Han Hu

List of Publications by Year
in descending order

Version: 2024-02-01

27 papers	749 citations	471477 17 h-index	610883 24 g-index
27 all docs	27 docs citations	27 times ranked	1070 citing authors

#	Article	IF	Citations
1	Microlayer evaporation governs heat transfer enhancement during pool boiling from microstructured surfaces. Applied Physics Letters, 2022, 120, .	3.3	17
2	Deep learning strategies for critical heat flux detection in pool boiling. Applied Thermal Engineering, 2021, 190, 116849.	6.0	20
3	Role of nanoscale roughness in the heat transfer characteristics of thin film evaporation. International Journal of Heat and Mass Transfer, 2020, 150, 119306.	4.8	17
4	A coupled wicking and evaporation model for prediction of pool boiling critical heat flux on structured surfaces. International Journal of Heat and Mass Transfer, 2019, 136, 373-382.	4.8	25
5	Failure mechanisms of air entrainment in drop impact on lubricated surfaces. Soft Matter, 2017, 13, 2402-2409.	2.7	31
6	Multiscale Modeling of the Three-Dimensional Meniscus Shape of a Wetting Liquid Film on Micro-/Nanostructured Surfaces. Langmuir, 2017, 33, 12028-12037.	3.5	9
7	Solidification of additive-enhanced phase change materials in spherical enclosures with convective cooling. Applied Thermal Engineering, 2017, 111, 134-142.	6.0	33
8	Intrinsic instability of thin liquid films on nanostructured surfaces. Applied Physics Letters, 2016, 109, .	3.3	3
9	Experimental Characterization of Inward Freezing and Melting of Additive-Enhanced Phase-Change Materials Within Millimeter-Scale Cylindrical Enclosures. Journal of Heat Transfer, 2016, 138, .	2.1	15
10	Heat transfer analysis of PCM slurry flow between parallel plates. International Journal of Heat and Mass Transfer, 2016, 99, 895-903.	4.8	16
11	Viscosity of Water under Electric Field: Anisotropy Induced by Redistribution of Hydrogen Bonds. Journal of Physical Chemistry B, 2016, 120, 4818-4827.	2.6	31
12	Multiscale Modeling of Thin Liquid Films. Springer Series in Materials Science, 2016, , 507-536.	0.6	3
13	Deposition of Colloidal Drops Containing Ellipsoidal Particles: Competition between Capillary and Hydrodynamic Forces. Langmuir, 2016, 32, 11899-11906.	3.5	29
14	Effect of nanostructures on heat transfer coefficient of an evaporating meniscus. International Journal of Heat and Mass Transfer, 2016, 101, 878-885.	4.8	44
15	Dust ignition of pure and encapsulated paraffin phase change materials. Journal of Loss Prevention in the Process Industries, 2016, 40, 298-303.	3.3	0
16	INWARD MELTING AND FREEZING OF ADDITIVE-ENHANCED PHASE CHANGE MATERIALS IN SMALL DIAMETER CYLINDERS. , 2016, , .		0
17	EFFECT OF NANOSTRUCTURES AND ELECTROSTATIC INTERACTIONS ON MENISCUS SHAPE AND DISJOINING PRESSURE OF THIN LIQUID FILMS. , 2016, , .		0
18	Dendrite Growth during Freezing of Millimeter-Scale Eicosane Droplets. Journal of Heat Transfer, 2015, 137, .	2.1	2

#	Article	IF	Citations
19	Model of Meniscus Shape and Disjoining Pressure of Thin Liquid Films on Nanostructured Surfaces with Electrostatic Interactions. Journal of Physical Chemistry C, 2015, 119, 11777-11785.	3.1	18
20	Colloidal Drop Deposition on Porous Substrates: Competition among Particle Motion, Evaporation, and Infiltration. Langmuir, 2015, 31, 7953-7961.	3.5	70
21	Pore-Scale Transport Resolved Model Incorporating Cathode Microstructure and Peroxide Growth in Lithium-Air Batteries. Journal of the Electrochemical Society, 2015, 162, A1135-A1145.	2.9	27
22	Effect of Nanostructures on the Meniscus Shape and Disjoining Pressure of Ultrathin Liquid Film. Nano Letters, 2014, 14, 7131-7137.	9.1	37
23	Wetting kinetics of water nano-droplet containing non-surfactant nanoparticles: A molecular dynamics study. Applied Physics Letters, 2013, 103, .	3.3	38
24	A molecular dynamics study of effective thermal conductivity in nanocomposites. International Journal of Heat and Mass Transfer, 2013, 61, 577-582.	4.8	57
25	Molecular dynamics simulations of disjoining pressure effect in ultra-thin water film on a metal surface. Applied Physics Letters, 2013, 103, .	3.3	32
26	The effect of oxygen vacancies on water wettability of a ZnO surface. Physical Chemistry Chemical Physics, 2013, 15, 16557.	2.8	88
27	Effect of nanopatterns on Kapitza resistance at a water-gold interface during boiling: A molecular dynamics study. Journal of Applied Physics, 2012, 112, .	2.5	87