Rongfu Wen

List of Publications by Year
in descending order

40 papers	1,965 citations	361045 20 h-index	329751 37 g-index
40 all docs	40 docs citations	40 times ranked	1249 citing authors

#	Article	IF	Citations
1	Liquid film boiling enabled ultra-high conductance and high flux heat spreaders. Cell Reports Physical Science, 2022, 3, 100746.	2.8	5
2	Droplet Spreading Characteristics on Ultra-Slippery Solid Hydrophilic Surfaces with Ultra-Low Contact Angle Hysteresis. Coatings, 2022, 12, 755.	1.2	8
3	Sustainable anti-frosting surface for efficient thermal transport. Cell Reports Physical Science, 2022, 3, 100937.	2.8	6
4	Macrotextures-enabled self-propelling of large condensate droplets. Chemical Engineering Journal, 2021, 405, 126901.	6.6	32
5	Microcavity-Enabled Local Oscillation of Taylor Bubbles in a Microchannel. Industrial & Engineering Chemistry Research, 2021, 60, 1055-1066.	1.8	2
6	Fast Capillary Wicking on Hierarchical Copper Nanowired Surfaces with Interconnected V-Grooves: Implications for Thermal Management. ACS Applied Nano Materials, 2021, 4, 5360-5371.	2.4	19
7	Rapid and Persistent Suction Condensation on Hydrophilic Surfaces for High-Efficiency Water Collection. Nano Letters, 2021, 21, 7411-7418.	4.5	45
8	Coupling droplets/bubbles with a liquid film for enhancing phase-change heat transfer. IScience, 2021, 24, 102531.	1.9	8
9	Detection and experimental analysis of the molecular clusters distribution during wall condensation. Journal of Molecular Liquids, 2021, , 116948.	2.3	1
10	Hydrophilic Slippery Surface Promotes Efficient Defrosting. Langmuir, 2021, 37, 11931-11938.	1.6	3
11	Composite porous surfaces of microcavities for enhancing boiling heat transfer. International Journal of Heat and Mass Transfer, 2021, 177, 121513.	2.5	21
12	Preferential Vapor Nucleation on Hierarchical Tapered Nanowire Bunches. Langmuir, 2021, 37, 774-784.	1.6	17
13	Laser-Induced Patterned Photonic Crystal Heterostructure for Multimetal Ion Recognition. ACS Applied Materials & Interfaces, 2021, 13, 4330-4339.	4.0	8
14	Microscopic Observation of Preferential Capillary Pumping in Hollow Nanowire Bundles. Langmuir, 2021, , .	1.6	3
15	Advances in Dropwise Condensation: Dancing Droplets. , 2020, , .		1
16	Falling-droplet-enhanced filmwise condensation in the presence of non-condensable gas. International Journal of Heat and Mass Transfer, 2019, 140, 173-186.	2.5	28
17	Three-Dimensional Superhydrophobic Nanowire Networks for Enhancing Condensation Heat Transfer. Joule, 2018, 2, 269-279.	11.7	190
18	Liquid-Vapor Phase-Change Heat Transfer on Functionalized Nanowired Surfaces and Beyond. Joule, 2018, 2, 2307-2347.	11.7	164

#	Article	IF	Citations
19	Sustaining enhanced condensation on hierarchical mesh-covered surfaces. National Science Review, 2018, 5, 878-887.	4.6	51
20	Capillary-driven liquid film boiling heat transfer on hybrid mesh wicking structures. Nano Energy, 2018, 51, 373-382.	8.2	108
21	Micromesh-Enabled Low-Cost Thermal Ground Planes for High Heat Flux Power Electronics. , 2018, , .		1
22	Hydrophobic copper nanowires for enhancing condensation heat transfer. Nano Energy, 2017, 33, 177-183.	8.2	181
23	Enhanced bubble nucleation and liquid rewetting for highly efficient boiling heat transfer on two-level hierarchical surfaces with patterned copper nanowire arrays. Nano Energy, 2017, 38, 59-65.	8.2	174
24	Wetting Transition of Condensed Droplets on Nanostructured Superhydrophobic Surfaces: Coordination of Surface Properties and Condensing Conditions. ACS Applied Materials & Interfaces, 2017, 9, 13770-13777.	4.0	116
25	A numerical study of droplet motion/departure on condensation of mixture vapor using lattice Boltzmann method. International Journal of Heat and Fluid Flow, 2017, 68, 53-61.	1.1	11
26	Hierarchical Superhydrophobic Surfaces with Micropatterned Nanowire Arrays for High-Efficiency Jumping Droplet Condensation. ACS Applied Materials & Interfaces, 2017, 9, 44911-44921.	4.0	115
27	Micromesh-covered superhydrophobic surfaces for efficient condensation heat transfer. , 2017, , .		1
28	Droplet Departure Characteristics and Dropwise Condensation Heat Transfer at Low Steam Pressure. Journal of Heat Transfer, 2016, 138, .	1.2	27
29	Directional Movement of Droplets in Grooves: Suspended or Immersed?. Scientific Reports, 2016, 6, 18836.	1.6	37
30	Atomic Layer Deposited Coatings on Nanowires for High Temperature Water Corrosion Protection. ACS Applied Materials & Interfaces, 2016, 8, 32616-32623.	4.0	6
31	Effect of nano structures on the nucleus wetting modes during water vapour condensation: from individual groove to nano-array surface. RSC Advances, 2016, 6, 7923-7932.	1.7	37
32	Effect of surface free energies on the heterogeneous nucleation of water droplet: A molecular dynamics simulation approach. Journal of Chemical Physics, 2015, 142, 054701.	1.2	78
33	Heterogeneous nucleation capability of conical microstructures for water droplets. RSC Advances, 2015, 5, 812-818.	1.7	44
34	Droplet dynamics and heat transfer for dropwise condensation at lower and ultra-lower pressure. Applied Thermal Engineering, 2015, 88, 265-273.	3.0	54
35	Experimental investigation on steam condensation heat transfer enhancement with vertically patterned hydrophobicâ€“hydrophilic hybrid surfaces. International Journal of Heat and Mass Transfer, 2015, 83, 27-38.	2.5	152
36	Molecular dynamics simulation on the wetting characteristic of micro-droplet on surfaces with different free energies. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 216801.	0.2	6

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37	Evolution of transient cluster/droplet size distribution in a heterogeneous nucleation process. RSC Advances, 2014, 4, 31692.	1.7	17
38	Analysis of condensation heat transfer enhancement with dropwise-filmwise hybrid surface: Droplet sizes effect. International Journal of Heat and Mass Transfer, 2014, 77, 785-794.	2.5	68
39	A droplet model in steam condensation with noncondensable gas. International Journal of Thermal Sciences, 2013, 68, 1-7.	2.6	17
40	Analysis of droplet jumping phenomenon with lattice Boltzmann simulation of droplet coalescence. Applied Physics Letters, 2013, 102, .	1.5	103