

# Zhijun Zhang

## List of Publications by Year in descending order

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36  
papers

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citations

1162367

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36  
docs citations

36  
times ranked

148  
citing authors

#	ARTICLE	IF	CITATIONS
1	Knudsen pumps: a review. <i>Microsystems and Nanoengineering</i> , 2020, 6, 26.	3.4	32
2	Study of Flow Characteristics of Gas Mixtures in a Rectangular Knudsen Pump. <i>Micromachines</i> , 2019, 10, 79.	1.4	22
3	Numerical simulation of thermal edge flow in ratchet-like periodically patterned micro-channels. <i>International Journal of Heat and Mass Transfer</i> , 2019, 135, 1023-1038.	2.5	20
4	Shape Effect on the Temperature Field during Microwave Heating Process. <i>Journal of Food Quality</i> , 2018, 2018, 1-24.	1.4	19
5	Sensitivity analysis of intermittent microwave convective drying based on multiphase porous media models. <i>International Journal of Thermal Sciences</i> , 2020, 153, 106344.	2.6	17
6	Energy utilization and heating uniformity of multiple specimens heated in a domestic microwave oven. <i>Food and Bioproducts Processing</i> , 2022, 132, 35-51.	1.8	16
7	Impact of Improved Design on Knudsen Force for Micro Gas Sensor. <i>Micromachines</i> , 2020, 11, 634.	1.4	10
8	3D Model-Based Simulation Analysis of Energy Consumption in Hot Air Drying of Corn Kernels. <i>Mathematical Problems in Engineering</i> , 2013, 2013, 1-12.	0.6	9
9	Pumping Performance Evaluation of HL-2M In-Vessel Cryopump With Monte Carlo Method. <i>IEEE Transactions on Plasma Science</i> , 2018, 46, 1587-1591.	0.6	9
10	Hypersonic nonequilibrium flow simulations of a hemispherical nose with a counterflowing jet. <i>Acta Astronautica</i> , 2019, 165, 388-400.	1.7	8
11	Gas-surface interaction effects on rarefied gas flows around microbeams induced by temperature fields. <i>International Journal of Heat and Mass Transfer</i> , 2021, 172, 121186.	2.5	8
12	Transient numerical simulation of hemispherical cone with combined opposing jet in hypersonic flow. <i>Acta Astronautica</i> , 2020, 175, 327-337.	1.7	7
13	Numerical investigation into the low-pressure detection sensor performance of hydrogen gas with variable soft sphere molecular model. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 7243-7253.	3.8	7
14	Heat and drag reduction of single and combined opposing jets in hypersonic nonequilibrium flows. <i>Aerospace Science and Technology</i> , 2022, 121, 107194.	2.5	7
15	Modelling of intermittent microwave convective drying: parameter sensitivity. <i>Open Physics</i> , 2017, 15, 405-419.	0.8	6
16	Numerical Investigation into the Flow Characteristics of Gas Mixtures in Knudsen Pump with Variable Soft Sphere Model. <i>Micromachines</i> , 2020, 11, 784.	1.4	6
17	Numerical and experimental study on bandgap property of two-dimensional lattice with nested core. <i>Applied Physics A: Materials Science and Processing</i> , 2022, 128, 1.	1.1	6
18	Nonequilibrium Thermal Dynamic Modeling of Porous Medium Vacuum Drying Process. <i>Mathematical Problems in Engineering</i> , 2012, 2012, 1-22.	0.6	5

#	ARTICLE	IF	CITATIONS
19	Heat and Mass Transfer of Droplet Vacuum Freezing Process Based on Dynamic Mesh. Mathematical Problems in Engineering, 2014, 2014, 1-6.	0.6	5
20	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
21	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
22	Bandgap enhancement of two-dimensional lattice metamaterial via re-entrant hierarchy. Smart Materials and Structures, 2022, 31, 095012.	1.8	5
23	Heat and Mass Transfer of Vacuum Cooling for Porous Foods-Parameter Sensitivity Analysis. Mathematical Problems in Engineering, 2014, 2014, 1-8.	0.6	3
24	Monte Carlo simulation of gas free molecular flow in turbo molecular pump's inlet tube. Molecular Simulation, 2018, 44, 1261-1269.	0.9	3
25	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
26	Cortex Effect on Vacuum Drying Process of Porous Medium. Mathematical Problems in Engineering, 2013, 2013, 1-8.	0.6	2
27	Numerical Investigation of the Deformable Porous Media Treated by the Intermittent Microwave. Processes, 2021, 9, 757.	1.3	2
28	Mathematical Modeling of Heat and Mass Transfer in Energy Science and Engineering. Mathematical Problems in Engineering, 2013, 2013, 1-3.	0.6	1
29	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
30	Mathematical Modeling of Heat and Mass Transfer in Energy Science and Engineering 2014. Mathematical Problems in Engineering, 2015, 2015, 1-3.	0.6	1
31	Parameter Sensitivity of the Microdroplet Vacuum Freezing Process. Mathematical Problems in Engineering, 2015, 2015, 1-8.	0.6	1
32	Relative Permeability Effect on Vacuum Drying Process of Porous Material Modeling. Journal of Computational and Theoretical Nanoscience, 2015, 12, 2757-2762.	0.4	1
33	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
34	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
35	Drying Modeling and Simulation. Mathematical Problems in Engineering, 2012, 2012, 1-3.	0.6	0
36	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