

# Hao Peng

## List of Publications by Year in descending order

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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	Efficiency and optimal performance evaluation of organic Rankine cycle for low grade waste heat power generation. <i>Energy</i> , 2013, 50, 343-352.	8.8	197
2	State of the art on the high-temperature thermochemical energy storage systems. <i>Energy Conversion and Management</i> , 2018, 177, 792-815.	9.2	166
3	Optimal design approach for the plate-fin heat exchangers using neural networks cooperated with genetic algorithms. <i>Applied Thermal Engineering</i> , 2008, 28, 642-650.	6.0	161
4	Energy-efficient and -economic technologies for air conditioning with vapor compression refrigeration: A comprehensive review. <i>Applied Energy</i> , 2018, 232, 157-186.	10.1	150
5	A study on performance of a liquid air energy storage system with packed bed units. <i>Applied Energy</i> , 2018, 211, 126-135.	10.1	123
6	Alkanes Phase Change Materials and Their Microencapsulation for Thermal Energy Storage: A Critical Review. <i>Energy &amp; Fuels</i> , 2018, 32, 7262-7293.	5.1	123
7	Thermal investigation of PCM-based high temperature thermal energy storage in packed bed. <i>Energy Conversion and Management</i> , 2014, 81, 420-427.	9.2	122
8	Thermodynamic analysis of an improved adiabatic compressed air energy storage system. <i>Applied Energy</i> , 2016, 183, 1361-1373.	10.1	107
9	Modeling on heat storage performance of compressed air in a packed bed system. <i>Applied Energy</i> , 2015, 160, 1-9.	10.1	94
10	Solidification performance of a latent heat storage unit with innovative longitudinal triangular fins. <i>International Journal of Heat and Mass Transfer</i> , 2019, 138, 667-676.	4.8	84
11	A review on synthesis, characterization and application of nanoencapsulated phase change materials for thermal energy storage systems. <i>Applied Thermal Engineering</i> , 2021, 185, 116326.	6.0	69
12	Study on heat transfer performance of an aluminum flat plate heat pipe with fins in vapor chamber. <i>Energy Conversion and Management</i> , 2013, 74, 44-50.	9.2	65
13	Neural networks analysis of thermal characteristics on plate-fin heat exchangers with limited experimental data. <i>Applied Thermal Engineering</i> , 2009, 29, 2251-2256.	6.0	61
14	Simulation of ligament mode breakup of molten slag by spinning disk in the dry granulation process. <i>Applied Thermal Engineering</i> , 2015, 84, 437-447.	6.0	54
15	An Improved Particle Swarm Algorithm for Optimal Design of Plate-Fin Heat Exchangers. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 6144-6149.	3.7	47
16	Theoretical analysis of free-surface film flow on the rotary granulating disk in waste heat recovery process of molten slag. <i>Applied Thermal Engineering</i> , 2014, 63, 387-395.	6.0	45
17	Performance investigation of an innovative offset strip fin arrays in compact heat exchangers. <i>Energy Conversion and Management</i> , 2014, 80, 287-297.	9.2	45
18	Dynamic analysis of a novel standalone liquid air energy storage system for industrial applications. <i>Energy Conversion and Management</i> , 2021, 245, 114537.	9.2	38

#	ARTICLE	IF	CITATIONS
19	Predicting thermal-hydraulic performances in compact heat exchangers by support vector regression. <i>International Journal of Heat and Mass Transfer</i> , 2015, 84, 203-213.	4.8	37
20	Experimental Study on the Critical Characteristics of Liquid Atomization by a Spinning Disk. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 6175-6185.	3.7	36
21	Numerical study on solidification behavior and exergy analysis of a latent heat storage unit with innovative circular superimposed longitudinal fins. <i>International Journal of Heat and Mass Transfer</i> , 2021, 169, 120949.	4.8	36
22	Experimental investigate on thermal properties of a novel high temperature flat heat pipe receiver in solar power tower plant. <i>Applied Thermal Engineering</i> , 2016, 109, 610-618.	6.0	32
23	Analysis on flow and heat transfer characteristics of EGR helical baffled cooler with spiral corrugated tubes. <i>Experimental Thermal and Fluid Science</i> , 2013, 44, 275-284.	2.7	30
24	Numerical study on heat transfer and flow characteristics of novel microchannel heat sinks. <i>International Journal of Thermal Sciences</i> , 2022, 176, 107535.	4.9	30
25	Experimental Investigation of Ligament Formation Dynamics of Thin Viscous Liquid Film at Spinning Disk Edge. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 9267-9275.	3.7	29
26	Synthesis and characterization of mixed alkanes microcapsules with phase change temperature below ice point for cryogenic thermal energy storage. <i>Energy</i> , 2019, 187, 115898.	8.8	28
27	Numerical modeling and experimental verification of flow and heat transfer over serrated fins at low Reynolds number. <i>Experimental Thermal and Fluid Science</i> , 2008, 32, 1039-1048.	2.7	27
28	Influence of rotary disk configurations on droplets characteristics in molten slag granulation for waste heat recovery. <i>Applied Thermal Engineering</i> , 2018, 135, 269-279.	6.0	27
29	Field synergy analysis on convective heat transfer and fluid flow of a novel triangular perforated fin. <i>International Journal of Heat and Mass Transfer</i> , 2013, 64, 526-535.	4.8	26
30	Experimental investigation of the heat transfer and flow characteristics of microchannels with microribs. <i>International Journal of Heat and Mass Transfer</i> , 2019, 143, 118482.	4.8	23
31	Ligament-type granulation of molten slag in different rotary disk configurations. <i>Applied Thermal Engineering</i> , 2018, 128, 1565-1578.	6.0	22
32	Cost-effectiveness performance analysis of organic Rankine cycle for low grade heat utilization coupling with operation condition. <i>Applied Thermal Engineering</i> , 2013, 58, 571-584.	6.0	21
33	Numerical analysis on performance of naphthalene phase change thermal storage system in aluminum plate-fin unit. <i>Heat and Mass Transfer</i> , 2015, 51, 195-207.	2.1	21
34	Flow and heat transfer characteristics of a double-tube structure internal finned tube with blossom shape internal fins. <i>Applied Thermal Engineering</i> , 2018, 128, 1102-1115.	6.0	21
35	Starting characteristics of a novel high temperature flat heat pipe receiver in solar power tower plant based of a Flat-front Startup model. <i>Energy</i> , 2019, 183, 936-945.	8.8	21
36	Analysis of heat transfer and flow characteristics over serrated fins with different flow directions. <i>Energy Conversion and Management</i> , 2011, 52, 826-835.	9.2	20

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37	Nature-Inspired Structures Applied in Heat Transfer Enhancement and Drag Reduction. <i>Micromachines</i> , 2021, 12, 656.	2.9	19
38	Thermo-hydraulic performances of internally finned tube with a new type wave fin arrays. <i>Applied Thermal Engineering</i> , 2016, 98, 1174-1188.	6.0	18
39	Comparative study on natural convection melting in square cavity using lattice Boltzmann method. <i>Results in Physics</i> , 2020, 18, 103274.	4.1	18
40	Synthesis and Characterization of Nanoalumina and CNTs-Reinforced Microcapsules with Dodecane as a Phase Change Material for Cold Energy Storage. <i>Energy &amp; Fuels</i> , 2020, 34, 7700-7708.	5.1	18
41	High-temperature analogy experimental investigation on dry granulating characteristic of rotating disk for waste heat utilization of molten slag. <i>Applied Thermal Engineering</i> , 2017, 125, 846-855.	6.0	17
42	Experimental study and thermodynamic modeling of solid-liquid equilibrium of binary systems: Dodecane-tetradecane and tridecane-pentadecane for cryogenic thermal energy storage. <i>Fluid Phase Equilibria</i> , 2019, 493, 109-119.	2.5	16
43	Study on pulverized coal gasification using waste heat from high temperature blast furnace slag particles. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 26848-26860.	7.1	15
44	Experimental and numerical analysis on heat transfer performance of slug flow in rectangular microchannel. <i>International Journal of Heat and Mass Transfer</i> , 2020, 147, 118963.	4.8	13
45	Nanoencapsulated n-tetradecane phase change materials with melamine-urea-formaldehyde-TiO <sub>2</sub> hybrid shell for cold energy storage. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 636, 128162.	4.7	12
46	Visual experimental study on residence time of particle in plate rotary heat exchanger. <i>Applied Thermal Engineering</i> , 2017, 111, 213-222.	6.0	11
47	Comparative analysis of gas-liquid flow in T-junction microchannels with different inlet orientations. <i>Advances in Mechanical Engineering</i> , 2016, 8, 168781401663732.	1.6	10
48	Analogue experimental investigation on ligament granulation of molten slag in various rotary disk configurations for waste energy recovery. <i>Results in Physics</i> , 2018, 11, 385-393.	4.1	10
49	Experimental Measurements and Thermodynamic Modeling of Melting Temperature of the Binary Systems n-C <sub>11</sub> H <sub>24</sub> -n-C <sub>14</sub> H <sub>30</sub> , n-C <sub>12</sub> H <sub>26</sub> -n-C <sub>13</sub> H <sub>28</sub> , n-C <sub>12</sub> H <sub>26</sub> -n-C <sub>14</sub> H <sub>30</sub> , and n-C <sub>13</sub> H <sub>28</sub> -n-C <sub>15</sub> H <sub>32</sub> for Cryogenic Thermal Energy Storage. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 15026-15035.	3.7	10
50	Study on the solidification characteristics of molten slag droplets cooled by mixed cooling medium. <i>Applied Thermal Engineering</i> , 2019, 149, 939-949.	6.0	10
51	Study on turbulent flow and heat transfer performance of tubes with internal fins in EGR cooler. <i>Heat and Mass Transfer</i> , 2015, 51, 1017-1027.	2.1	9
52	Experimental and numerical investigation on shell-and-tube exhaust gas recirculation cooler with different tube bundles. <i>Heat and Mass Transfer</i> , 2020, 56, 601-615.	2.1	9
53	Regulation of velocity zoning behaviour and hydraulic jump of impinging jet flow on a spinning disk reactor. <i>Chemical Engineering Journal</i> , 2020, 390, 124392.	12.7	9
54	Experimental Investigation on Transition Characteristics of Different Rotary Disk Configurations. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 11281-11291.	3.7	8

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55	Thermal characteristics of the combined flat plate heat receiver in solar power tower plant. Energy, 2018, 165, 275-289.	8.8	8
56	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
57	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
58	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
59	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
60	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
61	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
62	Molecular investigation on the anomalous phenomenon at liquid desiccant surfaces for air conditioning. Building Simulation, 2020, 13, 599-608.	5.6	5
63	Experimental Investigation of Slag Particles of Ligament Mode Disintegration in Spinning Disk Atomizing. Energy Procedia, 2017, 105, 622-627.	1.8	3
64	Experimental investigation on particles characteristics in molten aluminum ligament granulation for waste energy recovery. Energy Procedia, 2019, 158, 4459-4464.	1.8	2
65	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