Rongfu Wen

List of Publications by Year
in descending order

40 papers	1,965 citations	361413 20 h-index	330143 37 g-index
40 all docs	40 docs citations	40 times ranked	1249 citing authors

#	Article	IF	Citations
1	Three-Dimensional Superhydrophobic Nanowire Networks for Enhancing Condensation Heat Transfer. Joule, 2018, 2, 269-279.	24.0	190
2	Hydrophobic copper nanowires for enhancing condensation heat transfer. Nano Energy, 2017, 33, 177-183.	16.0	181
3	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.	16.0	174
4	Liquid-Vapor Phase-Change Heat Transfer on Functionalized Nanowired Surfaces and Beyond. Joule, 2018, 2, 2307-2347.	24.0	164
5	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.	4.8	152
6	Wetting Transition of Condensed Droplets on Nanostructured Superhydrophobic Surfaces: Coordination of Surface Properties and Condensing Conditions. ACS Applied Materials & Interfaces, 2017, 9, 13770-13777.	8.0	116
7	Hierarchical Superhydrophobic Surfaces with Micropatterned Nanowire Arrays for High-Efficiency Jumping Droplet Condensation. ACS Applied Materials & Interfaces, 2017, 9, 44911-44921.	8.0	115
8	Capillary-driven liquid film boiling heat transfer on hybrid mesh wicking structures. Nano Energy, 2018, 51, 373-382.	16.0	108
9	Analysis of droplet jumping phenomenon with lattice Boltzmann simulation of droplet coalescence. Applied Physics Letters, 2013, 102, .	3.3	103
10	Effect of surface free energies on the heterogeneous nucleation of water droplet: A molecular dynamics simulation approach. Journal of Chemical Physics, 2015, 142, 054701.	3.0	78
11	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.	4.8	68
12	Droplet dynamics and heat transfer for dropwise condensation at lower and ultra-lower pressure. Applied Thermal Engineering, 2015, 88, 265-273.	6.0	54
13	Sustaining enhanced condensation on hierarchical mesh-covered surfaces. National Science Review, 2018, 5, 878-887.	9.5	51
14	Rapid and Persistent Suction Condensation on Hydrophilic Surfaces for High-Efficiency Water Collection. Nano Letters, 2021, 21, 7411-7418.	9.1	45
15	Heterogeneous nucleation capability of conical microstructures for water droplets. RSC Advances, 2015, 5, 812-818.	3.6	44
16	Directional Movement of Droplets in Grooves: Suspended or Immersed?. Scientific Reports, 2016, 6, 18836.	3.3	37
17	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.	3.6	37
18	Macrotextures-enabled self-propelling of large condensate droplets. Chemical Engineering Journal, 2021, 405, 126901.	12.7	32

#	Article	IF	Citations
19	Falling-droplet-enhanced filmwise condensation in the presence of non-condensable gas. International Journal of Heat and Mass Transfer, 2019, 140, 173-186.	4.8	28
20	Droplet Departure Characteristics and Dropwise Condensation Heat Transfer at Low Steam Pressure. Journal of Heat Transfer, 2016, 138, .	2.1	27
21	Composite porous surfaces of microcavities for enhancing boiling heat transfer. International Journal of Heat and Mass Transfer, 2021, 177, 121513.	4.8	21
22	Fast Capillary Wicking on Hierarchical Copper Nanowired Surfaces with Interconnected V-Grooves: Implications for Thermal Management. ACS Applied Nano Materials, 2021, 4, 5360-5371.	5.0	19
23	A droplet model in steam condensation with noncondensable gas. International Journal of Thermal Sciences, 2013, 68, 1-7.	4.9	17
24	Evolution of transient cluster/droplet size distribution in a heterogeneous nucleation process. RSC Advances, 2014, 4, 31692.	3.6	17
25	Preferential Vapor Nucleation on Hierarchical Tapered Nanowire Bunches. Langmuir, 2021, 37, 774-784.	3.5	17
26	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.	2.4	11
27	Coupling droplets/bubbles with a liquid film for enhancing phase-change heat transfer. IScience, 2021, 24, 102531.	4.1	8
28	Laser-Induced Patterned Photonic Crystal Heterostructure for Multimetal Ion Recognition. ACS Applied Materials & Interfaces, 2021, 13, 4330-4339.	8.0	8
29	Droplet Spreading Characteristics on Ultra-Slippery Solid Hydrophilic Surfaces with Ultra-Low Contact Angle Hysteresis. Coatings, 2022, 12, 755.	2.6	8
30	Atomic Layer Deposited Coatings on Nanowires for High Temperature Water Corrosion Protection. ACS Applied Materials & Interfaces, 2016, 8, 32616-32623.	8.0	6
31	Molecular dynamics simulation on the wetting characteristic of micro-droplet on surfaces with different free energies. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 216801.	0.5	6
32	Sustainable anti-frosting surface for efficient thermal transport. Cell Reports Physical Science, 2022, 3, 100937.	5.6	6
33	Liquid film boiling enabled ultra-high conductance and high flux heat spreaders. Cell Reports Physical Science, 2022, 3, 100746.	5.6	5
34	Hydrophilic Slippery Surface Promotes Efficient Defrosting. Langmuir, 2021, 37, 11931-11938.	3.5	3
35	Microscopic Observation of Preferential Capillary Pumping in Hollow Nanowire Bundles. Langmuir, 2021, , .	3.5	3
36	Microcavity-Enabled Local Oscillation of Taylor Bubbles in a Microchannel. Industrial & Engineering Chemistry Research, 2021, 60, 1055-1066.	3.7	2

#	Article	IF	Citations
37	Micromesh-covered superhydrophobic surfaces for efficient condensation heat transfer. , 2017, , .		1
38	Micromesh-Enabled Low-Cost Thermal Ground Planes for High Heat Flux Power Electronics. , 2018, , .		1
39	Advances in Dropwise Condensation: Dancing Droplets. , 2020, , .		1
40	Detection and experimental analysis of the molecular clusters distribution during wall condensation. Journal of Molecular Liquids, 2021, , 116948.	4.9	1