Ji-Xiang Wang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5250755/publications.pdf

Version: 2024-02-01

52 papers	1,622 citations	279487 23 h-index	301761 39 g-index
56 all docs	56 docs citations	56 times ranked	808 citing authors

#	Article	IF	Citations
1	Can a toilet promote virus transmission? From a fluid dynamics perspective. Physics of Fluids, 2020, 32, 065107.	1.6	129
2	Review of aerospace-oriented spray cooling technology. Progress in Aerospace Sciences, 2020, 116, 100635.	6.3	103
3	Recent active thermal management technologies for the development of energy-optimized aerospace vehicles in China. Chinese Journal of Aeronautics, 2021, 34, 1-27.	2.8	85
4	Microstructure and phase evolution of alkali-activated steel slag during early age. Construction and Building Materials, 2019, 204, 158-165.	3.2	83
5	A green route to sustainable alkali-activated materials by heat and chemical activation of lithium slag. Journal of Cleaner Production, 2019, 225, 1184-1193.	4.6	77
6	A gas-atomized spray cooling system integrated with an ejector loop: Ejector modeling and thermal performance analysis. Energy Conversion and Management, 2019, 180, 106-118.	4.4	77
7	Investigation of a spray cooling system with two nozzles for space application. Applied Thermal Engineering, 2015, 89, 115-124.	3.0	69
8	Investigation of heat transfer mechanism of low environmental pressure large-space spray cooling for near-space flight systems. International Journal of Heat and Mass Transfer, 2018, 119, 496-507.	2.5	66
9	An air distribution optimization of hospital wards for minimizing cross-infection. Journal of Cleaner Production, 2021, 279, 123431.	4.6	59
10	Setting controlling of lithium slag-based geopolymer by activator and sodium tetraborate as a retarder and its effects on mortar properties. Cement and Concrete Composites, 2020, 110, 103598.	4.6	58
11	Experimental investigation of the thermal control effects of phase change material based packaging strategy for on-board permanent magnet synchronous motors. Energy Conversion and Management, 2016, 123, 232-242.	4.4	54
12	Virus transmission from urinals. Physics of Fluids, 2020, 32, 081703.	1.6	52
13	Synthesis of fly ash-based self-supported zeolites foam geopolymer via saturated steam treatment. Journal of Hazardous Materials, 2020, 393, 122468.	6.5	50
14	Investigation on a gas-atomized spray cooling upon flat and micro-structured surfaces. International Journal of Thermal Sciences, 2021, 161, 106751.	2.6	50
15	Transient cooling effect analyses for a permanent-magnet synchronous motor with phase-change-material packaging. Applied Thermal Engineering, 2016, 109, 251-260.	3.0	47
16	Investigation of a gravity-immune chip-level spray cooling for thermal protection of laser-based wireless power transmission system. International Journal of Heat and Mass Transfer, 2017, 114, 715-726.	2.5	42
17	Effects of fly ash on the properties and microstructure of alkali-activated FA/BFS repairing mortar. Fuel, 2019, 256, 115919.	3.4	41
18	A highly self-adaptive cold plate for the single-phase mechanically pumped fluid loop for spacecraft thermal management. Energy Conversion and Management, 2016, 111, 57-66.	4.4	37

#	Article	IF	Citations
19	Enhanced heat transfer by an original immersed spray cooling system integrated with an ejector. Energy, 2018, 158, 512-523.	4.5	36
20	Conception and experimental investigation of a hybrid temperature control method using phase change material for permanent magnet synchronous motors. Experimental Thermal and Fluid Science, 2017, 81, 9-20.	1.5	29
21	One-step high efficiency crystallization of zeolite A from ultra-fine circulating fluidized bed fly ash by hydrothermal synthesis method. Fuel, 2019, 257, 116043.	3.4	29
22	The effect of NaOH content on rheological properties, microstructures and interfacial characteristic of alkali activated phosphorus slag fresh pastes. Construction and Building Materials, 2020, 252, 119132.	3.2	28
23	Reaction kinetics and kinetics models of alkali activated phosphorus slag. Construction and Building Materials, 2020, 237, 117728.	3.2	26
24	Nanostructured jumping-droplet thermal rectifier. Physical Review E, 2021, 103, 023110.	0.8	24
25	Comparative study of the heating surface impact on porous-material-involved spray system for electronic cooling â€“ an experimental approach. Applied Thermal Engineering, 2018, 135, 537-548.	3.0	23
26	A self-driven temperature and flow rate co-adjustment mechanism based on Shape-Memory-Alloy (SMA) assembly for an adaptive thermal control coldplate module with on-orbit service characteristics. Applied Thermal Engineering, 2017, 114, 744-755.	3.0	22
27	A hybrid cooling system combining self-adaptive single-phase mechanically pumped fluid loop and gravity-immune two-phase spray module. Energy Conversion and Management, 2018, 176, 194-208.	4.4	21
28	Understanding the acting mechanism of NaOH adjusting the transformation of viscoelastic properties of alkali activated phosphorus slag. Construction and Building Materials, 2020, 257, 119488.	3.2	20
29	Ground-Based Near-Space-Oriented Spray Cooling: Temperature Uniformity Analysis and Performance Prediction. Journal of Thermophysics and Heat Transfer, 2019, 33, 617-626.	0.9	18
30	Physics-based statistical learning perspectives on droplet formation characteristics in microfluidic cross-junctions. Applied Physics Letters, 2022, 120, .	1.5	16
31	Ground-based investigation of a directional, flexible, and wireless concentrated solar energy transmission system. Applied Energy, 2022, 322, 119517.	5.1	16
32	Data-driven modeling of a forced convection system for super-real-time transient thermal performance prediction. International Communications in Heat and Mass Transfer, 2021, 126, 105387.	2.9	15
33	On male urination and related environmental disease transmission in restrooms: From the perspectives of fluid dynamics. Sustainable Cities and Society, 2022, 80, 103753.	5.1	14
34	An integrated hardware-in-the-loop verification approach for dual heat sink systems of aerospace single phase mechanically pumped fluid loop. Applied Thermal Engineering, 2016, 106, 1403-1414.	3.0	13
35	Characteristics of Alkali-Activated Lithium Slag at Early Reaction Age. Journal of Materials in Civil Engineering, 2019, 31, .	1.3	13
36	Cooling Ability/Capacity and Exergy Penalty Analysis of Each Heat Sink of Modern Supersonic Aircraft. Entropy, 2019, 21, 223.	1.1	11

#	Article	IF	Citations
37	Liquid-curtain-based strategy to restrain plume during flushing. Physics of Fluids, 2020, 32, 111707.	1.6	11
38	A concentrated sunlight energy wireless transmission system for space solar energy harvest. Energy Conversion and Management, 2022, 261, 115524.	4.4	11
39	Construction and experimental verification of a novel flexible thermal control system configuration for the autonomous on-orbit services of space missions. Energy Conversion and Management, 2017, 138, 273-285.	4.4	9
40	A Thermoelectric-Heat-Pump Employed Active Control Strategy for the Dynamic Cooling Ability Distribution of Liquid Cooling System for the Space Stationâ€™s Main Power-Cell-Arrays. Entropy, 2019, 21, 578.	1.1	8
41	Power loss and efficiency analysis of an onboard three-level brushless synchronous generator. International Journal of Electronics, 2021, 108, 1-20.	0.9	7
42	Experimental study on Rayleigh-BÃ©nard-Marangoni convection characteristics in a droplet during mass transfer. International Journal of Heat and Mass Transfer, 2021, 172, 121214.	2.5	5
43	Optimization of alkali-activated concrete based on the characteristics of binder systems. Construction and Building Materials, 2021, 300, 123952.	3.2	5
44	Ground-based investigations on phase-moving phenomenon with space sublimation cooling for lunar exploration missions. Chinese Journal of Aeronautics, 2022, 35, 65-74.	2.8	5
45	Numerical Investigation on the Thermal Performance of Nanofluid-Based Cooling System for Synchronous Generators. Entropy, 2019, 21, 420.	1.1	4
46	Performance analysis of a self-driven adaptive cold-plate, an experimental approach. , 2016, , .		2
47	Numerical investigation and experimental validation of an infrared measurement approach for surface heat flux distribution using a multi-color-reference. International Journal of Heat and Mass Transfer, 2019, 131, 675-690.	2.5	1
48	In-Situ Crystallization and Characteristics of Alkali-Activated Materials-Supported Analcime-C from a By-Product of the Lithium Carbonate Industry. Materials, 2022, 15, 1261.	1.3	1
49	Configuration design and numerical analysis of a Martian dust storm simulation wind tunnel for Mars airplanes and rovers. , 2016, , .		0
50	Excitation current calculation of a brushless synchronous generator under different speed and load. , 2018, , .		0
51	A Near-space-oriented Large-space Spray Cooling System: Temperature Uniformity Analysis and Performance Prediction Using Neural Network. , 2018, , .		0
52	10.1063/5.0021450.1. , 2020, , .		0