Wen-Quan Tao

List of Publications by Year
in descending order

195 papers	6,427 citations	61984 43 h-index	82547 72 g-index
196 all docs	196 docs citations	196 times ranked	4307 citing authors

#	Article	IF	Citations
1	A critical review of the pseudopotential multiphase lattice Boltzmann model: Methods and applications. International Journal of Heat and Mass Transfer, 2014, 76, 210-236.	4.8	574
2	Field synergy principle for enhancing convective heat transfer––its extension and numerical verifications. International Journal of Heat and Mass Transfer, 2002, 45, 3849-3856.	4.8	298
3	Review of methodologies and polices for evaluation of energy efficiency in high energy-consuming industry. Applied Energy, 2017, 187, 203-215.	10.1	229
4	Nanoscale simulation of shale transport properties using the lattice Boltzmann method: permeability and diffusivity. Scientific Reports, 2015, 5, 8089.	3.3	206
5	Pore-scale flow and mass transport in gas diffusion layer of proton exchange membrane fuel cell with interdigitated flow fields. International Journal of Thermal Sciences, 2012, 51, 132-144.	4.9	183
6	Numerical investigation of the coupled water and thermal management in PEM fuel cell. Applied Energy, 2013, 112, 1115-1125.	10.1	169
7	Parametric Numerical Study of Flow and Heat Transfer in Microchannels With Wavy Walls. Journal of Heat Transfer, 2011, 133, .	2.1	154
8	Pore-scale modeling of complex transport phenomena in porous media. Progress in Energy and Combustion Science, 2022, 88, 100968.	31.2	139
9	Pore-scale modeling of multiphase reactive transport with phase transitions and dissolution-precipitation processes in closed systems. Physical Review E, 2013, 87, 043306.	2.1	131
10	Experimental and numerical studies of liquid flow and heat transfer in microtubes. International Journal of Heat and Mass Transfer, 2007, 50, 3447-3460.	4.8	121
11	Predicting Effective Diffusivity of Porous Media from Images by Deep Learning. Scientific Reports, 2019, 9, 20387.	3.3	110
12	Multi-scale modeling of proton exchange membrane fuel cell by coupling finite volume method and lattice Boltzmann method. International Journal of Heat and Mass Transfer, 2013, 63, 268-283.	4.8	101
13	Generalized lattice Boltzmann model for flow through tight porous media with Klinkenberg's effect. Physical Review E, 2015, 91, 033004.	2.1	96
14	Pore‐scale study of dissolution‐induced changes in hydrologic properties of rocks with binary minerals. Water Resources Research, 2014, 50, 9343-9365.	4.2	91
15	Lattice Boltzmann modeling of pool boiling with large liquid-gas density ratio. International Journal of Thermal Sciences, 2017, 114, 172-183.	4.9	84
16	3D numerical simulation on shell-and-tube heat exchangers with middle-overlapped helical baffles and continuous baffles – Part II: Simulation results of periodic model and comparison between continuous and noncontinuous helical baffles. International Journal of Heat and Mass Transfer, 2009, 52, 5381-5389.	4.8	81
17	Meshless method based on the local weak-forms for steady-state heat conduction problems. International Journal of Heat and Mass Transfer, 2008, 51, 3103-3112.	4.8	74
18	Heat transfer correlation of the falling film evaporation on a single horizontal smooth tube. Applied Thermal Engineering, 2016, 103, 177-186.	6.0	72

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19	Highly luminescent sensing for nitrofurans and tetracyclines in water based on zeolitic imidazolate framework-8 incorporated with dyes. Talanta, 2019, 204, 344-352.	5.5	71
20	Using a strong chemical oxidant, potassium ferrate (K2FeO4), in waste activated sludge treatment: A review. Environmental Research, 2020, 188, 109764.	7.5	71
21	Coupled numerical approach combining finite volume and lattice Boltzmann methods for multi-scale multi-physicochemical processes. Journal of Computational Physics, 2013, 255, 83-105.	3.8	64
22	Pore-scale study of multiphase reactive transport in fibrous electrodes of vanadium redox flow batteries. Electrochimica Acta, 2017, 248, 425-439.	5.2	64
23	Prediction of fully developed turbulent heat transfer of internal helically ribbed tubes ? An extension of Gnielinski equation. International Journal of Heat and Mass Transfer, 2012, 55, 1375-1384.	4.8	63
24	Numerical studies on the inherent interrelationship between field synergy principle and entransy dissipation extreme principle for enhancing convective heat transfer. International Journal of Heat and Mass Transfer, 2014, 74, 196-205.	4.8	62
25	Nucleate boiling performance evaluation of cavities at mesoscale level. International Journal of Heat and Mass Transfer, 2017, 106, 708-719.	4.8	62
26	Multiscale Simulations of Heat Transfer and Fluid Flow Problems. Journal of Heat Transfer, 2012, 134, .	2.1	61
27	Modeling a hybrid methodology for evaluating and forecasting regional energy efficiency in China. Applied Energy, 2017, 185, 1769-1777.	10.1	60
28	Numerical prediction of effective thermal conductivities of 3D four-directional braided composites. Composite Structures, 2015, 125, 499-508.	5.8	59
29	Ultrasensitive detection of Cr(VI) (Cr2O72â˘ʹ/CrO42â˘ʹ) ions in water environment with a fluorescent sensor based on metal-organic frameworks combined with sulfur quantum dots. Analytica Chimica Acta, 2020, 1131, 68-79.	5.4	59
30	Bubble nucleation over patterned surfaces with different wettabilities: Molecular dynamics investigation. International Journal of Heat and Mass Transfer, 2019, 136, 1-9.	4.8	58
31	Evaluation of thermal hydrolysis efficiency of mechanically dewatered sewage sludge via rheological measurement. Water Research, 2017, 116, 34-43.	11.3	57
32	Pore scale study of multiphase multicomponent reactive transport during CO2 dissolution trapping. Advances in Water Resources, 2018, 116, 208-218.	3.8	57
33	Numerical studies of simultaneously developing laminar flow and heat transfer in microtubes with thick wall and constant outside wall temperature. International Journal of Heat and Mass Transfer, 2010, 53, 3977-3989.	4.8	56
34	Experimental investigations of R134a and R123 falling film evaporation on enhanced horizontal tubes. International Journal of Refrigeration, 2017, 75, 190-203.	3.4	56
35	Modeling of the effects of cathode catalyst layer design parameters on performance of polymer electrolyte membrane fuel cell. Applied Energy, 2020, 277, 115555.	10.1	56
36	Numerical prediction for laminar forced convection heat transfer in parallel-plate channels with streamwise-periodic rod disturbances. International Journal for Numerical Methods in Fluids, 1998, 28, 1371-1387.	1.6	54

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37	Evaluation of the coupling scheme of FVM and LBM for fluid flows around complex geometries. International Journal of Heat and Mass Transfer, 2011, 54, 1975-1985.	4.8	51
38	Effect of vapor flow on the falling film evaporation of R134a outside a horizontal tube bundle. International Journal of Heat and Mass Transfer, 2016, 92, 1171-1181.	4.8	51
39	Scale effect on flow and thermal boundaries in microâ€‘nanoâ€‘channel flow using molecular dynamicsâ€"continuum hybrid simulation method. International Journal for Numerical Methods in Engineering, 2010, 81, 207-228.	2.8	49
40	Molecular dynamics studies of bubble nucleation on a grooved substrate. International Journal of Heat and Mass Transfer, 2020, 158, 119850.	4.8	49
41	A three-dimensional volume of fluid & level set (VOSET) method for incompressible two-phase flow. Computers and Fluids, 2015, 118, 293-304.	2.5	48
42	Highly sensitive and selective fluorescent detection of phosphate in water environment by a functionalized coordination polymer. Water Research, 2019, 163, 114883.	11.3	48
43	Experimental investigation of R410A and R32 falling film evaporation on horizontal enhanced tubes. Applied Thermal Engineering, 2018, 137, 739-748.	6.0	44
44	Study of thermal contact resistance of rough surfaces based on the practical topography. Computers and Fluids, 2018, 164, 2-11.	2.5	44
45	Investigation of Re -independence of turbulent flow and pollutant dispersion in urban street canyon using numerical wind tunnel (NWT) models. International Journal of Heat and Mass Transfer, 2014, 79, 176-188.	4.8	42
46	A NEW HIGH-ORDER-ACCURATE AND BOUNDED SCHEME FOR INCOMPRESSIBLE FLOW. Numerical Heat Transfer, Part B: Fundamentals, 2003, 43, 19-41.	0.9	41
47	The Temperature Effect on the Diffusion Processes of Water and Proton in the Proton Exchange Membrane Using Molecular Dynamics Simulation. Numerical Heat Transfer; Part A: Applications, 2014, 65, 216-228.	2.1	41
48	Numerical study of effective thermal conductivities of plain woven composites by unit cells of different sizes. International Journal of Heat and Mass Transfer, 2015, 91, 829-840.	4.8	41
49	Three-dimensional transport model of PEM fuel cell with straight flow channels. Journal of Power Sources, 2006, 158, 25-35.	7.8	40
50	Numerical investigation of liquid water transport and distribution in porous gas diffusion layer of a proton exchange membrane fuel cell using lattice Boltzmann method. Russian Journal of Electrochemistry, 2012, 48, 712-726.	0.9	40
51	Heat transfer correlations of refrigerant falling film evaporation on a single horizontal smooth tube. International Journal of Heat and Mass Transfer, 2019, 133, 96-106.	4.8	39
52	A multi-block lattice Boltzmann method for the thermal contact resistance at the interface of two solids. Applied Thermal Engineering, 2018, 138, 122-132.	6.0	38
53	Roughness effect on flow and thermal boundaries in microchannel/nanochannel flow using molecular dynamicsâ€‘continuum hybrid simulation. International Journal for Numerical Methods in Engineering, 2012, 89, 2-19.	2.8	37
54	A compressible lattice Boltzmann finite volume model for high subsonic and transonic flows on regular lattices. Computers and Fluids, 2016, 131, 45-55.	2.5	37

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55	A test-validated prediction model of thermal contact resistance for Ti-6Al-4V alloy. Applied Energy, 2018, 228, 1601-1617.	10.1	37
56	How different freezing morphologies of impacting droplets form. Journal of Colloid and Interface Science, 2021, 584, 403-410.	9.4	36
57	Experimental and Numerical Study of Turbulent Heat Transfer in Twisted Square Ducts. Journal of Heat Transfer, 2001, 123, 868-877.	2.1	35
58	A comprehensive review on computational studies of falling film hydrodynamics and heat transfer on the horizontal tube and tube bundle. Applied Thermal Engineering, 2022, 202, 117869.	6.0	35
59	A stabilized MLPG method for steady state incompressible fluid flow simulation. Journal of Computational Physics, 2010, 229, 8564-8577.	3.8	33
60	A new indicator for a fair comparison on the energy performance of data centers. Applied Energy, 2020, 276, 115497.	10.1	33
61	Lattice Boltzmann mesoscopic modeling of flow boiling heat transfer processes in a microchannel. Applied Thermal Engineering, 2021, 197, 117369.	6.0	32
62	Effects of Roughness of Gas Diffusion Layer Surface on Liquid Water Transport in Micro Gas Channels of a Proton Exchange Membrane Fuel Cell. Numerical Heat Transfer; Part A: Applications, 2012, 62, 295-318.	2.1	30
63	Experimental and numerical studies for applying hybrid solar chimney and photovoltaic system to the solar-assisted air cleaning system. Applied Energy, 2020, 269, 115150.	10.1	30
64	A Direct Numerical Simulation for Nucleate Boiling by the VOSET Method. Numerical Heat Transfer; Part A: Applications, 2014, 65, 949-971.	2.1	29
65	Premixed Combustion in a Porous Burner with Different Fuels. Combustion Science and Technology, 2015, 187, 489-504.	2.3	29
66	Molecular dynamics–continuum hybrid simulation for condensation of gas flow in a microchannel. Microfluidics and Nanofluidics, 2009, 7, 407-422.	2.2	28
67	Numerical Simulation of Finned Tube Bank Across a Staggered Circular-Pin-Finned Tube Bundle. Numerical Heat Transfer; Part A: Applications, 2015, 68, 737-760.	2.1	27
68	Revealing the mechanisms for potassium ferrate affecting methane production from anaerobic digestion of waste activated sludge. Bioresource Technology, 2020, 317, 124022.	9.6	27
69	An Experimental Study on Heat/Mass Transfer and Pressure Drop Characteristics for Arrays of Nonuniform Plate Length Positioned Obliquely to the Flow Direction. Journal of Heat Transfer, 1993, 115, 568-575.	2.1	26
70	Pool boiling heat transfer of water and nanofluid outside the surface with higher roughness and different wettability. Nanoscale and Microscale Thermophysical Engineering, 2018, 22, 296-323.	2.6	26
71	Numerical simulations of the liquid-vapor phase change dynamic processes in a flat micro heat pipe. International Journal of Heat and Mass Transfer, 2020, 147, 119022.	4.8	26
72	Effect of thermal expansion on thermal contact resistance prediction based on the dual-iterative thermal–mechanical coupling method. International Journal of Heat and Mass Transfer, 2021, 173, 121243.	4.8	26

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73	Research on energy efficiency evaluation based on indicators for industry sectors in China. Applied Energy, 2014, 134, 550-562.	10.1	25
74	Numerical predictions of the effective thermal conductivity for needled C/C-SiC composite materials. Numerical Heat Transfer; Part A: Applications, 2016, 70, 1101-1117.	2.1	25
75	Experimental Characterization of the Thermal Conductivity and Microstructure of Opacifier-Fiber-Aerogel Composite. Molecules, 2018, 23, 2198.	3.8	25
76	Pore-scale numerical study of multiphase reactive transport processes in cathode catalyst layers of proton exchange membrane fuel cells. International Journal of Hydrogen Energy, 2021, 46, 13283-13297.	7.1	25
77	The influence of surface structure and thermal conductivity of the tube on the condensation heat transfer of R134a and R404A over single horizontal enhanced tubes. Applied Thermal Engineering, 2017, 125, 1114-1122.	6.0	24
78	Numerical Study of Flow and Heat Transfer Enhancement by Using Delta Winglets in a Triangular Wavy Fin-and-Tube Heat Exchanger. Journal of Heat Transfer, 2009, 131, .	2.1	23
79	A lifting relation from macroscopic variables to mesoscopic variables in lattice Boltzmann method: Derivation, numerical assessments and coupling computations validation. Computers and Fluids, 2012, 54, 92-104.	2.5	23
80	Effect of downward vapor stream on falling film evaporation of R134a in a tube bundle. International Journal of Refrigeration, 2018, 89, 112-121.	3.4	22
81	A review of mass-transfer models and mechanistic studies of semi-volatile organic compounds in indoor environments. Indoor and Built Environment, 2018, 27, 1307-1321.	2.8	22
82	Freezing pretreatment assists potassium ferrate to promote hydrogen production from anaerobic fermentation of waste activated sludge. Science of the Total Environment, 2021, 781, 146685.	8.0	22
83	A Design and Rating Method for Shell-and-Tube Heat Exchangers With Helical Baffles. Journal of Heat Transfer, 2010, 132, .	2.1	21
84	Lattice Boltzmann method for conjugated heat and mass transfer with general interfacial conditions. Physical Review E, 2018, 98, .	2.1	21
85	Magnetic Actuation of Surface Walkers: The Effects of Confinement and Inertia. Langmuir, 2020, 36, 7046-7055.	3.5	19
86	Stability-Controllable Second-order Difference scheme for convection term. Journal of Thermal Science, 1998, 7, 119-130.	1.9	18
87	Performance analysis of IDEAL algorithm for three‐dimensional incompressible fluid flow and heat transfer problems. International Journal for Numerical Methods in Fluids, 2009, 61, 1132-1160.	1.6	18
88	Coupled solid (FVM)–fluid (DSMC) simulation of micro-nozzle with unstructured-grid. Microfluidics and Nanofluidics, 2009, 7, 621-631.	2.2	18
89	A two-dimensional simulation method of the solar chimney power plant with a new radiation model for the collector. International Communications in Heat and Mass Transfer, 2017, 85, 100-106.	5.6	18
90	Advanced carbon sequestration by the hybrid system of photobioreactor and microbial fuel cell with novel photocatalytic porous framework. Bioresource Technology, 2021, 333, 125182.	9.6	18

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91	Analysis and extension of field synergy principle (FSP) for compressible boundary-layer heat transfer. International Journal of Heat and Mass Transfer, 2015, 84, 1061-1069.	4.8	17
92	Study on the effect of foreign particle on bubble nucleation by using molecular dynamics simulation. Journal of Molecular Liquids, 2020, 305, 112876.	4.9	17
93	Potassium ferrate coupled with freezing method enhances methane production from sludge anaerobic digestion. Bioresource Technology, 2021, 332, 125112.	9.6	17
94	Parametric study and multiple correlations of an H-type finned tube bank in a fully developed region. Numerical Heat Transfer; Part A: Applications, 2016, 70, 64-78.	2.1	16
95	Cross Vapor Stream Effect on Falling Film Evaporation in Horizontal Tube Bundle Using R134a. Heat Transfer Engineering, 2018, 39, 724-737.	1.9	16
96	Falling film evaporation in a triangular tube bundle under the influence of cross vapor stream. International Journal of Refrigeration, 2020, 112, 44-55.	3.4	15
97	Study of vibrational droplet triboelectric nanogenerator on structural and operational parameters. Nano Energy, 2020, 70, 104473.	16.0	15
98	Implementation of an efficient segregated algorithm-IDEAL on 3D collocated grid system. Science Bulletin, 2009, 54, 929-942.	9.0	14
99	Application of Combined Enhanced Techniques for Design of Highly Efficient Air Heat Transfer Surface. Heat Transfer Engineering, 2012, 33, 52-62.	1.9	14
100	CFD analysis of SVOC mass transfer in different chambers. International Journal of Heat and Mass Transfer, 2016, 99, 613-621.	4.8	14
101	Molecular Dynamics Study of Bubble Nucleation on a Substrate with Nonuniform Wettability. Langmuir, 2020, 36, 5336-5348.	3.5	14
102	Multiscale modeling of proton exchange membrane fuel cells by coupling pore-scale models of the catalyst layers and cell-scale models. International Journal of Green Energy, 2021, 18, 1147-1160.	3.8	14
103	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.	0.9	13
104	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.	1.1	13
105	Numerical Solutions of Nano/Microphenomena Coupled With Macroscopic Process of Heat Transfer and Fluid Flow: A Brief Review. Journal of Heat Transfer, 2015, 137, .	2.1	13
106	Thermal conductivity of composite building materials: A pore scale modeling approach. International Journal of Heat and Mass Transfer, 2020, 148, 118691.	4.8	13
107	Molecular Dynamics Study of Bubble Nucleation on an Ideally Smooth Substrate. Langmuir, 2020, 36, 13725-13734.	3.5	13
108	Pore-scale numerical prediction of three-phase relative permeability in porous media using the lattice Boltzmann method. International Communications in Heat and Mass Transfer, 2021, 126, 105403.	5.6	13

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109	Self-peeling of frozen water droplets upon impacting a cold surface. Communications Physics, 2022, 5, .	5.3	13
110	Comparative Study on Triangular and Quadrilateral Meshes by a Finite-Volume Method with a Central Difference Scheme. Numerical Heat Transfer, Part B: Fundamentals, 2012, 62, 243-263.	0.9	12
111	Mesoscopic analyses of the impact of morphology and operating conditions on the transport resistances in a proton-exchange-membrane fuel-cell catalyst layer. Sustainable Energy and Fuels, 2020, 4, 3623-3639.	4.9	12
112	Pore-scale study of three-phase displacement in porous media. Physics of Fluids, 2022, 34, .	4.0	12
113	MLPG/SUPG Method for Convection-Dominated Problems. Numerical Heat Transfer, Part B: Fundamentals, 2012, 61, 36-51.	0.9	11
114	A New Hybrid Algorithm for Numerical Simulation of VOC Emissions Using Single-Layer and Multilayer Approaches. Numerical Heat Transfer, Part B: Fundamentals, 2015, 67, 211-230.	0.9	11
115	Molecular dynamics simulation of water permeation through the Nafion membrane. Numerical Heat Transfer; Part A: Applications, 2016, 70, 1232-1241.	2.1	11
116	Numerical prediction of effective thermal conductivity of ceramic fiber board using lattice Boltzmann method. Numerical Heat Transfer; Part A: Applications, 2018, 74, 1285-1300.	2.1	11
117	Numerical studies on issues of Re-independence for indoor airflow and pollutant dispersion within an isolated building. Building Simulation, 2022, 15, 1259-1276.	5.6	11
118	Lattice Boltzmann study on thermoacoustic onset in a Rijke tube. European Physical Journal Plus, 2015, 130, 1.	2.6	10
119	Numerical simulation of nucleate boiling in shallow liquid. Computers and Fluids, 2018, 164, 35-40.	2.5	10
120	Application and numerical error analysis of multiscale method for air flow, heat and pollutant transfer through different scale urban areas. Building and Environment, 2019, 149, 349-365.	6.9	10
121	Discussion on Numerical Treatment of Periodic Boundary Condition for Temperature. Numerical Heat Transfer, Part B: Fundamentals, 2007, 52, 429-448.	0.9	9
122	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. Numerical Heat Transfer; Part A: Applications, 2014, 65, 844-862.	2.1	9
123	Molecular Dynamics—Continuum Hybrid Simulation for the Impingement of Droplet on a Liquid Film. Numerical Heat Transfer; Part A: Applications, 2015, 68, 512-525.	2.1	9
124	Numerical Study of the Solid Particle Erosion on H-Type Finned Circular/Elliptic Tube Surface. Communications in Computational Physics, 2017, 21, 466-489.	1.7	9
125	A hybrid flux splitting method for compressible flow. Numerical Heat Transfer, Part B: Fundamentals, 2018, 73, 33-47.	0.9	9
126	Two-dimensional numerical model for predicting fouling shape growth based on immersed boundary method and lattice Boltzmann method. Applied Thermal Engineering, 2020, 179, 115755.	6.0	9

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127	Computational fluid dynamics prediction of formaldehyde emission and sorption processes in a small test chamber with mixing fan and vents. Atmospheric Environment, 2020, 229, 117455.	4.1	9
128	Study on mitigation of automobile exhaust pollution in an urban street canyon: Emission reduction and air cleaning street lamps. Building and Environment, 2021, 193, 107651.	6.9	9
129	Calcium Hypochlorite Promotes Dark Fermentative Hydrogen Production from Waste Activated Sludge. ACS Sustainable Chemistry and Engineering, 2022, 10, 2509-2521.	6.7	9
130	1 part per trillion level detection of disinfection byproducts in drinking water using miniaturized sensor. Journal of Materials Chemistry A, 2017, 5, 4842-4849.	10.3	8
131	Study on method of comprehensive energy efficiency evaluation for distributed energy system. , 2017, , .		8
132	Application of similarity theory in modeling the output characteristics of proton exchange membrane fuel cell. International Journal of Hydrogen Energy, 2021, 46, 36940-36953.	7.1	8
133	Highly stable and methanol tolerant oxygen reduction reaction electrocatalyst Co/CoO/SnO@N-C nanocubes by one-step introduction of functional components. International Journal of Hydrogen Energy, 2022, 47, 917-927.	7.1	8
134	Enhanced methane yield through sludge two-phase anaerobic digestion process with the addition of calcium hypochlorite. Bioresource Technology, 2022, 347, 126693.	9.6	8
135	A New General Convective Boundedness Criterion. Numerical Heat Transfer, Part B: Fundamentals, 2006, 49, 585-598.	0.9	7
136	Comparison of Robustness and Efficiency for SIMPLE and CLEAR Algorithms with 13 High-Resolution Convection Schemes in Compressible Flows. Numerical Heat Transfer, Part B: Fundamentals, 2014, 66, 133-161.	0.9	7
137	Topology optimization of the manifold microchannels with triple-objective functions. Numerical Heat Transfer, Part B: Fundamentals, 2021, 80, 89-114.	0.9	7
138	A new performance evaluation method and its application in fin-tube surface design of small diameter tube. Frontiers in Energy, 2011, 5, 59-68.	2.3	6
139	Numerical Study on Some Improvements in the Passive Cooling System of a Radio Base Station Base on Multiscale Thermal Modeling Methodologyâ€"Part IIâ€"Results of Multiscale Numerical Simulation and Subsequent Improvements of Cooling Techniques. Numerical Heat Transfer; Part A: Applications, 2014, 65, 863-884.	2.1	6
140	Numerical predictions of the effective thermal conductivity of the rigid polyurethane foam. Journal Wuhan University of Technology, Materials Science Edition, 2017, 32, 703-708.	1.0	6
141	A new stability parameter in streamline upwind meshless Petrovâ€"Galerkin method for convectionâ€"diffusion problems at large Peclet number. Numerical Heat Transfer, Part B: Fundamentals, 2018, 74, 746-764.	0.9	6
142	A numerical investigation on dynamics of ferrofluid droplet in nonuniform magnetic field. Numerical Heat Transfer; Part A: Applications, 2019, 75, 690-707.	2.1	6
143	Peripheral heat transfer prediction of the subcooled falling liquid film on a horizontal smooth tube. Physics of Fluids, 2021, 33, .	4.0	6
144	Application of similarity theory in the study of proton exchange membrane fuel cells: a comprehensive review of recent developments and future research requirements. Energy Storage and Saving, 2022, 1, 3-21.	7.5	6

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145	Study on General Governing Equations of Computational Heat Transfer and Fluid Flow. Communications in Computational Physics, 2012, 12, 1482-1494.	1.7	5
146	Semi-analytical solution for fully developed forced convection in metal-foam filled tube with uniform wall temperature. Science China Technological Sciences, 2014, 57, 2487-2499.	4.0	5
147	A Compressible Thermal Lattice Boltzmann Model with Factorization Symmetry. Numerical Heat Transfer, Part B: Fundamentals, 2014, 66, 544-562.	0.9	5
148	Grand Canonical Monte Carlo Simulation of Nitrogen Adsorption in a Silica Aerogel Model. Computation, 2016, 4, 18.	2.0	5
149	A physically consistent FVM interpolation scheme based on the discretized convection–diffusion equation. Numerical Heat Transfer, Part B: Fundamentals, 2017, 71, 443-455.	0.9	5
150	A meshless local Petrov–Galerkin approach for solving the convection-dominated problems based on the streamline upwind idea and the variational multiscale concept. Numerical Heat Transfer, Part B: Fundamentals, 2018, 73, 19-32.	0.9	5
151	Numerical investigation on the nucleate pool boiling heat transfer of R134a outside the plain tube. Numerical Heat Transfer; Part A: Applications, 2019, 76, 889-908.	2.1	5
152	Numerical Simulation of the Physical–Chemical–Thermal Processes During Hydration Reaction of the Calcium Oxide/Calcium Hydroxide System in an Indirect Reactor. Transport in Porous Media, 2021, 140, 667-696.	2.6	5
153	Two-dimensional pore-scale investigation of liquid water evolution in the cathode of proton exchange membrane fuel cells. Numerical Heat Transfer; Part A: Applications, 2021, 79, 261-277.	2.1	5
154	My 50-year life in studying heat transfer. Applied Thermal Engineering, 2021, 194, 116947.	6.0	5
155	Experimental study of using aerofoils in a refrigerated display cabinet. International Journal of Thermofluids, 2022, 14, 100140.	7.8	5
156	No New Physics in Single-Phase Fluid Flow and Heat Transfer in Mini- and Micro-Channels: Is It a Conclusion?. , 2008, , .		4
157	Numerical Study on Some Improvements in the Passive Cooling System of a Radio Base Station. Numerical Heat Transfer; Part A: Applications, 2012, 62, 319-335.	2.1	4
158	Study on the Second-Order Additional Source Term Method for Handling Boundary Conditions. Numerical Heat Transfer, Part B: Fundamentals, 2013, 63, 44-61.	0.9	4
159	A parallel scalable multigrid method and HOC scheme for anisotropy elliptic problems. Numerical Heat Transfer, Part B: Fundamentals, 2017, 71, 346-358.	0.9	4
160	Thermo-Hydraulic Performance Evaluation, Field Synergy, and Entransy Dissipation Analysis for Hexagon-Like and Circular-Like Pin Finned Tube Bundles. Heat Transfer Engineering, 2018, 39, 1166-1178.	1.9	4
161	Adaptive inner iteration processes in pressure-based method for viscous compressible flows. Numerical Heat Transfer, Part B: Fundamentals, 2018, 74, 603-622.	0.9	4
162	Study of two-phase flow distribution in microchannel heat exchanger header - A numerical simulation. International Journal of Thermofluids, 2022, 14, 100150.	7.8	4

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163	Numerical investigation and analysis of heat transfer enhancement in channel by longitudinal vortex based on field synergy principle. Frontiers of Energy and Power Engineering in China, 2008, 2, 71-78.	0.4	3
164	Estimation of Unknown Boundary Heat Flux in Laminar Circular Pipe Flow Using Functional Optimization Approach: Effects of Reynolds Number. Journal of Heat Transfer, 2009, 131, .	2.1	3
165	An Efficient Solver for the Algebraic Equations Resulting from Discretization of the Governing Equations for Fluid Flow and Heat Transfer. Numerical Heat Transfer, Part B: Fundamentals, 2009, 56, 58-74.	0.9	3
166	Multiscale Simulations of Heat Transfer and Fluid Flow Problems. , 2010, , .		3
167	An Improved Paving Method of Automatic Quadrilateral Mesh Generation. Numerical Heat Transfer, Part B: Fundamentals, 2013, 64, 218-238.	0.9	3
168	Effective Thermal Conductivity of MOF-5 Powder under a Hydrogen Atmosphere. Computation, 2015, 3, 558-573.	2.0	3
169	Numerical simulation of dropwise condensation on rough structures in the presence of non-condensable gas using LBM. Numerical Heat Transfer; Part A: Applications, 2021, 79, 450-462.	2.1	3
170	Numerical evaluation of contaminants mixing uniformity in a full-scale test chamber with mixing fan. Indoor and Built Environment, 0, , 1420326X2097902.	2.8	3
171	Study on forced air convection cooling for electronic assemblies. Frontiers of Energy and Power Engineering in China, 2008, 2, 158-163.	0.4	2
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