Hao-Ran Liu

List of Publications by Year
in descending order

21 papers	467 citations	13 h-index
21 all docs	21 docs citations	21 times ranked

687363

713466

21 g-index

376 citing authors

#	Article	IF	Citations
1	A diffuse-interface immersed-boundary method for two-dimensional simulation of flows with moving contact lines on curved substrates. Journal of Computational Physics, 2015, 294, 484-502.	3.8	69
2	Dynamics of drop impact onto a solid sphere: spreading and retraction. Journal of Fluid Mechanics, 2017, 824, .	3.4	51
3	Fluidâ€"structure interaction involving dynamic wetting: 2D modeling and simulations. Journal of Computational Physics, 2017, 348, 45-65.	3.8	45
4	On the maximal spreading of impacting compound drops. Journal of Fluid Mechanics, 2018, 854, .	3.4	42
5	On the contact-line pinning in cavity formation during solidâ€"liquid impact. Journal of Fluid Mechanics, 2015, 783, 504-525.	3.4	39
6	Origin of Batch Hydrothermal Fluid Behavior and Its Influence on Nanomaterial Synthesis. Matter, 2020, 2, 1270-1282.	10.0	31
7	A fully 3D simulation of fluid-structure interaction with dynamic wetting and contact angle hysteresis. Journal of Computational Physics, 2020, 420, 109709.	3.8	27
8	An efficient phase-field method for turbulent multiphase flows. Journal of Computational Physics, 2021, 446, 110659.	3.8	25
9	Entrapping an impacting particle at a liquidâ€"gasÂinterface. Journal of Fluid Mechanics, 2018, 841, 1073-1084.	3.4	24
10	Regime transitions in thermally driven high-Rayleigh number vertical convection. Journal of Fluid Mechanics, 2021, 917, .	3.4	19
11	Two-layer thermally driven turbulence: mechanisms for interface breakup. Journal of Fluid Mechanics, 2021, 913, .	3.4	15
12	Head-on collision of two immiscible droplets of different components. Physics of Fluids, 2020, 32, .	4.0	14
13	Heat transfer in turbulent Rayleighâ€"BÃ©nard convection through two immiscible fluid layers. Journal of Fluid Mechanics, 2022, 938, .	3.4	13
14	Enhancing heat transport in multiphase Rayleighâ€"BÃ©nard turbulence by changing the plateâ€"liquid contact angles. Journal of Fluid Mechanics, 2022, 933, .	3.4	10
15	Submersion of impacting spheres at low Bond and Weber numbers owing to a confined pool. Journal of Fluid Mechanics, 2020, 884, .	3.4	9
16	Motion of self-rewetting drop on a substrate with a constant temperature gradient. Journal of Fluid Mechanics, 2021, 915, .	3.4	8
17	Early stage of delayed coalescence of soluble paired droplets: A numerical study. Physics of Fluids, 2021, 33, .	4.0	7
18	Simulation of incompressible multiphase flows with complex geometry using etching multiblock method. Applied Mathematics and Mechanics (English Edition), 2016, 37, 1405-1418.	3.6	6

#	Article	IF	Citations
19	Buoyancy-driven bubbles in a constricted vertical capillary. Physics of Fluids, 2022, 34, .	4.0	6
20	Simulation of flows with moving contact lines on a dual-resolution Cartesian grid using a diffuse-interface immersed-boundary method. Journal of Hydrodynamics, 2017, 29, 774-781.	3.2	4
21	Dynamics of viscoelastic drops impacting onto a hydrophobic solid substrate. Scientia Sinica: Physica, Mechanica Et Astronomica, 2018, 48, 094705.	0.4	3