Chengzhi Hu

List of Publications by Year
in descending order

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36	665	516710 16	580821 25
papers	citations	h-index	g-index

36	36	36	386
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Influence of fin parameters on the melting behavior in a horizontal shell-and-tube latent heat storage unit with longitudinal fins. Journal of Energy Storage, 2021, 34, 102230.	8.1	49
2	Molecular dynamics investigation of the effect of copper nanoparticle on the solid contact between friction surfaces. Applied Surface Science, 2014, 321, 302-309.	6.1	46
3	Visualized-experimental investigation on the energy storage performance of PCM infiltrated in the metal foam with varying pore densities. Energy, 2021, 237, 121540.	8.8	42
4	Pore-scale investigation on the heat-storage characteristics of phase change material in graded copper foam. Applied Thermal Engineering, 2020, 178, 115609.	6.0	40
5	Pore-scale simulation of forced convection heat transfer under turbulent conditions in open-cell metal foam. Chemical Engineering Journal, 2020, 389, 124427.	12.7	36
6	Effect of perforated fins on the heat-transfer performance of vertical shell-and-tube latent heat energy storage unit. Journal of Energy Storage, 2021, 39, 102647.	8.1	36
7	An investigation on the heat transfer characteristics of nanofluids in flow boiling by molecular dynamics simulations. International Journal of Heat and Mass Transfer, 2020, 162, 120338.	4.8	32
8	Molecular dynamics simulation on the friction properties of nanofluids confined by idealized surfaces. Tribology International, 2014, 78, 152-159.	5.9	31
9	Molecular dynamics simulation of effects of nanoparticles on frictional heating and tribological properties at various temperatures. Friction, 2020, 8, 531-541.	6.4	31
10	Numerical simulation on the forced convection heat transfer of porous medium for turbine engine heat exchanger applications. Applied Thermal Engineering, 2020, 180, 115845.	6.0	31
11	Effects of depositional nanoparticle wettability on explosive boiling heat transfer: A molecular dynamics study. International Communications in Heat and Mass Transfer, 2019, 109, 104390.	5.6	30
12	Molecular dynamics simulation of nanofluidâ€™s flow behaviors in the near-wall model and main flow model. Microfluidics and Nanofluidics, 2014, 17, 581-589.	2.2	27
13	Molecular dynamics study of the frictional properties of multilayer MoS₂. RSC Advances, 2020, 10, 17418-17426.	3.6	19
14	Numerical investigation of the flow and heat behaviours of an impinging jet. International Journal of Computational Fluid Dynamics, 2014, 28, 301-315.	1.2	18
15	Comparison of forced convective heat transfer between pillar and real foam structure under high Reynolds number. Applied Thermal Engineering, 2021, 182, 116130.	6.0	18
16	Forced Convection Heat Transfer in Porous Structure: Effect of Morphology on Pressure Drop and Heat Transfer Coefficient. Journal of Thermal Science, 2021, 30, 363-393.	1.9	18
17	Simulation of forced convective heat transfer in Kelvin cells with optimized skeletons. International Journal of Heat and Mass Transfer, 2021, 165, 120637.	4.8	17
18	A synergistic improvement in heat storage rate and capacity of nano-enhanced phase change materials. International Journal of Heat and Mass Transfer, 2022, 192, 122869.	4.8	16

#	Article	IF	Citations
19	An investigation on the flow and heat transfer characteristics of nanofluids by nonequilibrium molecular dynamics simulations. Numerical Heat Transfer, Part B: Fundamentals, 2016, 70, 152-163.	0.9	13
20	Visualization of SiO2-water nanofluid flow characteristics in backward-facing step using PIV. Experimental Thermal and Fluid Science, 2019, 101, 151-159.	2.7	12
21	Molecular dynamics simulation on the effect of nanoparticles on the heat transfer characteristics of pool boiling. Numerical Heat Transfer, Part B: Fundamentals, 2018, 73, 94-105.	0.9	11
22	Forced convective heat transfer in optimized kelvin cells to enhance overall performance. Energy, 2022, 242, 122995.	8.8	11
23	A study of interface evolution-triggering different nucleate boiling heat transfer phenomenon on the structured surfaces. International Journal of Heat and Mass Transfer, 2022, 190, 122754.	4.8	10
24	Molecular dynamics simulation on the effect of nanoparticle deposition and nondeposition on the nanofluid explosive boiling heat transfer. Numerical Heat Transfer; Part A: Applications, 2018, 73, 553-564.	2.1	9
25	Numerical simulation on the heat transfer characteristics of two-phase loop thermosyphon with high filling ratios. International Journal of Heat and Mass Transfer, 2022, 184, 122311.	4.8	9
26	Molecular dynamics simulation of frictional properties of Couette flow with striped superhydrophobic surfaces under different loads. Physical Chemistry Chemical Physics, 2019, 21, 17786-17791.	2.8	7
27	Molecular dynamics study on the mechanical properties of multilayer MoS₂ under different potentials. Nanotechnology, 2020, 31, 215703.	2.6	7
28	Thermal effect of nanoparticles on the metal foam composite phase change material: A pore-scale study. International Journal of Thermal Sciences, 2022, 179, 107709.	4.9	7
29	Heat transfer analysis of piston cooling using nanofluids in the gallery. Micro and Nano Letters, 2015, 10, 28-33.	1.3	6
30	Investigating control of convective heat transfer and flow resistance of Fe3O4/deionized water nanofluid in magnetic field in laminar flow. Nanotechnology, 2020, 31, 495402.	2.6	6
31	Influence of model inclination on the melting behavior of graded metal foam composite phase change material: A pore-scale study. Journal of Energy Storage, 2021, 44, 103537.	8.1	6
32	Wettability of complex Long-Chain alkanes droplets on Pillar-type surfaces. Applied Surface Science, 2021, 566, 150752.	6.1	5
33	Experimental Study and Analysis of Lubricants Dispersed With Nanodiamond Particles on Diesel Engine. Journal of Nanotechnology in Engineering and Medicine, 2014, 5, .	0.8	3
34	Pore-scale study on Rayleigh-BÃ©nard convection formed in the melting process of metal foam composite phase change material. International Journal of Thermal Sciences, 2022, 177, 107572.	4.9	3
35	Hydrophobic surface-assisted SiO₂/DI-water nanofluids for enhancing heat transfer and reducing flow resistance. Nanotechnology, 2021, 32, 125402.	2.6	2
36	Molecular Dynamics Simulation of Boiling Behavior of Nanofluid With Various Wettability Nanoparticle on Hydrophobic Surface. , 2019, , .		1