

Xiwen Zhang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4170315/publications.pdf>

Version: 2024-02-01

53
papers

1,222
citations

471509

17
h-index

395702

33
g-index

85
all docs

85
docs citations

85
times ranked

1082
citing authors

#	ARTICLE	IF	CITATIONS
1	Condensation and jumping relay of droplets on lotus leaf. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	130
2	Freezing of sessile water droplets on surfaces with various roughness and wettability. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	130
3	Dewetting Transitions of Dropwise Condensation on Nanotexture-Enhanced Superhydrophobic Surfaces. <i>ACS Nano</i> , 2015, 9, 12311-12319.	14.6	112
4	Supercooled water droplet impact on superhydrophobic surfaces with various roughness and temperature. <i>International Journal of Heat and Mass Transfer</i> , 2018, 122, 395-402.	4.8	92
5	Drop impact upon superhydrophobic surfaces with regular and hierarchical roughness. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	87
6	Dynamic behavior of water drops impacting on cylindrical superhydrophobic surfaces. <i>Physics of Fluids</i> , 2019, 31, .	4.0	86
7	Effect of wettability on droplet impact: Spreading and splashing. <i>Experimental Thermal and Fluid Science</i> , 2021, 124, 110369.	2.7	47
8	Asymmetric splash and breakup of drops impacting on cylindrical superhydrophobic surfaces. <i>Physics of Fluids</i> , 2020, 32, .	4.0	28
9	Numerical simulation of droplet impact on textured surfaces in a hybrid state. <i>Microfluidics and Nanofluidics</i> , 2017, 21, 1.	2.2	26
10	Dynamic behaviors of droplets impacting on ultrasonically vibrating surfaces. <i>Experimental Thermal and Fluid Science</i> , 2020, 112, 110019.	2.7	25
11	Dynamics of high Weber number drops impacting on hydrophobic surfaces with closed micro-cells. <i>Soft Matter</i> , 2016, 12, 5808-5817.	2.7	23
12	Deep-learning-based super-resolution reconstruction of high-speed imaging in fluids. <i>Physics of Fluids</i> , 2022, 34, .	4.0	22
13	PIV measurement and simulation of turbulent thermal free convection over a small heat source in a large enclosed cavity. <i>Building and Environment</i> , 2015, 90, 105-113.	6.9	21
14	Reversed role of liquid viscosity on drop splash. <i>Physics of Fluids</i> , 2021, 33, .	4.0	21
15	Acoustic feedback loops for screech tones of underexpanded free round jets at different modes. <i>Journal of Fluid Mechanics</i> , 2020, 902, .	3.4	20
16	From Initial Nucleation to Cassie-Baxter State of Condensed Droplets on Nanotextured Superhydrophobic Surfaces. <i>Scientific Reports</i> , 2017, 7, 42752.	3.3	19
17	Mesoscopic Dynamical Model of Ice Crystal Nucleation Leading to Droplet Freezing. <i>ACS Omega</i> , 2020, 5, 3322-3332.	3.5	19
18	A many-body dissipative particle dynamics study of eccentric droplets impacting inclined fiber. <i>Physics of Fluids</i> , 2021, 33, 042001.	4.0	19

#	ARTICLE	IF	CITATIONS
19	The effect of topography and wettability of biomaterials on platelet adhesion. <i>Journal of Adhesion Science and Technology</i> , 2016, 30, 878-893.	2.6	17
20	Tunable Droplet Breakup Dynamics on Micropillared Superhydrophobic Surfaces. <i>Langmuir</i> , 2018, 34, 7942-7950.	3.5	17
21	Shock Motion and Flow Structure of an Underexpanded Jet in the Helical Mode. <i>AIAA Journal</i> , 2019, 57, 3943-3953.	2.6	15
22	Adsorption properties of albumin and fibrinogen on hydrophilic/hydrophobic TiO ₂ surfaces: A molecular dynamics study. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 207, 111994.	5.0	15
23	Numerical study of the instantaneous flow fields by large eddy simulation and stability analysis in a single aisle cabin model. <i>Building and Environment</i> , 2016, 96, 1-11.	6.9	14
24	Internal rupture and rapid bouncing of impacting drops induced by submillimeter-scale textures. <i>Physical Review E</i> , 2017, 95, 063104.	2.1	14
25	Screech feedback loop and mode staging process of axisymmetric underexpanded jets. <i>Experimental Thermal and Fluid Science</i> , 2021, 122, 110323.	2.7	14
26	How surface roughness promotes or suppresses drop splash. <i>Physics of Fluids</i> , 2022, 34, .	4.0	14
27	Modeling Clot Formation of Shear-Injured Platelets in Flow by a Dissipative Particle Dynamics Method. <i>Bulletin of Mathematical Biology</i> , 2020, 82, 83.	1.9	13
28	Acoustic particle migration and focusing in a tilted acoustic field. <i>Physics of Fluids</i> , 2021, 33, 122006.	4.0	13
29	How micropatterns affect the anti-icing performance of superhydrophobic surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2022, 195, 123196.	4.8	13
30	Experimental and computational studies on the flow fields in aortic aneurysms associated with deployment of AAA stent-grafts. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2007, 23, 495-501.	3.4	12
31	Mechanical behavior of the erythrocyte in microvessel stenosis. <i>Science China Life Sciences</i> , 2011, 54, 450-458.	4.9	12
32	HYDRODYNAMIC AND HEMOLYSIS ANALYSIS ON DISTANCE AND CLEARANCE BETWEEN IMPELLER AND DIFFUSER OF AXIAL BLOOD PUMP. <i>Journal of Mechanics in Medicine and Biology</i> , 2016, 16, 1650014.	0.7	11
33	Numerical study of droplet fragmentation during impact on mesh screens. <i>Microfluidics and Nanofluidics</i> , 2019, 23, 1.	2.2	11
34	Statistical analysis of turbulent thermal free convection over a small heat source in a large enclosed cavity. <i>Applied Thermal Engineering</i> , 2016, 93, 446-455.	6.0	10
35	Study of dynamic hydrophobicity of micro-structured hydrophobic surfaces and lotus leaves. <i>Science China: Physics, Mechanics and Astronomy</i> , 2011, 54, 675-682.	5.1	9
36	Study on a mesoscopic model of droplets freezing considering the recalescence process. <i>Physics of Fluids</i> , 2021, 33, .	4.0	9

#	ARTICLE	IF	CITATIONS
37	The feedback loops of discrete tones in under-expanded impinging jets. <i>Physics of Fluids</i> , 2021, 33, 106112.	4.0	8
38	Mode switch in tonal under-expanded impinging jets. <i>Physics of Fluids</i> , 2021, 33, 124102.	4.0	8
39	Molecular dynamics simulations of BSA absorptions on pure and formate-contaminated rutile (1 1 0) surface. <i>Applied Surface Science</i> , 2020, 533, 147574.	6.1	7
40	Characteristics of secondary droplets produced by the impact of drops onto a smooth surface. <i>Advances in Aerodynamics</i> , 2021, 3, .	2.5	7
41	Condensation on solid surfaces with amphiphilic micro-nanostructures by lattice Boltzmann simulation. <i>Chemical Physics</i> , 2018, 513, 258-265.	1.9	6
42	Numerical investigation of polygonal particle separation in microfluidic channels. <i>Microfluidics and Nanofluidics</i> , 2016, 20, 1.	2.2	4
43	Three-dimensional measurement of the droplets out of focus in shadowgraphy systems via deep learning-based image-processing method. <i>Physics of Fluids</i> , 2022, 34, .	4.0	4
44	The interactions between bloodstream and vascular structure on aortic dissecting aneurysmal model: A numerical study. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2013, 29, 462-468.	3.4	3
45	COMPARISON OF THREE CONTROL STRATEGIES FOR AXIAL BLOOD PUMP. <i>Journal of Mechanics in Medicine and Biology</i> , 2019, 19, 1950058.	0.7	3
46	A many-body dissipative particle dynamics with energy conservation study of droplets icing on microstructure surfaces. <i>Advances in Aerodynamics</i> , 2021, 3, .	2.5	3
47	Particle acceleration for delivery deoxyribonucleic acid vaccine into skin in vivo. <i>Review of Scientific Instruments</i> , 2001, 72, 3390-3395.	1.3	2
48	Computational fluid dynamics modeling and hemolysis analysis of axial blood pumps with various impeller structures. <i>Progress in Natural Science: Materials International</i> , 2006, 16, 993-997.	4.4	2
49	A new stent with streamlined cross-section can suppress monocyte cell adhesion in the flow disturbance zones of the endovascular stent. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016, 19, 60-66.	1.6	2
50	A Study on the Pressure-Lowering Effect of the Multilayer Stent. <i>Annals of Vascular Surgery</i> , 2019, 59, 237-243.	0.9	2
51	Mechanical behavior of pathological and normal red blood cells in microvascular flow based on modified level-set method. <i>Science China: Physics, Mechanics and Astronomy</i> , 2016, 59, 1.	5.1	1
52	10.1063/5.0078644.8. , 2022, , .		0
53	10.1063/5.0079494.7. , 2022, , .		0