## Zhen Chen

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/562921/publications.pdf

Version: 2024-02-01

46 papers

1,133 citations

20 h-index 32 g-index

48 all docs 48 docs citations

times ranked

48

755 citing authors

#	Article	IF	Citations
1	Isotherm-evolution-based interface tracking algorithm for modelling temperature-driven solid-liquid phase-change in multiphase flows. International Journal of Thermal Sciences, 2022, 177, 107541.	2.6	5
2	Multiphase smoothed particle hydrodynamics modeling of forced liquid sloshing. International Journal for Numerical Methods in Fluids, 2021, 93, 411-428.	0.9	6
3	High-order gas kinetic flux solver for simulation of two dimensional incompressible flows. Physics of Fluids, 2021, 33, 017107.	1.6	8
4	A simplified lattice Boltzmann flux solver for multiphase flows with large density ratio. International Journal for Numerical Methods in Fluids, 2021, 93, 1895-1912.	0.9	8
5	Phase-field-simplified lattice Boltzmann method for modeling solid-liquid phase change. Physical Review E, 2021, 103, 023308.	0.8	7
6	An improved multiphase lattice Boltzmann flux solver for the simulation of incompressible flow with large density ratio and complex interface. Physics of Fluids, 2021, 33, 033306.	1.6	26
7	Gas kinetic flux solver based high-order finite-volume method for simulation of two-dimensional compressible flows. Physical Review E, 2021, 104, 015305.	0.8	6
8	Ternary phase-field simplified multiphase lattice Boltzmann method and its application to compound droplet dynamics on solid surface in shear flow. Physical Review Fluids, 2021, 6, .	1.0	8
9	Efficient boundary condition-enforced immersed boundary method for incompressible flows with moving boundaries. Journal of Computational Physics, 2021, 441, 110425.	1.9	24
10	Mixed convection between rotating sphere and concentric cubical enclosure. Physics of Fluids, 2021, 33, .	1.6	10
11	Simplified lattice Boltzmann method for nonâ€Newtonian powerâ€law fluid flows. International Journal for Numerical Methods in Fluids, 2020, 92, 38-54.	0.9	31
12	Reduced order modeling-based discrete unified gas kinetic scheme for rarefied gas flows. Physics of Fluids, 2020, 32, 067108.	1.6	19
13	On numerical diffusion of simplified lattice Boltzmann method. International Journal for Numerical Methods in Fluids, 2020, 92, 1198-1211.	0.9	7
14	Immersed boundary–simplified thermal lattice Boltzmann method for incompressible thermal flows. Physics of Fluids, 2020, 32, .	1.6	45
15	Double distribution function-based discrete gas kinetic scheme for viscous incompressible and compressible flows. Journal of Computational Physics, 2020, 412, 109428.	1.9	5
16	Oblique drop impact on thin film: Splashing dynamics at moderate impingement angles. Physics of Fluids, 2020, 32, .	1.6	21
17	An improved discrete gas-kinetic scheme for two-dimensional viscous incompressible and compressible flows. Physics of Fluids, 2019, 31, .	1.6	10
18	A multiphase smoothed particle hydrodynamics model with lower numerical diffusion. Journal of Computational Physics, 2019, 382, 177-201.	1.9	32

#	Article	IF	CITATIONS
19	An improved axisymmetric lattice Boltzmann flux solver for axisymmetric isothermal/thermal flows. International Journal for Numerical Methods in Fluids, 2019, 90, 632-650.	0.9	2
20	Study on one-dimensional softening with localization via integrated MPM and SPH. Computational Particle Mechanics, 2019, 6, 629-636.	1.5	3
21	A kinetic theory-based axisymmetric lattice Boltzmann flux solver for isothermal and thermal swirling flows. Journal of Computational Physics, 2019, 392, 141-160.	1.9	9
22	A simplified axisymmetric lattice Boltzmann method for incompressible swirling and rotating flows. Physics of Fluids, 2019, 31, 023605.	1.6	14
23	Multiphase Godunov-Type Smoothed Particle Hydrodynamics Method with Approximate Riemann Solvers. International Journal of Computational Methods, 2019, 16, 1846010.	0.8	4
24	Third-order discrete unified gas kinetic scheme for continuum and rarefied flows: Low-speed isothermal case. Physical Review E, 2018, 97, 023306.	0.8	17
25	On improvements of simplified and highly stable lattice Boltzmann method: Formulations, boundary treatment, and stability analysis. International Journal for Numerical Methods in Fluids, 2018, 87, 161-179.	0.9	43
26	An improved <scp>SPH</scp> model for multiphase flows with large density ratios. International Journal for Numerical Methods in Fluids, 2018, 86, 167-184.	0.9	14
27	Numerical Investigation on the Water Entry of Convex Objects Using a Multiphase Smoothed Particle Hydrodynamics Model. International Journal of Computational Methods, 2018, 15, 1850008.	0.8	9
28	Improved fully implicit discrete-velocity method for efficient simulation of flows in all flow regimes. Physical Review E, 2018, 98, .	0.8	24
29	Simplified multiphase lattice Boltzmann method for simulating multiphase flows with large density ratios and complex interfaces. Physical Review E, 2018, 98, .	0.8	54
30	Highly accurate simplified lattice Boltzmann method. Physics of Fluids, 2018, 30, .	1.6	40
31	An improved discrete velocity method (DVM) for efficient simulation of flows in all flow regimes. Physics of Fluids, 2018, 30, .	1.6	38
32	High-order simplified thermal lattice Boltzmann method for incompressible thermal flows. International Journal of Heat and Mass Transfer, 2018, 127, 1-16.	2.5	31
33	Immersed boundary-simplified lattice Boltzmann method for incompressible viscous flows. Physics of Fluids, 2018, 30, .	1.6	45
34	The Simplified Lattice Boltzmann Method on Non-Uniform Meshes. Communications in Computational Physics, 2018, 23, .	0.7	18
35	An immersed boundary-gas kinetic flux solver for simulation of incompressible flows. Computers and Fluids, 2017, 142, 45-56.	1.3	12
36	A free energy-based surface tension force model for simulation of multiphase flows by level-set method. Journal of Computational Physics, 2017, 345, 404-426.	1.9	30

## ZHEN CHEN

#	Article	IF	CITATION
37	Three-dimensional simplified and unconditionally stable lattice Boltzmann method for incompressible isothermal and thermal flows. Physics of Fluids, 2017, 29, 053601.	1.6	27
38	A Simplified Lattice Boltzmann Method without Evolution of Distribution Function. Advances in Applied Mathematics and Mechanics, 2017, 9, 1-22.	0.7	68
39	A simplified thermal lattice Boltzmann method without evolution of distribution functions. International Journal of Heat and Mass Transfer, 2017, 105, 741-757.	2.5	40
40	A Truly Second-Order and Unconditionally Stable Thermal Lattice Boltzmann Method. Applied Sciences (Switzerland), 2017, 7, 277.	1.3	18
41	An SPH pressure correction algorithm for multiphase flows with large density ratio. International Journal for Numerical Methods in Fluids, 2016, 81, 765-788.	0.9	12
42	An SPH model for multiphase flows with complex interfaces and large density differences. Journal of Computational Physics, 2015, 283, 169-188.	1.9	154
43	Numerical studies on sloshing in rectangular tanks using a tree-based adaptive solver and experimental validation. Ocean Engineering, 2014, 82, 20-31.	1.9	20
44	A Numerical Investigation Into the Impact Pressures of Different Base Forms Using SPH Method. , 2014, , .		0
45	An investigation into the pressure on solid walls in 2D sloshing using SPH method. Ocean Engineering, 2013, 59, 129-141.	1.9	73
46	A comparative study of truly incompressible and weakly compressible SPH methods for free surface incompressible flows. International Journal for Numerical Methods in Fluids, 2013, 73, 813-829.	0.9	26