Hao Peng

List of Publications by Year
in descending order

65 papers	2,532 citations	201674 27 h-index	197818 49 g-index
65 all docs	65 docs citations	65 times ranked	1954 citing authors

#	Article	IF	Citations
1	Nanoencapsulated n-tetradecane phase change materials with melamineâ€“ureaâ€“formaldehydeâ€“TiO2 hybrid shell for cold energy storage. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 636, 128162.	4.7	12
2	Numerical study on heat transfer and flow characteristics of novel microchannel heat sinks. International Journal of Thermal Sciences, 2022, 176, 107535.	4.9	30
3	A review on synthesis, characterization and application of nanoencapsulated phase change materials for thermal energy storage systems. Applied Thermal Engineering, 2021, 185, 116326.	6.0	69
4	Numerical study on solidification behavior and exergy analysis of a latent heat storage unit with innovative circular superimposed longitudinal fins. International Journal of Heat and Mass Transfer, 2021, 169, 120949.	4.8	36
5	Nature-Inspired Structures Applied in Heat Transfer Enhancement and Drag Reduction. Micromachines, 2021, 12, 656.	2.9	19
6	Study on pulverized coal gasification using waste heat from high temperature blast furnace slag particles. International Journal of Hydrogen Energy, 2021, 46, 26848-26860.	7.1	15
7	Dynamic analysis of a novel standalone liquid air energy storage system for industrial applications. Energy Conversion and Management, 2021, 245, 114537.	9.2	38
8	Experimental and numerical investigation on shell-and-tube exhaust gas recirculation cooler with different tube bundles. Heat and Mass Transfer, 2020, 56, 601-615.	2.1	9
9	Experimental and numerical analysis on heat transfer performance of slug flow in rectangular microchannel. International Journal of Heat and Mass Transfer, 2020, 147, 118963.	4.8	13
10	Experimental study and thermodynamic modeling of solid-liquid equilibrium of binary and ternary mixtures formed by C11H24, C12H26 and C14H30 for cryogenic thermal energy storage. International Journal of Refrigeration, 2020, 120, 378-387.	3.4	2
11	Comparative study on natural convection melting in square cavity using lattice Boltzmann method. Results in Physics, 2020, 18, 103274.	4.1	18
12	Synthesis and Characterization of Nanoalumina and CNTs-Reinforced Microcapsules with n-Dodecane as a Phase Change Material for Cold Energy Storage. Energy & Fuels, 2020, 34, 7700-7708.	5.1	18
13	Molecular investigation on the anomalous phenomenon at liquid desiccant surfaces for air conditioning. Building Simulation, 2020, 13, 599-608.	5.6	5
14	Regulation of velocity zoning behaviour and hydraulic jump of impinging jet flow on a spinning disk reactor. Chemical Engineering Journal, 2020, 390, 124392.	12.7	9
15	The influence of the interaction between the multiple slag droplets on the solidification characteristics in humid air. Applied Thermal Engineering, 2020, 170, 115012.	6.0	8
16	Starting characteristics of a novel high temperature flat heat pipe receiver in solar power tower plant based ofâ€œFlat-frontâ€Startup model. Energy, 2019, 183, 936-945.	8.8	21
17	Experimental investigation on particles characteristics in molten aluminum ligament granulation for waste energy recovery. Energy Procedia, 2019, 158, 4459-4464.	1.8	2
18	Experimental Measurements and Thermodynamic Modeling of Melting Temperature of the Binary Systems n-C11H24â€“n-C14H30, n-C12H26â€“n-C13H28, n-C12H26â€“n-C14H30, and n-C13H28â€“n-C15H32 for Cryogenic Thermal Energy Storage. Industrial & Engineering Chemistry Research, 2019, 58, 15026-15035.	3.7	10

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19	Experimental investigation of the heat transfer and flow characteristics of microchannels with microribs. International Journal of Heat and Mass Transfer, 2019, 143, 118482.	4.8	23
20	Synthesis and characterization of mixed alkanes microcapsules with phase change temperature below ice point for cryogenic thermal energy storage. Energy, 2019, 187, 115898.	8.8	28
21	Experimental study and thermodynamic modeling of solid-liquid equilibrium of binary systems: Dodecane-tetradedcane and tridecane-pentadecane for cryogenic thermal energy storage. Fluid Phase Equilibria, 2019, 493, 109-119.	2.5	16
22	Solidification performance of a latent heat storage unit with innovative longitudinal triangular fins. International Journal of Heat and Mass Transfer, 2019, 138, 667-676.	4.8	84
23	Study on the solidification characteristics of molten slag droplets cooled by mixed cooling medium. Applied Thermal Engineering, 2019, 149, 939-949.	6.0	10
24	The contact heat transfer between the heating plate and granular materials in rotary heat exchanger under overloaded condition. Results in Physics, 2018, 8, 600-609.	4.1	7
25	Influence of rotary disk configurations on droplets characteristics in molten slag granulation for waste heat recovery. Applied Thermal Engineering, 2018, 135, 269-279.	6.0	27
26	Ligament-type granulation of molten slag in different rotary disk configurations. Applied Thermal Engineering, 2018, 128, 1565-1578.	6.0	22
27	Flow and heat transfer characteristics of a double-tube structure internal finned tube with blossom shape internal fins. Applied Thermal Engineering, 2018, 128, 1102-1115.	6.0	21
28	A study on performance of a liquid air energy storage system with packed bed units. Applied Energy, 2018, 211, 126-135.	10.1	123
29	Analogue experimental investigation on ligament granulation of molten slag in various rotary disk configurations for waste energy recovery. Results in Physics, 2018, 11, 385-393.	4.1	10
30	Energy-efficient and -economic technologies for air conditioning with vapor compression refrigeration: A comprehensive review. Applied Energy, 2018, 232, 157-186.	10.1	150
31	State of the art on the high-temperature thermochemical energy storage systems. Energy Conversion and Management, 2018, 177, 792-815.	9.2	166
32	Thermal characteristics of the combined flat plate heat receiver in solar power tower plant. Energy, 2018, 165, 275-289.	8.8	8
33	n-Alkanes Phase Change Materials and Their Microencapsulation for Thermal Energy Storage: A Critical Review. Energy & Fuels, 2018, 32, 7262-7293.	5.1	123
34	Experimental study of boiling heat transfer and flow characteristics in fin channels with variable cross section. Experimental Thermal and Fluid Science, 2017, 84, 279-285.	2.7	7
35	Experimental Investigation on Transition Characteristics of Different Rotary Disk Configurations. Industrial & Engineering Chemistry Research, 2017, 56, 11281-11291.	3.7	8
36	Experimental Investigation of Slag Particles of Ligament Mode Disintegration in Spinning Disk Atomizing. Energy Procedia, 2017, 105, 622-627.	1.8	3

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37	High-temperature analogy experimental investigation on dry granulating characteristic of rotating disk for waste heat utilization of molten slag. Applied Thermal Engineering, 2017, 125, 846-855.	6.0	17
38	An investigation on heat transfer of granular materials in the novel flighted rotary drum. Canadian Journal of Chemical Engineering, 2017, 95, 386-397.	1.7	7
39	Visual experimental study on residence time of particle in plate rotary heat exchanger. Applied Thermal Engineering, 2017, 111, 213-222.	6.0	11
40	Experimental Study on the Critical Characteristics of Liquid Atomization by a Spinning Disk. Industrial & Engineering Chemistry Research, 2016, 55, 6175-6185.	3.7	36
41	Experimental Investigation of Ligament Formation Dynamics of Thin Viscous Liquid Film at Spinning Disk Edge. Industrial & Engineering Chemistry Research, 2016, 55, 9267-9275.	3.7	29
42	Thermodynamic analysis of an improved adiabatic compressed air energy storage system. Applied Energy, 2016, 183, 1361-1373.	10.1	107
43	Experimental investigate on thermal properties of a novel high temperature flat heat pipe receiver in solar power tower plant. Applied Thermal Engineering, 2016, 109, 610-618.	6.0	32
44	Comparative analysis of gasâ€“liquid flow in T-junction microchannels with different inlet orientations. Advances in Mechanical Engineering, 2016, 8, 168781401663732.	1.6	10
45	Thermo-hydraulic performances of internally finned tube with a new type wave fin arrays. Applied Thermal Engineering, 2016, 98, 1174-1188.	6.0	18
46	Predicting thermalâ€“hydraulic performances in compact heat exchangers by support vector regression. International Journal of Heat and Mass Transfer, 2015, 84, 203-213.	4.8	37
47	Numerical analysis on performance of naphthalene phase change thermal storage system in aluminum plate-fin unit. Heat and Mass Transfer, 2015, 51, 195-207.	2.1	21
48	Simulation of ligament mode breakup of molten slag by spinning disk in the dry granulation process. Applied Thermal Engineering, 2015, 84, 437-447.	6.0	54
49	Study on turbulent flow and heat transfer performance of tubes with internal fins in EGR cooler. Heat and Mass Transfer, 2015, 51, 1017-1027.	2.1	9
50	Modeling on heat storage performance of compressed air in a packed bed system. Applied Energy, 2015, 160, 1-9.	10.1	94
51	Theoretical analysis of free-surface film flow on the rotary granulating disk in waste heat recovery process of molten slag. Applied Thermal Engineering, 2014, 63, 387-395.	6.0	45
52	Thermal investigation of PCM-based high temperature thermal energy storage in packed bed. Energy Conversion and Management, 2014, 81, 420-427.	9.2	122
53	Performance investigation of an innovative offset strip fin arrays in compact heat exchangers. Energy Conversion and Management, 2014, 80, 287-297.	9.2	45
54	Study on heat transfer performance of an aluminum flat plate heat pipe with fins in vapor chamber. Energy Conversion and Management, 2013, 74, 44-50.	9.2	65

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55	Analysis on flow and heat transfer characteristics of EGR helical baffled cooler with spiral corrugated tubes. Experimental Thermal and Fluid Science, 2013, 44, 275-284.	2.7	30
56	Cost-effectiveness performance analysis of organic Rankine cycle forÂlow grade heat utilization coupling with operation condition. Applied Thermal Engineering, 2013, 58, 571-584.	6.0	21
57	Field synergy analysis on convective heat transfer and fluid flow of a novel triangular perforated fin. International Journal of Heat and Mass Transfer, 2013, 64, 526-535.	4.8	26
58	Efficiency and optimal performance evaluation of organic Rankine cycle for low grade waste heat power generation. Energy, 2013, 50, 343-352.	8.8	197
59	An experimental and numerical investigation of air side heat transfer and flow characteristics on finned plate configuration. Heat and Mass Transfer, 2012, 48, 1707-1721.	2.1	7
60	Analysis of heat transfer and flow characteristics over serrated fins with different flow directions. Energy Conversion and Management, 2011, 52, 826-835.	9.2	20
61	An Improved Particle Swarm Algorithm for Optimal Design of Plate-Fin Heat Exchangers. Industrial & Engineering Chemistry Research, 2010, 49, 6144-6149.	3.7	47
62	Experimental investigation on flow and heat transfer performance of a novel heat fin-plate radiator for electronic cooling. Heat and Mass Transfer, 2009, 45, 1575-1581.	2.1	6
63	Neural networks analysis of thermal characteristics on plate-fin heat exchangers with limited experimental data. Applied Thermal Engineering, 2009, 29, 2251-2256.	6.0	61
64	Numerical modeling and experimental verification of flow and heat transfer over serrated fins at low Reynolds number. Experimental Thermal and Fluid Science, 2008, 32, 1039-1048.	2.7	27
65	Optimal design approach for the plate-fin heat exchangers using neural networks cooperated with genetic algorithms. Applied Thermal Engineering, 2008, 28, 642-650.	6.0	161