Peng-Fei Hao

List of Publications by Year
in descending order

61	1,818	331670 21	276875 41
papers	citations	h-index	g-index

78	78	78	1588
all docs	docs citations	times ranked	citing authors

#	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	10.1063/5.0079494.7. , 2022, , .		0
4	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
5	How micropatterns affect the anti-icing performance of superhydrophobic surfaces. International Journal of Heat and Mass Transfer, 2022, 195, 123196.	4.8	13
6	Screech feedback loop and mode staging process of axisymmetric underexpanded jets. Experimental Thermal and Fluid Science, 2021, 122, 110323.	2.7	14
7	A many-body dissipative particle dynamics study of eccentric droplets impacting inclined fiber. Physics of Fluids, 2021, 33, 042001.	4.0	19
8	Reversed role of liquid viscosity on drop splash. Physics of Fluids, 2021, 33, .	4.0	21
9	Effect of wettability on droplet impact: Spreading and splashing. Experimental Thermal and Fluid Science, 2021, 124, 110369.	2.7	47
10	Study on a mesoscopic model of droplets freezing considering the recalescence process. Physics of Fluids, 2021, 33, .	4.0	9
11	Adsorption properties of albumin and fibrinogen on hydrophilic/hydrophobic TiO2 surfaces: A molecular dynamics study. Colloids and Surfaces B: Biointerfaces, 2021, 207, 111994.	5.0	15
12	Patterning in colloidal droplets by forced airflow. Journal of Applied Physics, 2021, 129, .	2.5	3
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	Dynamic behaviors of droplets impacting on ultrasonically vibrating surfaces. Experimental Thermal and Fluid Science, 2020, 112, 110019.	2.7	25
18	Effects of Geometric Confinement on Zero-Gravity Droplets between Two Parallel Planes. Langmuir, 2020, 36, 12838-12848.	3.5	2

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19	Acoustic feedback loops for screech tones of underexpanded free round jets at different modes. Journal of Fluid Mechanics, 2020, 902, .	3.4	20
20	Asymmetric splash and breakup of drops impacting on cylindrical superhydrophobic surfaces. Physics of Fluids, 2020, 32, .	4.0	28
21	Air bubble-triggered suppression of the coffee-ring effect. Colloids and Interface Science Communications, 2020, 37, 100284.	4.1	7
22	Mesoscopic Dynamical Model of Ice Crystal Nucleation Leading to Droplet Freezing. ACS Omega, 2020, 5, 3322-3332.	3.5	19
23	Dynamic behavior of water drops impacting on cylindrical superhydrophobic surfaces. Physics of Fluids, 2019, 31, .	4.0	86
24	COMPARISON OF THREE CONTROL STRATEGIES FOR AXIAL BLOOD PUMP. Journal of Mechanics in Medicine and Biology, 2019, 19, 1950058.	0.7	3
25	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
26	Performance of thermal mixing structure of HTR-PM regarding bypass flow and power effect. Nuclear Engineering and Design, 2018, 335, 291-302.	1.7	4
27	Tunable Droplet Breakup Dynamics on Micropillared Superhydrophobic Surfaces. Langmuir, 2018, 34, 7942-7950.	3.5	17
28	From Initial Nucleation to Cassie-Baxter State of Condensed Droplets on Nanotextured Superhydrophobic Surfaces. Scientific Reports, 2017, 7, 42752.	3.3	19
29	Numerical simulation of droplet impact on textured surfaces in a hybrid state. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	26
30	Drop Impact on Oblique Superhydrophobic Surfaces with Two-Tier Roughness. Langmuir, 2017, 33, 3556-3567.	3.5	52
31	Internal rupture and rapid bouncing of impacting drops induced by submillimeter-scale textures. Physical Review E, 2017, 95, 063104.	2.1	14
32	Experimental study on the drag reduction effect of a rotating superhydrophobic surface in micro gap flow field. Microsystem Technologies, 2017, 23, 3033-3040.	2.0	10
33	Formation and evolution of airâ€“water interfaces between hydrophilic structures in a microchannel. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	11
34	Characteristics of Liquid Flow in Microchannels at very Low Reynolds Numbers. Chemical Engineering and Technology, 2016, 39, 1425-1430.	1.5	6
35	Evolutions of hairpin vortexes over a superhydrophobic surface in turbulent boundary layer flow. Physics of Fluids, 2016, 28, .	4.0	14
36	Drag reductions and the air-water interface stability of superhydrophobic surfaces in rectangular channel flow. Physical Review E, 2016, 94, 053117.	2.1	26

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37	Drop impact upon superhydrophobic surfaces with regular and hierarchical roughness. Applied Physics Letters, 2016, 108, .	3.3	87
38	Rapid Bouncing of High-Speed Drops on Hydrophobic Surfaces with Microcavities. Langmuir, 2016, 32, 9967-9974.	3.5	22
39	Dynamics of high Weber number drops impacting on hydrophobic surfaces with closed micro-cells. Soft Matter, 2016, 12, 5808-5817.	2.7	23
40	Numerical investigations of thermal mixing performance of a hot gas mixing structure in high-temperature gas-cooled reactor. Nuclear Science and Techniques/Hewuli, 2016, 27, 1.	3.4	5
41	Experiment study on thermal mixing performance of HTR-PM reactor outlet. Nuclear Engineering and Design, 2016, 306, 186-191.	1.7	8
42	The effect of topography and wettability of biomaterials on platelet adhesion. Journal of Adhesion Science and Technology, 2016, 30, 878-893.	2.6	17
43	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
44	Dewetting Transitions of Dropwise Condensation on Nanotexture-Enhanced Superhydrophobic Surfaces. ACS Nano, 2015, 9, 12311-12319.	14.6	112
45	Departure of Condensation Droplets on Superhydrophobic Surfaces. Langmuir, 2015, 31, 2414-2420.	3.5	100
46	Mechanisms of drag reduction of superhydrophobic surfaces in a turbulent boundary layer flow. Experiments in Fluids, 2015, 56, 1.	2.4	52
47	Wetting property of smooth and textured hydrophobic surfaces under condensation condition. Science China: Physics, Mechanics and Astronomy, 2014, 57, 2127-2132.	5.1	10
48	Thermal hydraulic analysis for hot gas mixing structure of HTR-PM. Nuclear Engineering and Design, 2014, 271, 510-514.	1.7	13
49	Water droplet impact on superhydrophobic surfaces with microstructures and hierarchical roughness. Science China: Physics, Mechanics and Astronomy, 2014, 57, 1376-1381.	5.1	41
50	Numerical Simulation of Condensation on Structured Surfaces. Langmuir, 2014, 30, 14048-14055.	3.5	22
51	Freezing of sessile water droplets on surfaces with various roughness and wettability. Applied Physics Letters, 2014, 104, .	3.3	130
52	Droplet Detachment by Air Flow for Microstructured Superhydrophobic Surfaces. Langmuir, 2013, 29, 5160-5166.	3.5	20
53	Condensation and jumping relay of droplets on lotus leaf. Applied Physics Letters, 2013, 103, .	3.3	130
54	Evaporating behaviors of water droplet on superhydrophobic surface. Science China: Physics, Mechanics and Astronomy, 2012, 55, 2463-2468.	5.1	7

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55	Static and dynamic characterization of droplets on hydrophobic surfaces. Science Bulletin, 2012, 57, 1095-1101.	1.7	8
56	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
57	Driving liquid droplets on microstructured gradient surface by mechanical vibration. Chemical Engineering Science, 2011, 66, 2118-2123.	3.8	32
58	Drag reduction in ultrahydrophobic channels with micro-nano structured surfaces. Science China: Physics, Mechanics and Astronomy, 2010, 53, 1298-1305.	5.1	23
59	Small is beautiful, and dry. Science China: Physics, Mechanics and Astronomy, 2010, 53, 2245-2259.	5.1	54
60	Sliding behavior of water droplet on superhydrophobic surface. Europhysics Letters, 2010, 90, 66003.	2.0	55
61	Sliding of Water Droplets on Microstructured Hydrophobic Surfaces. Langmuir, 2010, 26, 8704-8708.	3.5	149