Zhijun Zhang

List of Publications by Year
in descending order

36 papers	**253** citations	1162367 **8** h-index

1058022 **14** g-index

36 all docs	**36** docs citations	**36** times ranked	**148** citing authors

#	Article	IF	Citations
1	Numerical investigation of gas separation via thermally induced flows in ratchet-like patterned microchannels. International Journal of Thermal Sciences, 2022, 172, 107280.	2.6	3
2	Heat and drag reduction of single and combined opposing jets in hypersonic nonequilibrium flows. Aerospace Science and Technology, 2022, 121, 107194.	2.5	7
3	Ab initio simulation of rarefied flows of gaseous mixtures in the system of microbeams with different temperatures. International Communications in Heat and Mass Transfer, 2022, 131, 105872.	2.9	5
4	Energy utilization and heating uniformity of multiple specimens heated in a domestic microwave oven. Food and Bioproducts Processing, 2022, 132, 35-51.	1.8	16
5	Numerical and experimental study on bandgap property of two-dimensional lattice with nested core. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	1.1	6
6	Wall conditions effects on rarefied gas flow characteristics in the system of microbeams with different temperatures. European Physical Journal Plus, 2022, 137, 1.	1.2	1
7	Bandgap enhancement of two-dimensional lattice metamaterial via re-entrant hierarchy. Smart Materials and Structures, 2022, 31, 095012.	1.8	5
8	Numerical Investigation of the Deformable Porous Media Treated by the Intermittent Microwave. Processes, 2021, 9, 757.	1.3	2
9	Gas-surface interaction effects on rarefied gas flows around microbeams induced by temperature fields. International Journal of Heat and Mass Transfer, 2021, 172, 121186.	2.5	8
10	Impact of Improved Design on Knudsen Force for Micro Gas Sensor. Micromachines, 2020, 11, 634.	1.4	10
11	Numerical Investigation into the Flow Characteristics of Gas Mixtures in Knudsen Pump with Variable Soft Sphere Model. Micromachines, 2020, 11, 784.	1.4	6
12	Transient numerical simulation of hemispherical cone with combined opposing jet in hypersonic flow. Acta Astronautica, 2020, 175, 327-337.	1.7	7
13	Sensitivity analysis of intermittent microwave convective drying based on multiphase porous media models. International Journal of Thermal Sciences, 2020, 153, 106344.	2.6	17
14	Knudsen pumps: a review. Microsystems and Nanoengineering, 2020, 6, 26.	3.4	32
15	Numerical investigation into the low-pressure detection sensor performance of hydrogen gas with variable soft sphere molecular model. International Journal of Hydrogen Energy, 2020, 45, 7243-7253.	3.8	7
16	Hypersonic nonequilibrium flow simulations of a hemispherical nose with a counterflowing jet. Acta Astronautica, 2019, 165, 388-400.	1.7	8
17	Study of Flow Characteristics of Gas Mixtures in a Rectangular Knudsen Pump. Micromachines, 2019, 10, 79.	1.4	22
18	Numerical simulation of thermal edge flow in ratchet-like periodically patterned micro-channels. International Journal of Heat and Mass Transfer, 2019, 135, 1023-1038.	2.5	20

#	Article	IF	Citations
19	Pumping Performance Evaluation of HL-2M In-Vessel Cryopump With Monte Carlo Method. IEEE Transactions on Plasma Science, 2018, 46, 1587-1591.	0.6	9
20	Shape Effect on the Temperature Field during Microwave Heating Process. Journal of Food Quality, 2018, 2018, 1-24.	1.4	19
21	Monte Carlo simulation of gas free molecular flow in turbo molecular pump's inlet tube. Molecular Simulation, 2018, 44, 1261-1269.	0.9	3
22	Modelling of intermittent microwave convective drying: parameter sensitivity. Open Physics, 2017, 15, 405-419.	0.8	6
23	Heat and Mass Transfer of the Droplet Vacuum Freezing Process Based on the Diffusion-controlled Evaporation and Phase Transition Mechanism. Scientific Reports, 2016, 6, 35324.	1.6	5
24	Mathematical Modeling of Heat and Mass Transfer in Energy Science and Engineering 2014. Mathematical Problems in Engineering, 2015, 2015, 1-3.	0.6	1
25	Parameter Sensitivity of the Microdroplet Vacuum Freezing Process. Mathematical Problems in Engineering, 2015, 2015, 1-8.	0.6	1
26	Light Path Model of Fiber Optic Liquid Level Sensor Considering Residual Liquid Film on the Wall. Journal of Sensors, 2015, 2015, 1-8.	0.6	0
27	Relative Permeability Effect on Vacuum Drying Process of Porous Material Modeling. Journal of Computational and Theoretical Nanoscience, 2015, 12, 2757-2762.	0.4	1
28	Heat and Mass Transfer of Droplet Vacuum Freezing Process Based on Dynamic Mesh. Mathematical Problems in Engineering, 2014, 2014, 1-6.	0.6	5
29	Heat and Mass Transfer of Vacuum Cooling for Porous Foods-Parameter Sensitivity Analysis. Mathematical Problems in Engineering, 2014, 2014, 1-8.	0.6	3
30	System Model of Heat and Mass Transfer Process for Mobile Solvent Vapor Phase Drying Equipment. Mathematical Problems in Engineering, 2014, 2014, 1-11.	0.6	1
31	Cortex Effect on Vacuum Drying Process of Porous Medium. Mathematical Problems in Engineering, 2013, 2013, 1-8.	0.6	2
32	Mathematical Modeling of Heat and Mass Transfer in Energy Science and Engineering. Mathematical Problems in Engineering, 2013, 2013, 1-3.	0.6	1
33	3D Model-Based Simulation Analysis of Energy Consumption in Hot Air Drying of Corn Kernels. Mathematical Problems in Engineering, 2013, 2013, 1-12.	0.6	9
34	Nonequilibrium Thermal Dynamic Modeling of Porous Medium Vacuum Drying Process. Mathematical Problems in Engineering, 2012, 2012, 1-22.	0.6	5
35	A Molecular Dynamics Study on the Constraint Conditions of the Particle Growth Process in Laser Synthesis of Nanopowders. Advances in Materials Science and Engineering, 2012, 2012, 1-5.	1.0	0
36	Drying Modeling and Simulation. Mathematical Problems in Engineering, 2012, 2012, 1-3.	0.6	0