

# Kai Zhang

## List of Publications by Year in descending order

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63  
papers

1,413  
citations

304743

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361022

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all docs

63  
docs citations

63  
times ranked

1127  
citing authors

#	ARTICLE	IF	CITATIONS
1	Estimation of pollutant sources in multi-zone buildings through different deconvolution algorithms. <i>Building Simulation</i> , 2022, 15, 817-830.	5.6	11
2	Experimental study on the performance of a tree-shaped mini-channel liquid cooling heat sink. <i>Case Studies in Thermal Engineering</i> , 2022, 30, 101780.	5.7	14
3	Study on the performance of a miniscale channel heat sink with Y-shaped unit channels based on entransy analysis. <i>Applied Thermal Engineering</i> , 2022, 209, 118295.	6.0	8
4	Study on the cooling performance of a radiative cooling-based ventilated roof for its application in buildings. <i>Building Services Engineering Research and Technology</i> , 2022, 43, 685-702.	1.8	1
5	Effect of roof and ceiling configuration on energy performance of a metamaterial-based cool roof for low-rise office building in China. <i>Indoor and Built Environment</i> , 2021, 30, 1739-1750.	2.8	7
6	Core@double-shell structured multifunctional phase change microcapsules based on modified graphene oxide Pickering emulsion. <i>International Journal of Energy Research</i> , 2021, 45, 3257-3268.	4.5	19
7	Analysis of the impact of a novel cool roof on cooling performance for a low-rise prefabricated building in China. <i>Building Services Engineering Research and Technology</i> , 2021, 42, 26-44.	1.8	26
8	Enhanced Creep Resistance and Mechanical Properties for $\text{Cl}_2\text{O}_2$ and $\text{FOX}_7$ -based PBXs by Crystal Surface Modification. <i>Propellants, Explosives, Pyrotechnics</i> , 2021, 46, 572-578.	1.6	7
9	Phase-change composites silicone rubber/paraffin@ $\text{SiO}_2$ microcapsules with different core/shell ratio for thermal management. <i>International Journal of Energy Research</i> , 2021, 45, 18033-18047.	4.5	20
10	Study on the Performance of a Y-Shaped Liquid Cooling Heat Sink Based on Constructal Law for Electronic Chip Cooling. <i>Journal of Thermal Science and Engineering Applications</i> , 2021, 13, .	1.5	6
11	Effect of branching level on the performance of constructal theory based Y-shaped liquid cooling heat sink. <i>Applied Thermal Engineering</i> , 2020, 168, 114824.	6.0	38
12	Nanodiamond-Modified Microencapsulated Phase-Change Materials with Superhydrophobicity and High Light-to-Thermal Conversion Efficiency. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 21736-21744.	3.7	12
13	Solutions to mitigate the impact of measurement noise on the air pollution source strength estimation in a multi-zone building. <i>Building Simulation</i> , 2020, 13, 1329-1337.	5.6	9
14	Graphene-carbon nanotube hybrid aerogel/polyethylene glycol phase change composite for thermal management. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2020, 28, 656-662.	2.1	26
15	Sub-ambient radiative cooling and its application in buildings. <i>Building Simulation</i> , 2020, 13, 1165-1189.	5.6	33
16	Molecular investigation on the anomalous phenomenon at liquid desiccant surfaces for air conditioning. <i>Building Simulation</i> , 2020, 13, 599-608.	5.6	5
17	Gas distribution mapping for indoor environments based on laser absorption spectroscopy: Development of an improved tomographic algorithm. <i>Building and Environment</i> , 2020, 172, 106724.	6.9	13
18	Multifunctional silicone rubber/paraffin@ $\text{PbWO}_4$ phase-change composites for thermoregulation and gamma radiation shielding. <i>International Journal of Energy Research</i> , 2020, 44, 7674-7686.	4.5	17

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19	Novel Shape-Stabilized Phase Change Materials Based on Paraffin/EPDM@Graphene with High Thermal Conductivity and Low Leakage Rate. <i>Energy &amp; Fuels</i> , 2020, 34, 5024-5031.	5.1	28
20	Multifunctional phase change microcapsules based on graphene oxide Pickering emulsion for photothermal energy conversion and superhydrophobicity. <i>International Journal of Energy Research</i> , 2020, 44, 4464-4474.	4.5	44
21	Energy-Saving Analysis of Low-Rise Prefabricated Building Integrating with Metamaterial-Based Cool Roof in China. <i>Environmental Science and Engineering</i> , 2020, , 57-65.	0.2	1
22	Numerical Study on Thermal Management of Data Center Integrated with Underfloor Vertical Baffles. <i>Environmental Science and Engineering</i> , 2020, , 77-85.	0.2	0
23	Effects of molding on property of thermally conductive and electrically insulating polyamide 6 based composite. <i>Journal of Thermoplastic Composite Materials</i> , 2019, 32, 1190-1203.	4.2	8
24	Phase change microcapsules with lead tungstate shell for gamma radiation shielding and thermal energy storage. <i>International Journal of Energy Research</i> , 2019, 43, 8398.	4.5	14
25	Paraffin@graphene/silicon rubber form-stable phase change materials for thermal energy storage. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2019, 27, 626-631.	2.1	21
26	Dynamical source term estimation in a multi-compartment building under time-varying airflow. <i>Building and Environment</i> , 2019, 160, 106162.	6.9	28
27	Non-intrusive measurement method for the window opening behavior. <i>Energy and Buildings</i> , 2019, 197, 171-176.	6.7	21
28	Paraffin-based shape-stable phase change materials with graphene/carbon nanotube three-dimensional network structure. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2019, 27, 492-497.	2.1	23
29	Electrostatic interaction-based self-assembly of paraffin@graphene microcapsules with remarkable thermal conductivity for thermal energy storage. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2019, 27, 120-127.	2.1	25
30	Preparation and light-to-heat conversion efficiency of paraffin/graphene aerogel shape-stable phase change materials. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2019, 27, 375-381.	2.1	11
31	Airflow uniformity optimization for modular data center based on the constructal T-shaped underfloor air ducts. <i>Applied Thermal Engineering</i> , 2019, 155, 489-500.	6.0	24
32	Synergistic enhancement of thermal conductivity between SiCw and h-BN in MVQ-based composite. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2019, 27, 434-439.	2.1	4
33	Entransy analysis on the performance of the counter-flow heat exchangers for a double evaporating temperature chiller. <i>International Journal of Refrigeration</i> , 2019, 98, 89-97.	3.4	5
34	Modified Phase Change Microcapsules with Calcium Carbonate and Graphene Oxide Shells for Enhanced Energy Storage and Leakage Prevention. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 5182-5191.	6.7	120
35	Superhydrophobic Melamine-formaldehyde Foam Prepared by In-situ Coprecipitation. <i>Chemistry Letters</i> , 2018, 47, 414-416.	1.3	4
36	Exergy and energy analysis of a double evaporating temperature chiller. <i>Energy and Buildings</i> , 2018, 165, 464-471.	6.7	15

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37	Novel segregated-structure phase change materials composed of paraffin@graphene microencapsules with high latent heat and thermal conductivity. <i>Journal of Materials Science</i> , 2018, 53, 2566-2575.	3.7	64
38	Microencapsulated Paraffin Phase-Change Material with Calcium Carbonate Shell for Thermal Energy Storage and Solar-Thermal Conversion. <i>Langmuir</i> , 2018, 34, 14254-14264.	3.5	73
39	Energy saving and economic analysis of a new hybrid radiative cooling system for single-family houses in the USA. <i>Applied Energy</i> , 2018, 224, 371-381.	10.1	112
40	Recent advancements on thermal management and evaluation for data centers. <i>Applied Thermal Engineering</i> , 2018, 142, 215-231.	6.0	75
41	ENERGY SAVING ANALYSIS OF A METAMATERIAL BASED RADIATIVE COOLING SYSTEM FOR LOW-RISE RESIDENTIAL BUILDINGS BY INTEGRATING WITH RADIANT FLOOR. , 2018, , .		3
42	Multi- $\epsilon$ gating injection molding to enhance the thermal conductivity of carbon fiber/polysulfone composite. <i>Polymer Composites</i> , 2017, 38, 185-191.	4.6	12
43	In-situ synthesis and textural evolution of the novel carbonaceous SiC/mullite aerogel via polymer-derived ceramics route. <i>Ceramics International</i> , 2017, 43, 9896-9905.	4.8	12
44	On the characteristics of airflow through the perforated tiles for raised-floor data centers. <i>Journal of Building Engineering</i> , 2017, 10, 60-68.	3.4	19
45	Modelling study of the low-pump-power demand constructal T-shaped pipe network for a large scale radiative cooled-cold storage system. <i>Applied Thermal Engineering</i> , 2017, 127, 1564-1573.	6.0	22
46	Paraffin/carbon aerogel phase change materials with high enthalpy and thermal conductivity. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2017, 25, 512-518.	2.1	29
47	Highly dispersed melamine cyanurate flame-retardant epoxy resin composites. <i>Polymer International</i> , 2017, 66, 85-91.	3.1	45
48	Air-conditioning system with underfloor air distribution integrated solar chimney in data center. <i>Procedia Engineering</i> , 2017, 205, 3420-3427.	1.2	3
49	Theoretical analysis of mutual injection mechanism in spectral beam combining diode laser array. <i>Optical Engineering</i> , 2017, 56, 1.	1.0	1
50	Electro-optical equivalent calibration technology for high-energy laser energy meters. <i>Review of Scientific Instruments</i> , 2016, 87, 045114.	1.3	2
51	Experimental parametric study on the temperature distribution of an underfloor air distribution (UFAD) system with grille diffusers. <i>Indoor and Built Environment</i> , 2016, 25, 748-757.	2.8	5
52	Preparation and characterization of $\beta$ -ray radiation shielding PbWO <sub>4</sub> /EPDM composite. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2016, 309, 1097-1103.	1.5	47
53	Simplified model for desired airflow rate in underfloor air distribution (UFAD) systems. <i>Applied Thermal Engineering</i> , 2016, 93, 244-250.	6.0	21
54	Syntheses of novel soluble carborane polyimides with ultrahigh thermal stability. <i>Polymer International</i> , 2015, 64, 1715-1721.	3.1	23

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55	Research on temperature measurement technology for graphite-cone-absorption-cavity absolute calorimeter. Review of Scientific Instruments, 2015, 86, 025001.	1.3	1
56	Carborane polyimides, synthesis and characterization. RSC Advances, 2014, 4, 53628-53633.	3.6	24
57	Effect of RuO <sub>2</sub> on Piezoresistive Properties of CB/MVQ Composite Materials. Key Engineering Materials, 2014, 609-610, 124-129.	0.4	0
58	Experimental study on the characteristics of supply air for UFAD system with perforated tiles. Energy and Buildings, 2014, 80, 1-6.	6.7	29
59	Study on Performance of Storage Tanks in Solar Water Heater System in Charge and Discharge Progress. Energy Procedia, 2014, 48, 384-393.	1.8	35
60	Numerical Study on the Thermal Environment of UFAD System with Solar Chimney for the Data Center. Energy Procedia, 2014, 48, 1047-1054.	1.8	15
61	Graphene-based composite with microwave absorption property prepared by in situ reduction. Polymer Composites, 2014, 35, 461-467.	4.6	15
62	Review of underfloor air distribution technology. Energy and Buildings, 2014, 85, 180-186.	6.7	47
63	Volume absorption laser energy meter for high energy laser by water absorption. Applied Physics B: Lasers and Optics, 2013, 110, 573-578.	2.2	11