Zhong Lan

List of Publications by Year
in descending order

35 papers	1,081 citations	471509 17 h-index	414414 32 g-index
35 all docs	35 docs citations	35 times ranked	924 citing authors

#	Article	IF	Citations
1	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
2	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
3	Analysis of droplet jumping phenomenon with lattice Boltzmann simulation of droplet coalescence. Applied Physics Letters, 2013, 102, .	3.3	103
4	Wetting Mode Evolution of Steam Dropwise Condensation on Superhydrophobic Surface in the Presence of Noncondensable Gas. Journal of Heat Transfer, 2012, 134, .	2.1	59
5	Numerical Simulation of Coalescence-Induced Jumping of Multidroplets on Superhydrophobic Surfaces: Initial Droplet Arrangement Effect. Langmuir, 2017, 33, 6258-6268.	3.5	55
6	Self-enhancement of droplet jumping velocity: the interaction of liquid bridge and surface texture. RSC Advances, 2016, 6, 99314-99321.	3.6	54
7	Critical size ratio for coalescence-induced droplet jumping on superhydrophobic surfaces. Applied Physics Letters, 2017, 111, .	3.3	54
8	Molecular clustering physical model of steam condensation and the experimental study on the initial droplet size distribution. International Journal of Thermal Sciences, 2009, 48, 2228-2236.	4.9	50
9	Macrotextures-induced jumping relay of condensate droplets. Applied Physics Letters, 2019, 114, .	3.3	46
10	Rapid and Persistent Suction Condensation on Hydrophilic Surfaces for High-Efficiency Water Collection. Nano Letters, 2021, 21, 7411-7418.	9.1	45
11	Heterogeneous nucleation capability of conical microstructures for water droplets. RSC Advances, 2015, 5, 812-818.	3.6	44
12	Directional Movement of Droplets in Grooves: Suspended or Immersed?. Scientific Reports, 2016, 6, 18836.	3.3	37
13	Macrotextures-enabled self-propelling of large condensate droplets. Chemical Engineering Journal, 2021, 405, 126901.	12.7	32
14	Behavioral patterns of drop impingement onto rigid substrates with a wide range of wettability and different surface temperatures. AICHE Journal, 2009, 55, 1983-1992.	3.6	23
15	Numerical simulation on vapor absorption by wavy lithium bromide aqueous solution films. Heat and Mass Transfer, 2011, 47, 1611-1619.	2.1	19
16	Heat Transfer Characteristics of Falling Film Process on Coated Division Tubes: Effect of the Surface Configurations. Industrial & Engineering Chemistry Research, 2010, 49, 6622-6629.	3.7	18
17	Morphology evolution and dynamics of droplet coalescence on superhydrophobic surfaces. AICHE Journal, 2018, 64, 2913-2921.	3.6	18
18	Evolution of transient cluster/droplet size distribution in a heterogeneous nucleation process. RSC Advances, 2014, 4, 31692.	3.6	17

#	Article	IF	Citations
19	Preferential Vapor Nucleation on Hierarchical Tapered Nanowire Bunches. Langmuir, 2021, 37, 774-784.	3.5	17
20	Effect of a Superhydrophobic Surface Structure on Droplet Jumping Velocity. Langmuir, 2021, 37, 1779-1787.	3.5	16
21	Numerical simulation on wave behaviour and flow dynamics of laminarâ€wavy falling films: Effect of surface tension and viscosity. Canadian Journal of Chemical Engineering, 2012, 90, 61-68.	1.7	14
22	Heat Transfer and Thermodynamic Performance of LiBr/H2O Absorption Heat Transformer with Vapor Absorption Inside Vertical Spiral Tubes. Heat Transfer Engineering, 2014, 35, 1130-1136.	1.9	14
23	Multiple Bounces and Oscillatory Movement of a Microdroplet in Superhydrophobic Minichannels. Industrial & Engineering Chemistry Research, 2018, 57, 4452-4461.	3.7	14
24	Structure Transition of CuO_X Nanoparticles in Copperâ'Silica Nanocomposites. Journal of Physical Chemistry C, 2009, 113, 6969-6975.	3.1	13
25	Convection Condensation Heat Transfer of Steam-Air Mixture With Heat Pipe Heat Exchanger. Heat Transfer Engineering, 2014, 35, 600-609.	1.9	13
26	Droplet Regulation and Dropwise Condensation Heat Transfer Enhancement on Hydrophobic-Superhydrophobic Hybrid Surfaces. Heat Transfer Engineering, 2018, 39, 1540-1551.	1.9	12
27	The evolution of droplet impacting on thin liquid film at superhydrophilic surface. Applied Physics Letters, 2017, 111, 231601.	3.3	10
28	Dynamic Behaviors of Condensing Clusters Based on Rayleigh Scattering Experiment. Scientific Reports, 2017, 7, 987.	3.3	4
29	Direct observation of water clusters for surface design. Chemical Engineering Science, 2020, 217, 115475.	3.8	3
30	Experimental Study of Nucleate Boiling Heat Transfer Using Enhanced Space-Confined Structures. Journal of Heat Transfer, 2012, 134, .	2.1	2
31	Experimental study on steam condensation with non-condensable gas in horizontal microchannels. , 2013, , .		2
32	Microcavity-Enabled Local Oscillation of Taylor Bubbles in a Microchannel. Industrial & Engineering Chemistry Research, 2021, 60, 1055-1066.	3.7	2
33	Optimal Operation of an Oscillatory Flow Crystallizer: Coupling Disturbance and Stability. ACS Omega, 2021, 6, 28912-28922.	3.5	2
34	Optimization of an Oscillatory Flow Crystallizer Based on Heat Transfer and Supersaturation Distribution. Chemical Engineering and Technology, 2022, 45, 745-754.	1.5	1
35	Heat and mass transfer enhancement for falling film absorption with coated distribution tubes at high temperature. , 2013, , .		0