Hang Ding

List of Publications by Year in descending order

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44 papers 2,256 citations

304743

22

h-index

243625 44 g-index

44 all docs

44 docs citations

times ranked

44

1642 citing authors

#	Article	IF	Citations
1	Diffuse interface model for incompressible two-phase flows with large density ratios. Journal of Computational Physics, 2007, 226, 2078-2095.	3.8	524
2	Wetting condition in diffuse interface simulations of contact line motion. Physical Review E, 2007, 75, 046708.	2.1	261
3	Numerical Simulations of Flows with Moving Contact Lines. Annual Review of Fluid Mechanics, 2014, 46, 97-119.	25.0	248
4	Inertial effects in droplet spreading: a comparison between diffuse-interface and level-set simulations. Journal of Fluid Mechanics, 2007, 576, 287-296.	3.4	125
5	Onset of motion of a three-dimensional droplet on a wall in shear flow at moderate Reynolds numbers. Journal of Fluid Mechanics, 2008, 599, 341-362.	3.4	90
6	Linear stability analysis and numerical simulation of miscible two-layer channel flow. Physics of Fluids, 2009, 21 , .	4.0	89
7	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
8	Propagation of capillary waves and ejection of small droplets in rapid droplet spreading. Journal of Fluid Mechanics, 2012, 697, 92-114.	3.4	65
9	Pressure-driven miscible two-fluid channel flow with density gradients. Physics of Fluids, 2009, 21, .	4.0	58
10	Diffuse interface simulation of ternary fluids in contact with solid. Journal of Computational Physics, 2016, 309, 37-51.	3.8	57
11	Sliding, pinch-off and detachment of a droplet on a wall in shear flow. Journal of Fluid Mechanics, 2010, 644, 217-244.	3.4	56
12	Dynamics of drop impact onto a solid sphere: spreading and retraction. Journal of Fluid Mechanics, 2017, 824, .	3.4	51
13	Linear and nonlinear spatio-temporal instability in laminar two-layer flows. Journal of Fluid Mechanics, 2010, 656, 458-480.	3.4	49
14	Fluid–structure interaction involving dynamic wetting: 2D modeling and simulations. Journal of Computational Physics, 2017, 348, 45-65.	3.8	45
15	On the maximal spreading of impacting compound drops. Journal of Fluid Mechanics, 2018, 854, .	3.4	42
16	On the contact-line pinning in cavity formation during solid–liquid impact. Journal of Fluid Mechanics, 2015, 783, 504-525.	3.4	39
17	Film deposition and transition on a partially wetting plate in dip coating. Journal of Fluid Mechanics, 2016, 791, 358-383.	3.4	36
18	The inertial regime of drop impact on an anisotropic porous substrate. Journal of Fluid Mechanics, 2012, 691, 546-567.	3.4	29

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19	Numerical study on droplet generation in axisymmetric flow focusing upon actuation. Physics of Fluids, 2018, 30, .	4.0	29
20	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
21	Entrapping an impacting particle at a liquid–gasÂinterface. Journal of Fluid Mechanics, 2018, 841, 1073-1084.	3.4	24
22	Inertial coalescence of droplets on a partially wetting substrate. Physics of Fluids, 2013, 25, .	4.0	23
23	Directed motion of an impinging water droplet—seesaw effect. Journal of Materials Chemistry A, 2020, 8, 7889-7896.	10.3	23
24	Ratchet mechanism of drops climbing a vibrated oblique plate. Journal of Fluid Mechanics, 2018, 835, .	3.4	20
25	The correspondence between drag enhancement and vortical structures in turbulent Taylor–Couette flows with polymer additives: aÂstudy of curvature dependence. Journal of Fluid Mechanics, 2019, 881, 602-616.	3.4	20
26	Experimental and numerical investigations on interface coupling of coaxial liquid jets in co-flow focusing. Physics of Fluids, 2020, 32, .	4.0	20
27	Head-on collision of two immiscible droplets of different components. Physics of Fluids, 2020, 32, .	4.0	14
28	Forced dewetting in a capillary tube. Journal of Fluid Mechanics, 2019, 859, 308-320.	3.4	12
29	Interfacial instability and transition of jetting and dripping modes in a co-flow focusing process. Physics of Fluids, 2021, 33, .	4.0	12
30	Instability analysis of the cone–jet flow in liquid-driven flow focusing. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	11
31	Nonlinear dynamics and manipulation of dripping in capillary flow focusing. Science China: Physics, Mechanics and Astronomy, $2019, 62, 1$.	5.1	10
32	Submersion of impacting spheres at low Bond and Weber numbers owing to a confined pool. Journal of Fluid Mechanics, 2020, 884, .	3.4	9
33	Motion of self-rewetting drop on a substrate with a constant temperature gradient. Journal of Fluid Mechanics, 2021, 915, .	3.4	8
34	Early stage of delayed coalescence of soluble paired droplets: A numerical study. Physics of Fluids, 2021, 33, .	4.0	7
35	Experimental and numerical investigations on characteristics of coaxial liquid cone in coflow focusing. Physical Review Fluids, 2022, 7, .	2.5	7
36	On the maximal spreading of drops impacting onto a no-slip substrate. Physics of Fluids, 2022, 34, .	4.0	7

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37	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
38	Buoyancy-driven bubbles in a constricted vertical capillary. Physics of Fluids, 2022, 34, .	4.0	6
39	A Comparison Study of Numerical Methods for Compressible Two-Phase Flows. Advances in Applied Mathematics and Mechanics, 2017, 9, 1111-1132.	1.2	5
40	Digital flow rate sensor based on isovolumetric droplet discretization effect by a three-supersurface structure. Microfluidics and Nanofluidics, 2019, 23, 1.	2.2	5
41	On the compound sessile drops: configuration boundaries and transitions. Journal of Fluid Mechanics, 2021, 917, .	3.4	5
42	Simulation of Incompressible Viscous Flows by Local DFD-Immersed Boundary Method. Advances in Applied Mathematics and Mechanics, 2012, 4, 311-324.	1.2	5
43	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
44	Impact of superhydrophobic sphere onto a pool covered by oil layer. Physics of Fluids, 2022, 34, 032111.	4.0	4