

Zhiguo Qu

List of Publications by Year in descending order

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154
papers

5,757
citations

81839

39
h-index

95218

68
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156
all docs

156
docs citations

156
times ranked

4726
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental study of a passive thermal management system for high-powered lithium ion batteries using porous metal foam saturated with phase change materials. <i>Journal of Power Sources</i> , 2014, 255, 9-15.	4.0	324
2	Experimental and numerical studies on melting phase change heat transfer in open-cell metallic foams filled with paraffin. <i>Applied Thermal Engineering</i> , 2012, 37, 1-9.	3.0	321
3	Lithium-ion battery thermal management using heat pipe and phase change material during discharge-charge cycle: A comprehensive numerical study. <i>Applied Energy</i> , 2019, 242, 378-392.	5.1	257
4	Solar-Thermal Water Evaporation: A Review. <i>ACS Energy Letters</i> , 2020, 5, 437-456.	8.8	224
5	Numerical model of the passive thermal management system for high-power lithium ion battery by using porous metal foam saturated with phase change material. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 3904-3913.	3.8	185
6	A fully disposable and integrated paper-based device for nucleic acid extraction, amplification and detection. <i>Lab on A Chip</i> , 2017, 17, 1270-1279.	3.1	169
7	Modeling of multi-scale transport phenomena in shale gas production – A critical review. <i>Applied Energy</i> , 2020, 262, 114575.	5.1	161
8	Passive thermal management using metal foam saturated with phase change material in a heat sink. <i>International Communications in Heat and Mass Transfer</i> , 2012, 39, 1546-1549.	2.9	124
9	Stabilizing platinum atoms on CeO ₂ oxygen vacancies by metal-support interaction induced interface distortion: Mechanism and application. <i>Applied Catalysis B: Environmental</i> , 2020, 278, 119304.	10.8	120
10	Analytical solution of forced convective heat transfer in tubes partially filled with metallic foam using the two-equation model. <i>International Journal of Heat and Mass Transfer</i> , 2011, 54, 3846-3855.	2.5	105
11	Experimental study on pulse self-heating of lithium-ion battery at low temperature. <i>International Journal of Heat and Mass Transfer</i> , 2019, 135, 696-705.	2.5	100
12	Experimental study on the performance of a vanadium redox flow battery with non-uniformly compressed carbon felt electrode. <i>Applied Energy</i> , 2018, 213, 293-305.	5.1	99
13	Methane/air premixed combustion in a two-layer porous burner with different foam materials. <i>Fuel</i> , 2014, 115, 154-161.	3.4	94
14	Polydimethylsiloxane-Paper Hybrid Lateral Flow Assay for Highly Sensitive Point-of-Care Nucleic Acid Testing. <i>Analytical Chemistry</i> , 2016, 88, 6254-6264.	3.2	93
15	An Efficient Segregated Algorithm for Incompressible Fluid Flow and Heat Transfer Problems – IDEAL (Inner Doubly Iterative Efficient Algorithm for Linked Equations) Part I: Mathematical Formulation and Solution Procedure. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2008, 53, 1-17.	0.6	92
16	Review of Molecular Simulation Method for Gas Adsorption/desorption and Diffusion in Shale Matrix. <i>Journal of Thermal Science</i> , 2019, 28, 1-16.	0.9	92
17	Recent progress in lithium-ion battery thermal management for a wide range of temperature and abuse conditions. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 9428-9459.	3.8	77
18	Pen-on-paper strategy for point-of-care testing: Rapid prototyping of fully written microfluidic biosensor. <i>Biosensors and Bioelectronics</i> , 2017, 98, 478-485.	5.3	75

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19	Experimental study of combustion in a double-layer burner packed with alumina pellets of different diameters. <i>Applied Energy</i> , 2012, 100, 295-302.	5.1	74
20	Experimental and numerical studies on liquid wicking into filter papers for paper-based diagnostics. <i>Applied Thermal Engineering</i> , 2015, 88, 280-287.	3.0	74
21	Improved Analytical Sensitivity of Lateral Flow Assay using Sponge for HBV Nucleic Acid Detection. <i>Scientific Reports</i> , 2017, 7, 1360.	1.6	73
22	A numerical study on the performance of PEMFC with wedge-shaped fins in the cathode channel. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 27700-27700.	3.8	71
23	Optimization of blocked channel design for a proton exchange membrane fuel cell by coupled genetic algorithm and three-dimensional CFD modeling. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 17759-17770.	3.8	69
24	Thermal performance analysis of intermediate fluid vaporizer for liquefied natural gas. <i>Applied Thermal Engineering</i> , 2014, 65, 564-574.	3.0	67
25	Experimental study on the performance of a solar photovoltaic/thermal system combined with phase change material. <i>Solar Energy</i> , 2020, 198, 202-211.	2.9	65
26	Effects of graphite microstructure evolution on the anisotropic thermal conductivity of expanded graphite/paraffin phase change materials and their thermal energy storage performance. <i>International Journal of Heat and Mass Transfer</i> , 2020, 155, 119853.	2.5	64
27	Lattice Boltzmann simulation of gas-solid adsorption processes at pore scale level. <i>Journal of Computational Physics</i> , 2015, 300, 800-813.	1.9	60
28	Energy conversion performance of a PV/T-PCM system under different thermal regulation strategies. <i>Energy Conversion and Management</i> , 2021, 229, 113660.	4.4	57
29	Combustion of methane/air mixtures in a two-layer porous burner: A comparison of alumina foams, beads, and honeycombs. <i>Experimental Thermal and Fluid Science</i> , 2014, 52, 215-220.	1.5	55
30	An analytical model for shale gas transport in kerogen nanopores coupled with real gas effect and surface diffusion. <i>Fuel</i> , 2017, 210, 569-577.	3.4	54
31	Enhancing water transport performance of gas diffusion layers through coupling manipulation of pore structure and hydrophobicity. <i>Journal of Power Sources</i> , 2022, 525, 231121.	4.0	52
32	Lattice Boltzmann simulation of the gas-solid adsorption process in reconstructed random porous media. <i>Physical Review E</i> , 2016, 93, 043101.	0.8	51
33	Numerical investigation on self-coupling heat transfer in a counter-flow double-pipe heat exchanger filled with metallic foams. <i>Applied Thermal Engineering</i> , 2014, 66, 43-54.	3.0	50
34	A microscopic investigation of ion and electron transport in lithium-ion battery porous electrodes using the lattice Boltzmann method. <i>Applied Energy</i> , 2017, 194, 530-539.	5.1	49
35	Experimental Study of Biogas Combustion in a Two-Layer Packed Bed Burner. <i>Energy & Fuels</i> , 2011, 25, 2887-2895.	2.5	48
36	Numerical study on free-surface jet impingement cooling with nanoencapsulated phase-change material slurry and nanofluid. <i>International Journal of Heat and Mass Transfer</i> , 2017, 109, 312-325.	2.5	47

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37	Three-dimensional modeling of a PEMFC with serpentine flow field incorporating the impacts of electrode inhomogeneous compression deformation. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 22194-22209.	3.8	47
38	Thermal behavior of porous stainless-steel fiber felt saturated with phase change material. <i>Energy</i> , 2013, 55, 846-852.	4.5	44
39	Lattice Boltzmann simulation of ion and electron transport during the discharge process in a randomly reconstructed porous electrode of a lithium-ion battery. <i>International Journal of Heat and Mass Transfer</i> , 2018, 123, 500-513.	2.5	41
40	Experimental study of the selective catalytic reduction after-treatment for the exhaust emission of a diesel engine. <i>Applied Thermal Engineering</i> , 2019, 147, 198-204.	3.0	39
41	Engineering Acoustic Metamaterials for Sound Absorption: From Uniform to Gradient Structures. <i>IScience</i> , 2020, 23, 101110.	1.9	39
42	Bio-inspired flow channel designs for proton exchange membrane fuel cells: A review. <i>Journal of Power Sources</i> , 2022, 522, 231003.	4.0	38
43	An Efficient Segregated Algorithm for Incompressible Fluid Flow and Heat Transfer Problems—IDEAL (Inner Doubly Iterative Efficient Algorithm for Linked Equations) Part II: Application Examples. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2008, 53, 18-38.	0.6	37
44	The Interaction of Porous Material Coating With the Near Wake of Bluff Body. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2014, 136, .	0.8	37
45	Anisotropic thermal expansion coefficient of multilayer graphene reinforced copper matrix composites. <i>Journal of Alloys and Compounds</i> , 2018, 755, 114-122.	2.8	35
46	Prediction of effective diffusivity of porous media using deep learning method based on sample structure information self-amplification. <i>Energy and AI</i> , 2020, 2, 100035.	5.8	35
47	Coarse-grained molecular dynamics studies of the translocation mechanism of polyarginines across asymmetric membrane under tension. <i>Scientific Reports</i> , 2015, 5, 12808.	1.6	34
48	Pore-scale investigation on coupled diffusion mechanisms of free and adsorbed gases in nanoporous organic matter. <i>Fuel</i> , 2020, 260, 116423.	3.4	34
49	Simultaneous charging and discharging performance for a latent thermal energy storage system with a microencapsulated phase change material. <i>Applied Energy</i> , 2020, 275, 115353.	5.1	34
50	Multiple diffusion mechanisms of shale gas in nanoporous organic matter predicted by the local diffusivity lattice Boltzmann model. <i>International Journal of Heat and Mass Transfer</i> , 2019, 143, 118571.	2.5	33
51	A theoretical octet-truss lattice unit cell model for effective thermal conductivity of consolidated porous materials saturated with fluid. <i>Heat and Mass Transfer</i> , 2012, 48, 1385-1395.	1.2	32
52	Thermal cloak with adaptive heat source to proactively manipulate temperature field in heat conduction process. <i>International Journal of Heat and Mass Transfer</i> , 2018, 127, 1212-1222.	2.5	32
53	Liquid wicking behavior in paper-like materials: mathematical models and their emerging biomedical applications. <i>Microfluidics and Nanofluidics</i> , 2018, 22, 1.	1.0	31
54	Experimental and numerical study of CO ₂ adsorption on copper benzene-1,3,5-tricarboxylate (Cu-BTC) metal organic framework. <i>International Journal of Heat and Mass Transfer</i> , 2016, 92, 859-863.	2.5	30

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55	Pore-scale prediction of the effective mass diffusivity of heterogeneous shale structure using the lattice Boltzmann method. <i>International Journal of Heat and Mass Transfer</i> , 2019, 133, 976-985.	2.5	30
56	Premixed Combustion in a Porous Burner with Different Fuels. <i>Combustion Science and Technology</i> , 2015, 187, 489-504.	1.2	29
57	Lattice Boltzmann simulation of the double diffusive natural convection and oscillation characteristics in an enclosure filled with porous medium. <i>International Communications in Heat and Mass Transfer</i> , 2017, 81, 104-115.	2.9	29
58	Sensitivity Enhancement of Nucleic Acid Lateral Flow Assays through a Physicalâ€“Chemical Coupling Method: Dissoluble Saline Barriers. <i>ACS Sensors</i> , 2019, 4, 1691-1700.	4.0	29
59	Catalytic combustion of premixed methane/air in a two-zone perovskite-based alumina pileup-pellets burner with different pellet diameters. <i>Fuel</i> , 2015, 159, 128-140.	3.4	28
60	Experimental study on the sound absorption characteristics of continuously graded phononic crystals. <i>AIP Advances</i> , 2016, 6, .	0.6	28
61	Coupled GCMC and LBM simulation method for visualizations of CO ₂ /CH ₄ gas separation through Cu-BTC membranes. <i>Journal of Membrane Science</i> , 2018, 550, 448-461.	4.1	26
62	Numerical and experimental investigation on configuration optimization of the large-size ionic wind pump. <i>Energy</i> , 2019, 171, 624-630.	4.5	26
63	A Molecular Model of PEMFC Catalyst Layer: Simulation on Reactant Transport and Thermal Conduction. <i>Membranes</i> , 2021, 11, 148.	1.4	26
64	Evaluation of Arsenic-Induced Stress in <i>Dahlia pinnata</i> Cav.: Morphological and Physiological Response. <i>Soil and Sediment Contamination</i> , 2019, 28, 716-728.	1.1	25
65	Molecular analysis of interactions between dendrimers and asymmetric membranes at different transport stages. <i>Soft Matter</i> , 2014, 10, 139-148.	1.2	24
66	Structural modification of vanadium redox flow battery with high electrochemical corrosion resistance. <i>Applied Energy</i> , 2019, 250, 1632-1640.	5.1	24
67	Acoustic characteristics of continuously graded phononic crystals. <i>Applied Acoustics</i> , 2019, 151, 22-29.	1.7	24
68	One-dimensional numerical study for loop heat pipe with two-phase heat leak model. <i>International Journal of Thermal Sciences</i> , 2019, 137, 467-481.	2.6	24
69	An Improved Numerical Scheme for the SIMPLER Method on NonOrthogonal Curvilinear Coordinates: SIMPLERM. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2007, 51, 43-66.	0.6	23
70	A combined GCMC and LBM simulation method for CH ₄ capture in Cu-BTC particle adsorption bed. <i>International Communications in Heat and Mass Transfer</i> , 2017, 88, 48-53.	2.9	23
71	Numerical study on effective thermal conductivities of plain woven C/SiC composites with considering pores in interlaced woven yarns. <i>International Journal of Heat and Mass Transfer</i> , 2019, 140, 410-419.	2.5	23
72	A Realâ€“Time Selfâ€“Adaptive Thermal Metasurface. <i>Advanced Materials</i> , 2022, 34, e2201093.	11.1	23

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73	The effect of report particle properties on lateral flow assays: A mathematical model. <i>Sensors and Actuators B: Chemical</i> , 2017, 248, 699-707.	4.0	22
74	Sensitivity enhancement of lateral flow assay by embedding cotton threads in paper. <i>Cellulose</i> , 2019, 26, 8087-8099.	2.4	22
75	Three-dimensional pore-scale study of methane gas mass diffusion in shale with spatially heterogeneous and anisotropic features. <i>Fuel</i> , 2020, 273, 117750.	3.4	22
76	Premixed lean methane/air combustion in a catalytic porous foam burner supported with perovskite LaMn _{0.4} Co _{0.6} O ₃ catalyst with different support materials and pore densities. <i>Fuel Processing Technology</i> , 2016, 150, 117-125.	3.7	21
77	Thermal Management for Hydrogen Charging and Discharging in a Screened Metal-Organic Framework Particle Tank. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 61838-61848.	4.0	21
78	Three-dimensional numerical study of laminar confined slot jet impingement cooling using slurry of nano-encapsulated phase change material. <i>Journal of Thermal Science</i> , 2016, 25, 431-439.	0.9	20
79	Reduced growth response of ornamental plant <i>Nicotiana glauca</i> L. upon selected heavy metals uptake, with co-application of ethylenediaminetetraacetic acid. <i>Chemosphere</i> , 2020, 241, 125006.	4.2	20
80	Experimental investigation of methane/(Ar, N ₂ , CO ₂)-air mixture combustion in a two-layer packed bed burner. <i>Experimental Thermal and Fluid Science</i> , 2013, 44, 599-606.	1.5	19
81	Experimental study of effective thermal conductivity of stainless steel fiber felt. <i>Applied Thermal Engineering</i> , 2015, 86, 119-126.	3.0	19
82	One-dimensional numerical study of thermal performance of an organic Rankine cycle system using liquefied natural gas as a cold source for cold energy recovery. <i>Journal of Natural Gas Science and Engineering</i> , 2015, 26, 1399-1413.	2.1	19
83	Numerical investigation of coupled optical-electrical-thermal processes for plasmonic solar cells at various angles of incident irradiance. <i>Energy</i> , 2019, 174, 110-121.	4.5	19
84	Prediction of the effective thermal conductivity of an adsorption bed packed with 5A zeolite particles under working conditions. <i>International Journal of Thermal Sciences</i> , 2021, 159, 106630.	2.6	19
85	Visualizing Gas Diffusion Behaviors in Three-Dimensional Nanoporous Media. <i>Energy & Fuels</i> , 2021, 35, 2075-2086.	2.5	19
86	Performance analysis of IDEAL algorithm for three-dimensional incompressible fluid flow and heat transfer problems. <i>International Journal for Numerical Methods in Fluids</i> , 2009, 61, 1132-1160.	0.9	18
87	An improved detection limit and working range of lateral flow assays based on a mathematical model. <i>Analyst</i> , 2018, 143, 2775-2783.	1.7	17
88	A Local-Effective-Viscosity Multirelaxation-Time Lattice Boltzmann Pore-Network Coupling Model for Gas Transport in Complex Nanoporous Media. <i>SPE Journal</i> , 2021, 26, 461-481.	1.7	17
89	Molecular analysis of interactions between a PAMAM dendrimer-paclitaxel conjugate and a biomembrane. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 29507-29517.	1.3	16
90	Tuning Water Slip Behavior in Nanochannels Using Self-Assembled Monolayers. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 32481-32488.	4.0	16

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91	Analytical considerations of flow boiling heat transfer in metal-foam filled tubes. Heat and Mass Transfer, 2012, 48, 165-173.	1.2	15
92	Enhancement of solar pond stability performance using an external magnetic field. Energy Conversion and Management, 2021, 243, 114427.	4.4	15
93	Nanoparticle enhanced salinity-gradient osmotic energy conversion under photothermal effect. Energy Conversion and Management, 2022, 251, 115032.	4.4	15
94	Passive Ultra-Conductive Thermal Metamaterials. Advanced Materials, 2022, 34, e2200329.	11.1	15
95	Optimum Design of Two-Row Slotted Fin Surface with X-Shape Strip Arrangement Positioned by Front Coarse and Rear Dense-Principle, Part I: Physical/Mathematical Models and Numerical Methods. Numerical Heat Transfer; Part A: Applications, 2006, 50, 731-749.	1.2	14
96	Implementation of an efficient segregated algorithm-IDEAL on 3D collocated grid system. Science Bulletin, 2009, 54, 929-942.	4.3	14
97	Numerical study on the melting thermal characteristics of a microencapsulated phase change plate. Numerical Heat Transfer; Part A: Applications, 2016, 70, 399-419.	1.2	14
98	Liquid water transport and mechanical performance of electrospun gas diffusion layers. International Journal of Green Energy, 2022, 19, 210-218.	2.1	14
99	Review of Bipolar Plate in Redox Flow Batteries: Materials, Structures, and Manufacturing. Electrochemical Energy Reviews, 2021, 4, 718-756.	13.1	14
100	A unified catalyst layer design classification criterion on proton exchange membrane fuel cell performance based on a modified agglomerate model. Chemical Engineering Journal, 2022, 447, 137489.	6.6	14
101	Implementation of the IDEAL Algorithm on Nonorthogonal Curvilinear Coordinates for the Solution of 3-D Incompressible Fluid Flow and Heat Transfer Problems. Numerical Heat Transfer, Part B: Fundamentals, 2011, 59, 147-168.	0.6	13
102	Numerical Simulation of Non-Equilibrium Conjugate Heat Transfer in Tubes Partially Filled with Metallic Foams. Journal of Thermal Science and Technology, 2012, 7, 151-165.	0.6	13
103	A multi-scale porous composite adsorbent with copper benzene-1,3,5-tricarboxylate coating on copper foam. RSC Advances, 2016, 6, 52888-52897.	1.7	13
104	Highly efficient adsorbent design using a Cu-BTC/CuO/carbon fiber paper composite for high CH ₄ /N ₂ selectivity. RSC Advances, 2017, 7, 14206-14218.	1.7	13
105	Comprehensive coupling model of counter-flow wet cooling tower and its thermal performance analysis. Energy, 2022, 238, 121726.	4.5	13
106	Identifying the dominant transport mechanism in single nanoscale pores and 3D nanoporous media. Fundamental Research, 2023, 3, 409-421.	1.6	13
107	Temperature field prediction for various porous media considering variable boundary conditions using deep learning method. International Communications in Heat and Mass Transfer, 2022, 132, 105916.	2.9	13
108	Experimental study of the effect of a radiant tube on the temperature distribution in a horizontal heating furnace. Applied Thermal Engineering, 2017, 113, 1-7.	3.0	11

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109	A three-dimensional numerical study of coupled photothermal and photoelectrical processes for plasmonic solar cells with nanoparticles. <i>Renewable Energy</i> , 2021, 165, 278-287.	4.3	11
110	Lattice Boltzmann Simulation of Ion and Electron Transport in Lithium Ion Battery Porous Electrode During Discharge Process. <i>Energy Procedia</i> , 2016, 88, 642-646.	1.8	10
111	Combustion in a Hybrid Porous Burner Packed with Alumina Pellets and Silicon Carbide Foams with a Gap. <i>Journal of Energy Engineering - ASCE</i> , 2017, 143, 04017032.	1.0	10
112	Experimental study of the thermal characteristics of microencapsulated phase change composite cylinders. <i>Applied Thermal Engineering</i> , 2017, 114, 1256-1264.	3.0	10
113	Reverse identification method for simultaneous estimation of thermal conductivity and thermal contact conductance of multilayered composites. <i>International Journal of Heat and Mass Transfer</i> , 2021, 173, 121244.	2.5	10
114	Numerical Study on Some Improvements in the Passive Cooling System of a Radio Base Station Base on Multiscale Thermal Modeling Methodology—Part I: Confirmation of Simplified Models. <i>Numerical Heat Transfer; Part A: Applications</i> , 2014, 65, 844-862.	1.2	9
115	Experimental investigations of heat transfer characteristics of MPCM during charging. <i>Applied Thermal Engineering</i> , 2018, 144, 721-725.	3.0	9
116	Analysis of a two-stage ionic wind pump with multiple needle-to-mesh electrodes for cooling electronics. <i>Applied Thermal Engineering</i> , 2021, 185, 116340.	3.0	9
117	Enhanced sound absorption in two-dimensional continuously graded phononic crystals. <i>Japanese Journal of Applied Physics</i> , 2019, 58, 090904.	0.8	8
118	A two-dimensional mathematical model for analyzing the effects of capture probe properties on the performance of lateral flow assays. <i>Analyst, The</i> , 2019, 144, 5394-5403.	1.7	8
119	Comparison of Robustness and Efficiency for SIMPLE and CLEAR Algorithms with 13 High-Resolution Convection Schemes in Compressible Flows. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2014, 66, 133-161.	0.6	7
120	Lean methane premixed combustion over a catalytically stabilized zirconia foam burner. <i>International Journal of Green Energy</i> , 2016, 13, 1451-1459.	2.1	7
121	Experimental and simulation studies of polyarginines across the membrane of giant unilamellar vesicles. <i>RSC Advances</i> , 2016, 6, 30454-30459.	1.7	7
122	Numerical Investigation of Moisture Separators with Corrugated Plates. <i>Energy Procedia</i> , 2017, 105, 1501-1506.	1.8	7
123	Experimental and numerical study on performance of hybrid refrigeration system that combines vapor compression and thermoelectric systems. <i>Applied Thermal Engineering</i> , 2021, 194, 117107.	3.0	7
124	Experimental Investigations of Pool Boiling Heat Transfer on Horizontal Plate Sintered with Metallic Fiber Felt. <i>International Journal of Green Energy</i> , 2012, 9, 22-38.	2.1	6
125	Numerical Study on Some Improvements in the Passive Cooling System of a Radio Base Station Base on Multiscale Thermal Modeling Methodology—Part II—Results of Multiscale Numerical Simulation and Subsequent Improvements of Cooling Techniques. <i>Numerical Heat Transfer; Part A: Applications</i> , 2014, 65, 863-884.	1.2	6
126	Simulation study of interaction mechanism between peptide and asymmetric membrane. <i>Molecular Simulation</i> , 2017, 43, 34-41.	0.9	6

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127	Parametric Study and Optimization of Flow Characteristics of Wire-Nonparallel Plate-Type Electrostatic Air Accelerators. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2018, 140, 1011051-10110511.	0.8	6
128	Prolonged yield platform in bioinspired three dimensional carbon materials derived from crack deflection. <i>Materials Letters</i> , 2020, 270, 127759.	1.3	6
129	Coarse-grained molecular dynamics simulation of dendrimer transmembrane transport with temperature-dependent membrane phase states. <i>International Journal of Heat and Mass Transfer</i> , 2020, 155, 119797.	2.5	6
130	Multiscale investigation of the plasmonic solar cell in the spectral splitting concentrating photovoltaic-thermal system. <i>Energy Conversion and Management</i> , 2021, 250, 114846.	4.4	6
131	Similarity principle based multi-physical parameter unification and comparison in salinity-gradient osmotic energy conversion. <i>Applied Energy</i> , 2022, 307, 118312.	5.1	6
132	Semi-analytical solution for fully developed forced convection in metal-foam filled tube with uniform wall temperature. <i>Science China Technological Sciences</i> , 2014, 57, 2487-2499.	2.0	5
133	Part II: Numerical study on the flow and thermal characteristics of an integrated deflector under the periodic impingement of a supersonic high temperature jet. <i>International Journal of Heat and Mass Transfer</i> , 2015, 85, 1095-1111.	2.5	5
134	Tailoring patchy nanoparticle design to modulate serum albumin adsorption and membrane interaction. <i>Soft Matter</i> , 2021, 17, 2071-2080.	1.2	5
135	A Heater-Assisted Air Source Heat Pump Air Conditioner to Improve Thermal Comfort with Frost-Retarded Heating and Heat-Uninterrupted Defrosting. <i>Energies</i> , 2021, 14, 2646.	1.6	5
136	Nanopore-based active oil droplet filtration under negative DC dielectrophoresis for oily wastewater treatment. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 345302.	1.3	5
137	Viscous and thermal dissipation during the sound propagation in the continuously graded phononic crystals. <i>Applied Acoustics</i> , 2022, 189, 108606.	1.7	5
138	Collective Enhancements on Thermal-Electrical and Mechanical Properties of Graphite-Based Composite Bipolar Plates through the Coupled Manipulations of Molding and Impregnation Pressures. <i>Membranes</i> , 2022, 12, 222.	1.4	5
139	Numerical Study on Some Improvements in the Passive Cooling System of a Radio Base Station. <i>Numerical Heat Transfer; Part A: Applications</i> , 2012, 62, 319-335.	1.2	4
140	Adaptive inner iteration processes in pressure-based method for viscous compressible flows. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2018, 74, 603-622.	0.6	4
141	Electrohydrodynamic and heat transfer characteristics of a planar ionic wind generator with flat electrodes. <i>Applied Thermal Engineering</i> , 2022, 211, 118508.	3.0	4
142	Effective Thermal Conductivity of MOF-5 Powder under a Hydrogen Atmosphere. <i>Computation</i> , 2015, 3, 558-573.	1.0	3
143	Numerical Study of Heat Conduction with a Chemical Reaction at the Moving Frontal Surface for a Graphite Plate. <i>Numerical Heat Transfer; Part A: Applications</i> , 2015, 67, 189-209.	1.2	3
144	Renewable Energy Utilization and Energy Conservation in Thermal and Power Systems for China's Sustainable Energy Future. <i>Journal of Energy Engineering - ASCE</i> , 2019, 145, .	1.0	3

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145	Screening Study of the Effects of Impurity Gases on Hydrogen Storage in Metal-Organic Frameworks. Journal of Energy Engineering - ASCE, 2020, 146, 04020065.	1.0	3
146	Current-voltage characteristics and breakdown of different structural planar microelectrodes in atmospheric air. AIP Advances, 2021, 11, .	0.6	3
147	Continuous trapping of bacteria in non-Newtonian blood flow using negative dielectrophoresis with quadrupole electrodes. Journal Physics D: Applied Physics, 2021, 54, 015401.	1.3	3
148	Implementation of CLEAR algorithm on non-orthogonal curvilinear co-ordinates for solution of incompressible flow and heat transfer. International Journal for Numerical Methods in Fluids, 2007, 53, 1077-1105.	0.9	2
149	Paper-Based Immunoassays. , 2018, , 183-201.		2
150	Moving impingement heat transfer in a three-dimensional rarefied hydrogen gas jet based on the direct simulation Monte Carlo method coupled with the finite difference method. International Journal of Heat and Mass Transfer, 2022, 188, 122586.	2.5	2
151	Physical similarity and parametric sensitivity analysis of the capacitive deionization process. International Journal of Green Energy, 0, , 1-13.	2.1	2
152	Numerical Study of Liquid Sloshing on Anti-sloshing Device Using Open Cell Metal Foams in Oil Tank. , 2010, , .		1
153	A numerical study of film condensation on a metallic foam-sintered plate with considering convection and super-cooling effects. International Communications in Heat and Mass Transfer, 2016, 79, 105-113.	2.9	1
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