Peng-Fei Hao

List of Publications by Year
in descending order

61 papers	1,818 citations	331670 21 h-index	276875 41 g-index
78 all docs	78 docs citations	78 times ranked	1588 citing authors

#	Article	IF	Citations
1	Sliding of Water Droplets on Microstructured Hydrophobic Surfaces. Langmuir, 2010, 26, 8704-8708.	3.5	149
2	Condensation and jumping relay of droplets on lotus leaf. Applied Physics Letters, 2013, 103, .	3.3	130
3	Freezing of sessile water droplets on surfaces with various roughness and wettability. Applied Physics Letters, 2014, 104, .	3.3	130
4	Dewetting Transitions of Dropwise Condensation on Nanotexture-Enhanced Superhydrophobic Surfaces. ACS Nano, 2015, 9, 12311-12319.	14.6	112
5	Departure of Condensation Droplets on Superhydrophobic Surfaces. Langmuir, 2015, 31, 2414-2420.	3.5	100
6	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
7	Drop impact upon superhydrophobic surfaces with regular and hierarchical roughness. Applied Physics Letters, 2016, 108, .	3.3	87
8	Dynamic behavior of water drops impacting on cylindrical superhydrophobic surfaces. Physics of Fluids, 2019, 31, .	4.0	86
9	Sliding behavior of water droplet on superhydrophobic surface. Europhysics Letters, 2010, 90, 66003.	2.0	55
10	Small is beautiful, and dry. Science China: Physics, Mechanics and Astronomy, 2010, 53, 2245-2259.	5.1	54
11	Mechanisms of drag reduction of superhydrophobic surfaces in a turbulent boundary layer flow. Experiments in Fluids, 2015, 56, 1.	2.4	52
12	Drop Impact on Oblique Superhydrophobic Surfaces with Two-Tier Roughness. Langmuir, 2017, 33, 3556-3567.	3.5	52
13	Effect of wettability on droplet impact: Spreading and splashing. Experimental Thermal and Fluid Science, 2021, 124, 110369.	2.7	47
14	Water droplet impact on superhydrophobic surfaces with microstructures and hierarchical roughness. Science China: Physics, Mechanics and Astronomy, 2014, 57, 1376-1381.	5.1	41
15	Driving liquid droplets on microstructured gradient surface by mechanical vibration. Chemical Engineering Science, 2011, 66, 2118-2123.	3.8	32
16	Asymmetric splash and breakup of drops impacting on cylindrical superhydrophobic surfaces. Physics of Fluids, 2020, 32, .	4.0	28
17	Drag reductions and the air-water interface stability of superhydrophobic surfaces in rectangular channel flow. Physical Review E, 2016, 94, 053117.	2.1	26
18	Numerical simulation of droplet impact on textured surfaces in a hybrid state. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	26

#	Article	IF	Citations
19	Dynamic behaviors of droplets impacting on ultrasonically vibrating surfaces. Experimental Thermal and Fluid Science, 2020, 112, 110019.	2.7	25
20	Drag reduction in ultrahydrophobic channels with micro-nano structured surfaces. Science China: Physics, Mechanics and Astronomy, 2010, 53, 1298-1305.	5.1	23
21	Dynamics of high Weber number drops impacting on hydrophobic surfaces with closed micro-cells. Soft Matter, 2016, 12, 5808-5817.	2.7	23
22	Numerical Simulation of Condensation on Structured Surfaces. Langmuir, 2014, 30, 14048-14055.	3.5	22
23	Rapid Bouncing of High-Speed Drops on Hydrophobic Surfaces with Microcavities. Langmuir, 2016, 32, 9967-9974.	3.5	22
24	Deep-learning-based super-resolution reconstruction of high-speed imaging in fluids. Physics of Fluids, 2022, 34, .	4.0	22
25	Reversed role of liquid viscosity on drop splash. Physics of Fluids, 2021, 33, .	4.0	21
26	Droplet Detachment by Air Flow for Microstructured Superhydrophobic Surfaces. Langmuir, 2013, 29, 5160-5166.	3.5	20
27	Acoustic feedback loops for screech tones of underexpanded free round jets at different modes. Journal of Fluid Mechanics, 2020, 902, .	3.4	20
28	From Initial Nucleation to Cassie-Baxter State of Condensed Droplets on Nanotextured Superhydrophobic Surfaces. Scientific Reports, 2017, 7, 42752.	3.3	19
29	Mesoscopic Dynamical Model of Ice Crystal Nucleation Leading to Droplet Freezing. ACS Omega, 2020, 5, 3322-3332.	3.5	19
30	A many-body dissipative particle dynamics study of eccentric droplets impacting inclined fiber. Physics of Fluids, 2021, 33, 042001.	4.0	19
31	The effect of topography and wettability of biomaterials on platelet adhesion. Journal of Adhesion Science and Technology, 2016, 30, 878-893.	2.6	17
32	Tunable Droplet Breakup Dynamics on Micropillared Superhydrophobic Surfaces. Langmuir, 2018, 34, 7942-7950.	3.5	17
33	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
34	Evolutions of hairpin vortexes over a superhydrophobic surface in turbulent boundary layer flow. Physics of Fluids, 2016, 28, .	4.0	14
35	Internal rupture and rapid bouncing of impacting drops induced by submillimeter-scale textures. Physical Review E, 2017, 95, 063104.	2.1	14
36	Screech feedback loop and mode staging process of axisymmetric underexpanded jets. Experimental Thermal and Fluid Science, 2021, 122, 110323.	2.7	14

#	ARTICLE	IF	CITATIONS
37	How surface roughness promotes or suppresses drop splash. Physics of Fluids, 2022, 34, .	4.0	14
38	Thermal hydraulic analysis for hot gas mixing structure of HTR-PM. Nuclear Engineering and Design, 2014, 271, 510-514.	1.7	13
39	How micropatterns affect the anti-icing performance of superhydrophobic surfaces. International Journal of Heat and Mass Transfer, 2022, 195, 123196.	4.8	13
40	Formation and evolution of airâ€"water interfaces between hydrophilic structures in a microchannel. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	11
41	Wetting property of smooth and textured hydrophobic surfaces under condensation condition. Science China: Physics, Mechanics and Astronomy, 2014, 57, 2127-2132.	5.1	10
42	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
43	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
44	Study on a mesoscopic model of droplets freezing considering the recalescence process. Physics of Fluids, 2021, 33, .	4.0	9
45	Static and dynamic characterization of droplets on hydrophobic surfaces. Science Bulletin, 2012, 57, 1095-1101.	1.7	8
46	Experiment study on thermal mixing performance of HTR-PM reactor outlet. Nuclear Engineering and Design, 2016, 306, 186-191.	1.7	8
47	The feedback loops of discrete tones in under-expanded impinging jets. Physics of Fluids, 2021, 33, 106112.	4.0	8
48	Mode switch in tonal under-expanded impinging jets. Physics of Fluids, 2021, 33, 124102.	4.0	8
49	Evaporating behaviors of water droplet on superhydrophobic surface. Science China: Physics, Mechanics and Astronomy, 2012, 55, 2463-2468.	5.1	7
50	Air bubble-triggered suppression of the coffee-ring effect. Colloids and Interface Science Communications, 2020, 37, 100284.	4.1	7
51	Characteristics of secondary droplets produced by the impact of drops onto a smooth surface. Advances in Aerodynamics, 2021, 3, .	2.5	7
52	Characteristics of Liquid Flow in Microchannels at very Low Reynolds Numbers. Chemical Engineering and Technology, 2016, 39, 1425-1430.	1.5	6
53	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
54	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

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55	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
56	COMPARISON OF THREE CONTROL STRATEGIES FOR AXIAL BLOOD PUMP. Journal of Mechanics in Medicine and Biology, 2019, 19, 1950058.	0.7	3
57	Patterning in colloidal droplets by forced airflow. Journal of Applied Physics, 2021, 129, .	2.5	3
58	A many-body dissipative particle dynamics with energy conservation study of droplets icing on microstructure surfaces. Advances in Aerodynamics, 2021, 3, .	2.5	3
59	Effects of Geometric Confinement on Zero-Gravity Droplets between Two Parallel Planes. Langmuir, 2020, 36, 12838-12848.	3.5	2
60	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
61	10.1063/5.0079494.7. , 2022, , .		0