

Xiangdong Liu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2000796/publications.pdf>

Version: 2024-02-01

59
papers

2,203
citations

257357

24
h-index

223716

46
g-index

60
all docs

60
docs citations

60
times ranked

1799
citing authors

#	ARTICLE	IF	CITATIONS
1	Programmable wettability on photocontrolled graphene film. <i>Science Advances</i> , 2018, 4, eaat7392.	4.7	245
2	Bioinspired Multicompartmental Microfibers from Microfluidics. <i>Advanced Materials</i> , 2014, 26, 5184-5190.	11.1	218
3	Hydrodynamics of a droplet passing through a microfluidic T-junction. <i>Journal of Fluid Mechanics</i> , 2017, 819, 401-434.	1.4	174
4	Dynamic performance analysis on start-up of closed-loop pulsating heat pipes (CLPHPs). <i>International Journal of Thermal Sciences</i> , 2013, 65, 224-233.	2.6	154
5	Hydrodynamics of double emulsion droplet in shear flow. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	115
6	Three-dimensional splitting microfluidics. <i>Lab on A Chip</i> , 2016, 16, 1332-1339.	3.1	104
7	Thermal and hydrodynamic characteristics of constructal tree-shaped minichannel heat sink. <i>AIChE Journal</i> , 2010, 56, 2018-2029.	1.8	67
8	Enhancing and suppressing effects of an inner droplet on deformation of a double emulsion droplet under shear. <i>Lab on A Chip</i> , 2015, 15, 1255-1261.	3.1	58
9	Reconfigurable and Renewable Nano-Structured Plastics for Radiative Cooling. <i>Advanced Functional Materials</i> , 2021, 31, 2100535.	7.8	58
10	Condensation in Microchannels. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2008, 12, 117-143.	1.4	53
11	Gravity-capillary evaporation regimes in microgrooves. <i>AIChE Journal</i> , 2019, 65, 1119-1125.	1.8	53
12	Stretchable and Freeze-Tolerant Organohydrogel Thermocells with Enhanced Thermoelectric Performance Continually Working at Subzero Temperatures. <i>Advanced Functional Materials</i> , 2021, 31, 2104071.	7.8	53
13	Three-Dimensional Numerical Simulation for Annular Condensation in Rectangular Microchannels. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2009, 13, 13-29.	1.4	46
14	Microencapsulation of solid cores to prepare double emulsion droplets by microfluidics. <i>International Journal of Heat and Mass Transfer</i> , 2019, 135, 158-163.	2.5	43
15	Emulsion droplet formation in coflowing liquid streams. <i>Physical Review E</i> , 2013, 87, 013002.	0.8	41
16	Solids Circulation Flux and Gas Bypassing in a Pressurized Spout-Fluid Bed with a Draft Tube. <i>Canadian Journal of Chemical Engineering</i> , 2002, 80, 800-808.	0.9	34
17	Microfluidic generation of self-contained multicomponent microcapsules for self-healing materials. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	32
18	Slip boundary for fluid flow at rough solid surfaces. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	31

#	ARTICLE	IF	CITATIONS
19	Visualization study of flow condensation in hydrophobic microchannels. <i>AIChE Journal</i> , 2014, 60, 1182-1192.	1.8	30
20	Gas flow through rough microchannels in the transition flow regime. <i>Physical Review E</i> , 2016, 93, 013128.	0.8	29
21	Osmotic pressure-triggered cavitation in microcapsules. <i>Lab on A Chip</i> , 2016, 16, 251-255.	3.1	29
22	Hierarchically Anisotropic Networks to Decouple Mechanical and Ionic Properties for High-Performance Quasi-Solid Thermocells. <i>ACS Nano</i> , 2022, 16, 8347-8357.	7.3	29
23	3D-Printed Bionic Solar Evaporator. <i>Solar Rrl</i> , 2022, 6, .	3.1	28
24	Investigation of spherical and concentric mechanism of compound droplets. <i>Matter and Radiation at Extremes</i> , 2016, 1, 213-223.	1.5	27
25	Role of tree-shaped fins in charging performance of a latent heat storage unit. <i>International Journal of Energy Research</i> , 2020, 44, 4800-4811.	2.2	26
26	Optimal surface fractal dimension for heat and fluid flow in microchannels. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	24
27	High-Speed Visual Analysis of Fluid Flow and Heat Transfer in Oscillating Heat Pipes with Different Diameters. <i>Applied Sciences (Switzerland)</i> , 2016, 6, 321.	1.3	23
28	Heat Conduction in Porous Media Characterized by Fractal Geometry. <i>Energies</i> , 2017, 10, 1230.	1.6	23
29	Electroosmotic Flow in a Rough Nanochannel with Surface Roughness Characterized by Fractal Cantor. <i>Micromachines</i> , 2017, 8, 190.	1.4	23
30	Shear-driven two colliding motions of binary double emulsion droplets. <i>International Journal of Heat and Mass Transfer</i> , 2018, 121, 377-389.	2.5	23
31	Thermal slip for liquids at rough solid surfaces. <i>Physical Review E</i> , 2014, 89, 062407.	0.8	22
32	Thermal performance of a novel dual-serpentine-channel flat-plate oscillating heat pipe used for multiple heat sources and sinks. <i>International Journal of Heat and Mass Transfer</i> , 2020, 161, 120293.	2.5	22
33	Structure and Capacitance of Electrical Double Layers at the Graphene-Ionic Liquid Interface. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 939.	1.3	21
34	Interfacial mass transfer of water for fluorobenzene/aqueous solution system in double emulsion. <i>International Journal of Heat and Mass Transfer</i> , 2019, 145, 118690.	2.5	20
35	Hydrodynamic interaction of two deformable drops in confined shear flow. <i>Physical Review E</i> , 2014, 90, 033010.	0.8	19
36	Determination of effective thermal conductivity for real porous media using fractal theory. <i>Journal of Thermal Science</i> , 1999, 8, 102-107.	0.9	18

#	ARTICLE	IF	CITATIONS
37	Determination of effective thermal conductivity for polyurethane foam by use of fractal method. Science in China Series D: Earth Sciences, 2006, 49, 468-475.	0.9	18
38	Spreading dynamics of droplet on an inclined surface. Theoretical and Computational Fluid Dynamics, 2016, 30, 237-252.	0.9	15
39	NUMERICAL STUDY ON THE SOLIDIFICATION PERFORMANCE OF A LATENT HEAT STORAGE UNIT WITH KOCH-FRACTAL FIN. Fractals, 2019, 27, 1950108.	1.8	15
40	Underwater Unidirectional Cellular Fluidics. ACS Applied Materials & Interfaces, 2022, 14, 9891-9898.	4.0	14
41	Three-Dimensional Open Water Microchannel Transpiration Mimetics. ACS Applied Materials & Interfaces, 2022, 14, 30435-30442.	4.0	13
42	Recent Growth of Wettability Gradient Surfaces: A Review. Research, 2022, 2022, .	2.8	13
43	Bio-inspired slippery surfaces with multifunctional anti-icing performance. Science China Technological Sciences, 2021, 64, 2110-2118.	2.0	11
44	Three-dimensional pseudopotential lattice Boltzmann model for multiphase flows at high density ratio. Physical Review E, 2020, 102, 053308.	0.8	11
45	One dimensional numerical simulation for steady annular condensation flow in rectangular microchannels. Heat and Mass Transfer, 2009, 46, 75-82.	1.2	10
46	Electric field mediated droplet spheroidizing in an extensional flow. Physics of Fluids, 2021, 33, .	1.6	9
47	Numerical Study on the Liquid-Liquid Interface Evolution during Droplet Coalescence. Microgravity Science and Technology, 2020, 32, 737-748.	0.7	8
48	Visualization Study of Oil-in-Water-in-Oil (O/W/O) Double Emulsion Formation in a Simple and Robust Co-Flowing Microfluidic Device. Micromachines, 2017, 8, 268.	1.4	7
49	Experimental study of droplet formation in the cross-junction. Journal of Dispersion Science and Technology, 2021, 42, 1233-1240.	1.3	7
50	Dynamic Liquid Gating Artificially Spinning System for Self-Evolving Topographies and Microstructures. Langmuir, 2021, 37, 1438-1445.	1.6	7
51	Experimental Investigations and Numerical Simulation of Thermal Performance of a Horizontal Slinky-Coil Ground Heat Exchanger. Sustainability, 2017, 9, 1362.	1.6	6
52	Visualization study on coalescence of droplets with different sizes in external liquid. Canadian Journal of Chemical Engineering, 2018, 96, 1228-1235.	0.9	5
53	Roles of aqueous additives in the mass transfer process of water molecules in water/oil/water double emulsion droplets. Chemical Engineering Science, 2022, 248, 117175.	1.9	4
54	Enhancing discharging performance of a phase change thermal storage unit with a fractal space-filling matrix. Journal of Renewable and Sustainable Energy, 2021, 13, .	0.8	3

#	ARTICLE	IF	CITATIONS
55	Calculation Methods of Solution Chemical Potential and Application in Emulsion Microencapsulation. <i>Molecules</i> , 2021, 26, 2991.	1.7	3
56	An Improved Lattice Boltzmann Model for Convection Melting in the Existence of an Inhomogeneous Magnetic Field. <i>Microgravity Science and Technology</i> , 2021, 33, 1.	0.7	2
57	Stretchable and Freeze-Tolerant Organohydrogel Thermocells with Enhanced Thermoelectric Performance Continually Working at Subzero Temperatures (<i>Adv. Funct. Mater.</i> 43/2021). <i>Advanced Functional Materials</i> , 2021, 31, 2170322.	7.8	2
58	Experimental Study on Sessile Droplet Freezing on a Cold Surface in Low Atmospheric Pressure. <i>Microgravity Science and Technology</i> , 2022, 34, 1.	0.7	2
59	Lattice Boltzmann investigation of flow boiling in a microchannel. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 0, , 095440622210891.	1.1	2