	22
30	Oblique drop impact on thin film: Splashing dynamics at moderate impingement angles. <i>Physics of Fluids</i> , 2020, 32, .	4.0	21
31	A mass-conserved fractional step axisymmetric lattice Boltzmann flux solver for incompressible multiphase flows with large density ratio. <i>Physics of Fluids</i> , 2020, 32, .	4.0	20
32	A simplified circular function-based gas kinetic scheme for simulation of incompressible flows. <i>International Journal for Numerical Methods in Fluids</i> , 2017, 85, 583-598.	1.6	18
33	An interfacial lattice Boltzmann flux solver for simulation of multiphase flows at large density ratio. <i>International Journal of Multiphase Flow</i> , 2019, 116, 100-112.	3.4	18
34	Hydrodynamic performance of an unconstrained flapping swimmer with flexible fin: A numerical study. <i>Physics of Fluids</i> , 2022, 34, .	4.0	17
35	Numerical study on the freely falling plate: Effects of density ratio and thickness-to-length ratio. <i>Physics of Fluids</i> , 2016, 28, .	4.0	15
36	An immersed boundary-lattice boltzmann flux solver in a moving frame to study three-dimensional freely falling rigid bodies. <i>Journal of Fluids and Structures</i> , 2017, 68, 444-465.	3.4	14

#	ARTICLE	IF	CITATIONS
37	A fractional-step lattice Boltzmann flux solver for axisymmetric thermal flows. Numerical Heat Transfer, Part B: Fundamentals, 2016, 69, 111-129.	0.9	13
38	A generalized minimal residual method-based immersed boundary-lattice Boltzmann flux solver coupled with finite element method for non-linear fluid-structure interaction problems. Physics of Fluids, 2019, 31, .	4.0	13
39	An immersed boundary-gas kinetic flux solver for simulation of incompressible flows. Computers and Fluids, 2017, 142, 45-56.	2.5	12
40	Implicit heat flux correction-based immersed boundary-finite volume method for thermal flows with Neumann boundary conditions. Journal of Computational Physics, 2019, 386, 64-83.	3.8	12
41	On the re-initialization of fluid interfaces in diffuse interface method. Computers and Fluids, 2018, 166, 209-217.	2.5	11
42	On the immersed boundary-lattice Boltzmann simulations of incompressible flows with freely moving objects. International Journal for Numerical Methods in Fluids, 2017, 83, 331-350.	1.6	10
43	Development of an immersed boundary-multiphase lattice Boltzmann flux solver with high density ratio for contact line dynamics. Physics of Fluids, 2021, 33, 057101.	4.0	10
44	Comparative study of 1D, 2D and 3D simplified gas kinetic schemes for simulation of inviscid compressible flows. Applied Mathematical Modelling, 2017, 43, 85-109.	4.2	8
45	High-order gas kinetic flux solver for simulation of two dimensional incompressible flows. Physics of Fluids, 2021, 33, 017107.	4.0	8
46	A simplified lattice Boltzmann flux solver for multiphase flows with large density ratio. International Journal for Numerical Methods in Fluids, 2021, 93, 1895-1912.	1.6	8
47	An implicit simplified sphere function-based gas kinetic scheme for simulation of 3D incompressible isothermal flows. Computers and Fluids, 2018, 160, 204-218.	2.5	7
48	Recent advances in theory, simulations, and experiments on multiphase flows. Physics of Fluids, 2022, 34, .	4.0	5
49	Development of axisymmetric lattice Boltzmann flux solver for complex multiphase flows. Modern Physics Letters B, 2018, 32, 1840005.	1.9	3
50	An effective lattice Boltzmann flux solver on arbitrarily unstructured meshes. Modern Physics Letters B, 2018, 32, 1840012.	1.9	3
51	Extension of lattice Boltzmann flux solver for simulation of compressible multi-component flows. Modern Physics Letters B, 2018, 32, 1840001.	1.9	2
52	Numerical Investigation on Head-On Collisions of Binary Micro-Droplets by an Improved Multiphase Lattice Boltzmann Flux Solver. , 2016, , .		0
53	Nonlinear flutter analysis of composite panels. Modern Physics Letters B, 2018, 32, 1840043.	1.9	0
54	A diffuse interface IBM for compressible flows with Neumann boundary condition. International Journal of Modern Physics B, 2020, 34, 2040070.	2.0	0

#	ARTICLE	IF	CITATIONS
55	10.1063/5.0077312.1., 2022,, .		0