Jiayi Zhao

List of Publications by Year
in descending order

20	257	1039406 9	940134 16
papers	citations	h-index	g-index

20	20	20	123
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dynamical behaviors of droplet impingement and spreading on chemically heterogeneous surfaces. Applied Surface Science, 2017, 400, 515-523.	3.1	37
2	A review of many-body dissipative particle dynamics (MDPD): Theoretical models and its applications. Physics of Fluids, 2021, 33, .	1.6	30
3	Following or Against Topographic Wettability Gradient: Movements of Droplets on a Micropatterned Surface. Langmuir, 2017, 33, 5328-5335.	1.6	29
4	Spontaneous wetting transition of droplet coalescence on immersed micropillared surfaces. Applied Mathematical Modelling, 2018, 63, 390-404.	2.2	27
5	Droplet Sliding: The Numerical Observation of Multiple Contact Angle Hysteresis. Langmuir, 2019, 35, 9970-9978.	1.6	20
6	Droplets motion on chemically/topographically heterogeneous surfaces. Molecular Simulation, 2016, 42, 1452-1459.	0.9	18
7	Effects of a chemically heterogeneous island on the dynamic contact angles of droplets. Applied Surface Science, 2019, 486, 337-343.	3.1	17
8	Viscometric flow for a many-body dissipative particle dynamics (MDPD) fluid with Leesâ€“Edwards boundary condition. Molecular Simulation, 2018, 44, 213-224.	0.9	13
9	Study on stretching liquid bridges with symmetric and asymmetric surface wettability. Physical Review Fluids, 2020, 5, .	1.0	10
10	Rheology of polymers in many-body dissipative particle dynamics simulations: Schmidt number effect. Molecular Simulation, 2018, 44, 797-814.	0.9	9
11	Influence of thermal fluctuations on nanoscale free-surface flows: A many-body dissipative particle dynamics study. Physics of Fluids, 2021, 33, 112004.	1.6	8
12	Post-impact dynamics of droplet on bare stranded overhead power transmission lines with varying surface properties. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 609, 125690.	2.3	7
13	Viscosity measurement and simulation of microbubble wetting on flat surfaces with many-body dissipative particle dynamics model. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 608, 125559.	2.3	7
14	Numerical study on the bouncing dynamics of droplets impacting on a macro-textured superhydrophobic surface. Computers and Fluids, 2022, 238, 105383.	1.3	7
15	Rupture process of liquid bridges: The effects of thermal fluctuations. Physical Review E, 2020, 102, 023116.	0.8	6
16	Coalescence-induced jumping of droplets on superhydrophobic substrates with a beam structure. Applied Surface Science, 2022, 582, 152284.	3.1	5
17	An energy-conservative many-body dissipative particle dynamics model for thermocapillary drop motion. Physics of Fluids, 2022, 34, .	1.6	5
18	Modified thermal periodic Poiseuille and Lees-Edwards boundary conditions for energy conservative dissipative particle dynamics. International Communications in Heat and Mass Transfer, 2021, 123, 105173.	2.9	2

#	Article	IF	Citations
19	The calibration for many-body dissipative particle dynamics by using back-propagation neural networks. Molecular Simulation, 0, , 1-10.	0.9	0
20	Analytical prediction of electrowetting-induced jumping motion for droplets on textured hydrophobic substrates: Effects of the wetting states. Physics of Fluids, 2022, 34, 032001.	1.6	0