Xiwen Zhang

List of Publications by Year
in descending order

#	Article	IF	Citations
1	How surface roughness promotes or suppresses drop splash. Physics of Fluids, 2022, 34, .	4.0	14
2	Deep-learning-based super-resolution reconstruction of high-speed imaging in fluids. Physics of Fluids, 2022, 34, .	4.0	22
3	10.1063/5.0078644.8. , 2022, , .		0
4	10.1063/5.0079494.7. , 2022, , .		0
5	Three-dimensional measurement of the droplets out of focus in shadowgraphy systems via deep learning-based image-processing method. Physics of Fluids, 2022, 34, .	4.0	4
6	How micropatterns affect the anti-icing performance of superhydrophobic surfaces. International Journal of Heat and Mass Transfer, 2022, 195, 123196.	4.8	13
7	Screech feedback loop and mode staging process of axisymmetric underexpanded jets. Experimental Thermal and Fluid Science, 2021, 122, 110323.	2.7	14
8	A many-body dissipative particle dynamics study of eccentric droplets impacting inclined fiber. Physics of Fluids, 2021, 33, 042001.	4.0	19
9	Reversed role of liquid viscosity on drop splash. Physics of Fluids, 2021, 33, .	4.0	21
10	Effect of wettability on droplet impact: Spreading and splashing. Experimental Thermal and Fluid Science, 2021, 124, 110369.	2.7	47
11	Study on a mesoscopic model of droplets freezing considering the recalescence process. Physics of Fluids, 2021, 33, .	4.0	9
12	Adsorption properties of albumin and fibrinogen on hydrophilic/hydrophobic TiO_2 surfaces: A molecular dynamics study. Colloids and Surfaces B: Biointerfaces, 2021, 207, 111994.	5.0	15
13	The feedback loops of discrete tones in under-expanded impinging jets. Physics of Fluids, 2021, 33, 106112.	4.0	8
14	A many-body dissipative particle dynamics with energy conservation study of droplets icing on microstructure surfaces. Advances in Aerodynamics, 2021, 3, .	2.5	3
15	Mode switch in tonal under-expanded impinging jets. Physics of Fluids, 2021, 33, 124102.	4.0	8
16	Characteristics of secondary droplets produced by the impact of drops onto a smooth surface. Advances in Aerodynamics, 2021, 3, .	2.5	7
17	Acoustic particle migration and focusing in a tilted acoustic field. Physics of Fluids, 2021, 33, 122006.	4.0	13
18	Dynamic behaviors of droplets impacting on ultrasonically vibrating surfaces. Experimental Thermal and Fluid Science, 2020, 112, 110019.	2.7	25

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19	Molecular dynamics simulations of BSA absorptions on pure and formate-contaminated rutile (1 1 0) surface. Applied Surface Science, 2020, 533, 147574.	6.1	7
20	Acoustic feedback loops for screech tones of underexpanded free round jets at different modes. Journal of Fluid Mechanics, 2020, 902, .	3.4	20
21	Asymmetric splash and breakup of drops impacting on cylindrical superhydrophobic surfaces. Physics of Fluids, 2020, 32, .	4.0	28
22	Modeling Clot Formation of Shear-Injured Platelets in Flow by a Dissipative Particle Dynamics Method. Bulletin of Mathematical Biology, 2020, 82, 83.	1.9	13
23	Mesoscopic Dynamical Model of Ice Crystal Nucleation Leading to Droplet Freezing. ACS Omega, 2020, 5, 3322-3332.	3.5	19
24	A Study on the Pressure-Lowering Effect of the Multilayer Stent. Annals of Vascular Surgery, 2019, 59, 237-243.	0.9	2
25	Dynamic behavior of water drops impacting on cylindrical superhydrophobic surfaces. Physics of Fluids, 2019, 31, .	4.0	86
26	COMPARISON OF THREE CONTROL STRATEGIES FOR AXIAL BLOOD PUMP. Journal of Mechanics in Medicine and Biology, 2019, 19, 1950058.	0.7	3
27	Numerical study of droplet fragmentation during impact on mesh screens. Microfluidics and Nanofluidics, 2019, 23, 1.	2.2	11
28	Shock Motion and Flow Structure of an Underexpanded Jet in the Helical Mode. AIAA Journal, 2019, 57, 3943-3953.	2.6	15
29	Supercooled water droplet impact on superhydrophobic surfaces with various roughness and temperature. International Journal of Heat and Mass Transfer, 2018, 122, 395-402.	4.8	92
30	Condensation on solid surfaces with amphiphilic micro-nanostructures by lattice Boltzmann simulation. Chemical Physics, 2018, 513, 258-265.	1.9	6
31	Tunable Droplet Breakup Dynamics on Micropillared Superhydrophobic Surfaces. Langmuir, 2018, 34, 7942-7950.	3.5	17
32	From Initial Nucleation to Cassie-Baxter State of Condensed Droplets on Nanotextured Superhydrophobic Surfaces. Scientific Reports, 2017, 7, 42752.	3.3	19
33	Numerical simulation of droplet impact on textured surfaces in a hybrid state. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	26
34	Internal rupture and rapid bouncing of impacting drops induced by submillimeter-scale textures. Physical Review E, 2017, 95, 063104.	2.1	14
35	Drop impact upon superhydrophobic surfaces with regular and hierarchical roughness. Applied Physics Letters, 2016, 108, .	3.3	87
36	Numerical investigation of polygonal particle separation in microfluidic channels. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	4

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37	Dynamics of high Weber number drops impacting on hydrophobic surfaces with closed micro-cells. Soft Matter, 2016, 12, 5808-5817.	2.7	23
38	Numerical study of the instantaneous flow fields by large eddy simulation and stability analysis in a single aisle cabin model. Building and Environment, 2016, 96, 1-11.	6.9	14
39	The effect of topography and wettability of biomaterials on platelet adhesion. Journal of Adhesion Science and Technology, 2016, 30, 878-893.	2.6	17
40	Mechanical behavior of pathological and normal red blood cells in microvascular flow based on modified level-set method. Science China: Physics, Mechanics and Astronomy, 2016, 59, 1.	5.1	1
41	Statistical analysis of turbulent thermal free convection over a small heat source in a large enclosed cavity. Applied Thermal Engineering, 2016, 93, 446-455.	6.0	10
42	HYDRODYNAMIC AND HEMOLYSIS ANALYSIS ON DISTANCE AND CLEARANCE BETWEEN IMPELLER AND DIFFUSER OF AXIAL BLOOD PUMP. Journal of Mechanics in Medicine and Biology, 2016, 16, 1650014.	0.7	11
43	A new stent with streamlined cross-section can suppress monocyte cell adhesion in the flow disturbance zones of the endovascular stent. Computer Methods in Biomechanics and Biomedical Engineering, 2016, 19, 60-66.	1.6	2
44	Dewetting Transitions of Dropwise Condensation on Nanotexture-Enhanced Superhydrophobic Surfaces. ACS Nano, 2015, 9, 12311-12319.	14.6	112
45	PIV measurement and simulation of turbulent thermal free convection over a small heat source in a large enclosed cavity. Building and Environment, 2015, 90, 105-113.	6.9	21
46	Freezing of sessile water droplets on surfaces with various roughness and wettability. Applied Physics Letters, 2014, 104, .	3.3	130
47	The interactions between bloodstream and vascular structure on aortic dissecting aneurysmal model: A numerical study. Acta Mechanica Sinica/Lixue Xuebao, 2013, 29, 462-468.	3.4	3
48	Condensation and jumping relay of droplets on lotus leaf. Applied Physics Letters, 2013, 103, .	3.3	130
49	Mechanical behavior of the erythrocyte in microvessel stenosis. Science China Life Sciences, 2011, 54, 450-458.	4.9	12
50	Study of dynamic hydrophobicity of micro-structured hydrophobic surfaces and lotus leaves. Science China: Physics, Mechanics and Astronomy, 2011, 54, 675-682.	5.1	9
51	Experimental and computational studies on the flow fields in aortic aneurysms associated with deployment of AAA stent-grafts. Acta Mechanica Sinica/Lixue Xuebao, 2007, 23, 495-501.	3.4	12
52	Computational fluid dynamics modeling and hemolysis analysis of axial blood pumps with various impeller structures. Progress in Natural Science: Materials International, 2006, 16, 993-997.	4.4	2
53	Particle acceleration for delivery deoxyribonucleic acid vaccine into skin in vivo. Review of Scientific Instruments, 2001, 72, 3390-3395.	1.3	2