Hai-Bao Hu

List of Publications by Year
in descending order

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36 papers	701 citations	623734 14 h-index	552781 26 g-index
36 all docs	36 docs citations	36 times ranked	736 citing authors

#	Article	IF	Citations
1	Significant and stable drag reduction with air rings confined by alternated superhydrophobic and hydrophilic strips. Science Advances, 2017, 3, e1603288.	10.3	127
2	Improved lattice Boltzmann modeling of binary flow based on the conservative Allen-Cahn equation. Physical Review E, 2016, 94, 023311.	2.1	80
3	Maintenance of air layer and drag reduction on superhydrophobic surface. Ocean Engineering, 2017, 130, 328-335.	4.3	80
4	Selectively splitting a droplet using superhydrophobic stripes on hydrophilic surfaces. Physical Chemistry Chemical Physics, 2015, 17, 13800-13803.	2.8	47
5	Contact angle and impinging process of droplets on partially grooved hydrophobic surfaces. Applied Thermal Engineering, 2015, 85, 356-364.	6.0	39
6	Effect of a surface tension gradient on the slip flow along a superhydrophobic air-water interface. Physical Review Fluids, 2018, 3, .	2.5	39
7	No-Loss Transportation of Water Droplets by Patterning a Desired Hydrophobic Path on a Superhydrophobic Surface. Langmuir, 2016, 32, 7339-7345.	3.5	27
8	Resistance and wave characterizations of inland vessels in the fully-confined waterway. Ocean Engineering, 2020, 210, 107580.	4.3	25
9	Droplet impact on regular micro-grooved surfaces. Chinese Physics B, 2013, 22, 084702.	1.4	17
10	Effects of viscous heating and wall-fluid interaction energy on rate-dependent slip behavior of simple fluids. Physical Review E, 2017, 96, 033110.	2.1	17
11	A comparative analysis of the effective and local slip lengths for liquid flows over a trapped nanobubble. International Journal of Multiphase Flow, 2018, 104, 166-173.	3.4	17
12	Identifying two regimes of slip of simple fluids over smooth surfaces with weak and strong wall-fluid interaction energies. Journal of Chemical Physics, 2017, 146, 034701.	3.0	16
13	Molecular droplets vs bubbles: Effect of curvature on surface tension and Tolman length. Physics of Fluids, 2021, 33, .	4.0	15
14	Rebound behaviors of droplets impacting on a superhydrophobic surface. Science China: Physics, Mechanics and Astronomy, 2013, 56, 960-965.	5.1	14
15	Dynamic interaction of a bubble and discontinuous boundaries: A three-dimensional study with the fast multipole boundary element method. Engineering Analysis With Boundary Elements, 2020, 110, 1-15.	3.7	13
16	A GPU-accelerated solver for turbulent flow and scalar transport based on the Lattice Boltzmann method. Computers and Fluids, 2018, 173, 29-36.	2.5	12
17	Nonlinear dynamics of a cavitation bubble pair near a rigid boundary in a standing ultrasonic wave field. Ultrasonics Sonochemistry, 2020, 64, 104969.	8.2	12
18	Molecular dynamics simulations of the nano-droplet impact process on hydrophobic surfaces. Chinese Physics B, 2014, 23, 074702.	1.4	11

#	Article	IF	Citations
19	Many-body dissipative particle dynamics study of the local slippage over superhydrophobic surfaces. Physics of Fluids, 2021, 33, .	4.0	11
20	The local slip length and flow fields over nanostructured superhydrophobic surfaces. International Journal of Multiphase Flow, 2020, 126, 103258.	3.4	10
21	In Situ Grafting Hydrophilic Polymeric Layer for Stable Drag Reduction. Langmuir, 2019, 35, 7205-7211.	3.5	9
22	Ship maneuvering prediction based on virtual captive model test and system dynamics approaches. Journal of Hydrodynamics, 2022, 34, 259-276.	3.2	8
23	Lattice Boltzmann simulations of turbulent channel flow and heat transport by incorporating the Vreman model. Applied Thermal Engineering, 2018, 129, 463-471.	6.0	7
24	Simulation of the early stage water flooding through an opening using boundary element method. Ocean Engineering, 2019, 186, 106086.	4.3	7
25	Speed dependence of integrated drag reduction in turbulent flow with polymer injection. Experiments in Fluids, 2021, 62, 1.	2.4	7
26	Experimental investigation of flow past a circular cylinder with hydrophobic coating. Journal of Hydrodynamics, 2018, 30, 992-1000.	3.2	6
27	Manipulating dynamic drops using a hybrid superhydrophobic/hydrophilic surface. Applied Surface Science, 2016, 387, 1225-1229.	6.1	5
28	Directional and sustainable transportation of water droplets using lubricated carbon fibers on a superhydrophobic substrate. Applied Surface Science, 2020, 502, 143904.	6.1	4
29	Electric and viscous correction for viscous potential flow analysis of electrohydrodynamic instability of an electrified leaky-dielectric jet. Physics of Fluids, 2021, 33, .	4.0	4
30	Noise reduction in cavity flow by addition of porous media. Acta Mechanica Sinica/Lixue Xuebao, 2022, 38, .	3.4	4
31	Transverse effect on liquid viscosity: A many-body dissipative particle dynamics simulation study. Physics of Fluids, 2022, 34, 012006.	4.0	3
32	Artificially intelligent control of drag reduction around a circular cylinder based on wall pressure feedback. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 084701.	0.5	3
33	Instantaneous drag increase on alternate transverse superhydrophobic strips. Tribology International, 2021, 153, 106613.	5.9	2
34	Weakly nonlinear instability of annular viscous sheets. Physics of Fluids, 2021, 33, 034121.	4.0	2
35	Ship Hydrodynamics of Several Typical Scenes During Inland Waterway Transport. IOP Conference Series: Earth and Environmental Science, 2021, 697, 012003.	0.3	1
36	Extracting Coherent Structures in Near-Wall Turbulence Based on Wavelet Analysis. , 0, , .		0