

# Wen-Quan Tao

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3519951/publications.pdf>

Version: 2024-02-01

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	Application of similarity theory in the study of proton exchange membrane fuel cells: a comprehensive review of recent developments and future research requirements. <i>Energy Storage and Saving</i> , 2022, 1, 3-21.	7.5	6
2	Numerical studies on issues of Re-independence for indoor airflow and pollutant dispersion within an isolated building. <i>Building Simulation</i> , 2022, 15, 1259-1276.	5.6	11
3	Highly stable and methanol tolerant oxygen reduction reaction electrocatalyst Co/CoO/SnO@N-C nanocubes by one-step introduction of functional components. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 917-927.	7.1	8
4	Pore-scale modeling of complex transport phenomena in porous media. <i>Progress in Energy and Combustion Science</i> , 2022, 88, 100968.	31.2	139
5	A comprehensive review on computational studies of falling film hydrodynamics and heat transfer on the horizontal tube and tube bundle. <i>Applied Thermal Engineering</i> , 2022, 202, 117869.	6.0	35
6	Numerical Investigation on Dropwise Condensation on Rough Structures with and without Non-Condensable Gas. <i>Journal of Thermal Science</i> , 2022, 31, 308-317.	1.9	2
7	Enhanced methane yield through sludge two-phase anaerobic digestion process with the addition of calcium hypochlorite. <i>Bioresource Technology</i> , 2022, 347, 126693.	9.6	8
8	Calcium Hypochlorite Promotes Dark Fermentative Hydrogen Production from Waste Activated Sludge. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 2509-2521.	6.7	9
9	Self-peeling of frozen water droplets upon impacting a cold surface. <i>Communications Physics</i> , 2022, 5, .	5.3	13
10	Pore-scale study of three-phase displacement in porous media. <i>Physics of Fluids</i> , 2022, 34, .	4.0	12
11	Experimental study of using aerofoils in a refrigerated display cabinet. <i>International Journal of Thermofluids</i> , 2022, 14, 100140.	7.8	5
12	Study of two-phase flow distribution in microchannel heat exchanger header - A numerical simulation. <i>International Journal of Thermofluids</i> , 2022, 14, 100150.	7.8	4
13	Numerical Simulation of the Physical-Chemical-Thermal Processes During Hydration Reaction of the Calcium Oxide/Calcium Hydroxide System in an Indirect Reactor. <i>Transport in Porous Media</i> , 2021, 140, 667-696.	2.6	5
14	How different freezing morphologies of impacting droplets form. <i>Journal of Colloid and Interface Science</i> , 2021, 584, 403-410.	9.4	36
15	A two-level variational multiscale meshless local Petrov-Galerkin (VMS-MLPG) method for incompressible Navier-Stokes equations. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2021, 79, 1-15.	0.9	1
16	A robustness-enhanced method for Riemann solver. <i>International Journal of Heat and Mass Transfer</i> , 2021, 166, 120757.	4.8	0
17	Two-dimensional pore-scale investigation of liquid water evolution in the cathode of proton exchange membrane fuel cells. <i>Numerical Heat Transfer; Part A: Applications</i> , 2021, 79, 261-277.	2.1	5
18	Numerical simulation of dropwise condensation on rough structures in the presence of non-condensable gas using LBM. <i>Numerical Heat Transfer; Part A: Applications</i> , 2021, 79, 450-462.	2.1	3

#	ARTICLE	IF	CITATIONS
19	Study on mitigation of automobile exhaust pollution in an urban street canyon: Emission reduction and air cleaning street lamps. <i>Building and Environment</i> , 2021, 193, 107651.	6.9	9
20	Pore-scale numerical study of multiphase reactive transport processes in cathode catalyst layers of proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 13283-13297.	7.1	25
21	Three-dimensional non-isothermal numerical model for predicting semi-volatile organic compound transport process in a room. <i>Indoor Air</i> , 2021, 31, 2312-2328.	4.3	1
22	Multiscale modeling of proton exchange membrane fuel cells by coupling pore-scale models of the catalyst layers and cell-scale models. <i>International Journal of Green Energy</i> , 2021, 18, 1147-1160.	3.8	14
23	A Multi-Scale Thermal Analysis Method for Data Centers with Application in a Ship Data Center. <i>Journal of Thermal Science</i> , 2021, 30, 1973-1985.	1.9	2
24	Pore-scale numerical prediction of three-phase relative permeability in porous media using the lattice Boltzmann method. <i>International Communications in Heat and Mass Transfer</i> , 2021, 126, 105403.	5.6	13
25	Potassium ferrate coupled with freezing method enhances methane production from sludge anaerobic digestion. <i>Bioresource Technology</i> , 2021, 332, 125112.	9.6	17
26	My 50-year life in studying heat transfer. <i>Applied Thermal Engineering</i> , 2021, 194, 116947.	6.0	5
27	Numerical study of SALSCS demonstration unit in Xi 'an, China, with non-uniform solar irradiation. <i>International Journal of Heat and Mass Transfer</i> , 2021, 173, 121211.	4.8	2
28	Effect of thermal expansion on thermal contact resistance prediction based on the dual-iterative thermal-mechanical coupling method. <i>International Journal of Heat and Mass Transfer</i> , 2021, 173, 121243.	4.8	26
29	Topology optimization of the manifold microchannels with triple-objective functions. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2021, 80, 89-114.	0.9	7
30	Freezing pretreatment assists potassium ferrate to promote hydrogen production from anaerobic fermentation of waste activated sludge. <i>Science of the Total Environment</i> , 2021, 781, 146685.	8.0	22
31	Advanced carbon sequestration by the hybrid system of photobioreactor and microbial fuel cell with novel photocatalytic porous framework. <i>Bioresource Technology</i> , 2021, 333, 125182.	9.6	18
32	Application of similarity theory in modeling the output characteristics of proton exchange membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 36940-36953.	7.1	8
33	Lattice Boltzmann mesoscopic modeling of flow boiling heat transfer processes in a microchannel. <i>Applied Thermal Engineering</i> , 2021, 197, 117369.	6.0	32
34	Peripheral heat transfer prediction of the subcooled falling liquid film on a horizontal smooth tube. <i>Physics of Fluids</i> , 2021, 33, .	4.0	6
35	Numerical simulations of the liquid-vapor phase change dynamic processes in a flat micro heat pipe. <i>International Journal of Heat and Mass Transfer</i> , 2020, 147, 119022.	4.8	26
36	Falling film evaporation in a triangular tube bundle under the influence of cross vapor stream. <i>International Journal of Refrigeration</i> , 2020, 112, 44-55.	3.4	15

#	ARTICLE	IF	CITATIONS
37	Thermal conductivity of composite building materials: A pore scale modeling approach. <i>International Journal of Heat and Mass Transfer</i> , 2020, 148, 118691.	4.8	13
38	Revealing the mechanisms for potassium ferrate affecting methane production from anaerobic digestion of waste activated sludge. <i>Bioresource Technology</i> , 2020, 317, 124022.	9.6	27
39	A new indicator for a fair comparison on the energy performance of data centers. <i>Applied Energy</i> , 2020, 276, 115497.	10.1	33
40	Comparative study on the resistance of different catalysts to electrochemical damage of fuel cells. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 25249-25261.	7.1	2
41	Ultrasensitive detection of Cr(VI) ( $\text{Cr}_2\text{O}_7^{2-}/\text{CrO}_4^{2-}$ ) ions in water environment with a fluorescent sensor based on metal-organic frameworks combined with sulfur quantum dots. <i>Analytica Chimica Acta</i> , 2020, 1131, 68-79.	5.4	59
42	Modeling of the effects of cathode catalyst layer design parameters on performance of polymer electrolyte membrane fuel cell. <i>Applied Energy</i> , 2020, 277, 115555.	10.1	56
43	Two-dimensional numerical model for predicting fouling shape growth based on immersed boundary method and lattice Boltzmann method. <i>Applied Thermal Engineering</i> , 2020, 179, 115755.	6.0	9
44	Molecular Dynamics Study of Bubble Nucleation on an Ideally Smooth Substrate. <i>Langmuir</i> , 2020, 36, 13725-13734.	3.5	13
45	Computational fluid dynamics prediction of formaldehyde emission and sorption processes in a small test chamber with mixing fan and vents. <i>Atmospheric Environment</i> , 2020, 229, 117455.	4.1	9
46	Using a strong chemical oxidant, potassium ferrate ( $\text{K}_2\text{FeO}_4$ ), in waste activated sludge treatment: A review. <i>Environmental Research</i> , 2020, 188, 109764.	7.5	71
47	Magnetic Actuation of Surface Walkers: The Effects of Confinement and Inertia. <i>Langmuir</i> , 2020, 36, 7046-7055.	3.5	19
48	Study on the effect of foreign particle on bubble nucleation by using molecular dynamics simulation. <i>Journal of Molecular Liquids</i> , 2020, 305, 112876.	4.9	17
49	Molecular dynamics studies of bubble nucleation on a grooved substrate. <i>International Journal of Heat and Mass Transfer</i> , 2020, 158, 119850.	4.8	49
50	Numerical investigation of dust sedimentation effects on wall adsorption of indoor SVOC by the immersed boundary-lattice Boltzmann method. <i>Building and Environment</i> , 2020, 180, 106974.	6.9	2
51	A general self-adaptive under-relaxation strategy for fast and robust convergence of iterative calculation of incompressible flow. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2020, 77, 299-310.	0.9	0
52	Study of vibrational droplet triboelectric nanogenerator on structural and operational parameters. <i>Nano Energy</i> , 2020, 70, 104473.	16.0	15
53	Mesosopic analyses of the impact of morphology and operating conditions on the transport resistances in a proton-exchange-membrane fuel-cell catalyst layer. <i>Sustainable Energy and Fuels</i> , 2020, 4, 3623-3639.	4.9	12
54	Molecular Dynamics Study of Bubble Nucleation on a Substrate with Nonuniform Wettability. <i>Langmuir</i> , 2020, 36, 5336-5348.	3.5	14

#	ARTICLE	IF	CITATIONS
55	Experimental and numerical studies for applying hybrid solar chimney and photovoltaic system to the solar-assisted air cleaning system. <i>Applied Energy</i> , 2020, 269, 115150.	10.1	30
56	Highly sensitive and selective fluorescent detection of phosphate in water environment by a functionalized coordination polymer. <i>Water Research</i> , 2019, 163, 114883.	11.3	48
57	Numerical investigation on the nucleate pool boiling heat transfer of R134a outside the plain tube. <i>Numerical Heat Transfer; Part A: Applications</i> , 2019, 76, 889-908.	2.1	5
58	A numerical investigation on dynamics of ferrofluid droplet in nonuniform magnetic field. <i>Numerical Heat Transfer; Part A: Applications</i> , 2019, 75, 690-707.	2.1	6
59	Highly luminescent sensing for nitrofurans and tetracyclines in water based on zeolitic imidazolate framework-8 incorporated with dyes. <i>Talanta</i> , 2019, 204, 344-352.	5.5	71
60	Bubble nucleation over patterned surfaces with different wettabilities: Molecular dynamics investigation. <i>International Journal of Heat and Mass Transfer</i> , 2019, 136, 1-9.	4.8	58
61	A method for controlling absolute pressures at the entrance and exit of a nanochannel/nanotube. <i>Microfluidics and Nanofluidics</i> , 2019, 23, 1.	2.2	1
62	Comprehensive Energy System Evaluation Model Based on Secondary Energy Analysis. , 2019, , .		0
63	Predicting Effective Diffusivity of Porous Media from Images by Deep Learning. <i>Scientific Reports</i> , 2019, 9, 20387.	3.3	110
64	Heat transfer correlations of refrigerant falling film evaporation on a single horizontal smooth tube. <i>International Journal of Heat and Mass Transfer</i> , 2019, 133, 96-106.	4.8	39
65	Application and numerical error analysis of multiscale method for air flow, heat and pollutant transfer through different scale urban areas. <i>Building and Environment</i> , 2019, 149, 349-365.	6.9	10
66	A meshless local Petrov-Galerkin approach for solving the convection-dominated problems based on the streamline upwind idea and the variational multiscale concept. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2018, 73, 19-32.	0.9	5
67	A hybrid flux splitting method for compressible flow. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2018, 73, 33-47.	0.9	9
68	Pore scale study of multiphase multicomponent reactive transport during CO <sub>2</sub> dissolution trapping. <i>Advances in Water Resources</i> , 2018, 116, 208-218.	3.8	57
69	Effect of downward vapor stream on falling film evaporation of R134a in a tube bundle. <i>International Journal of Refrigeration</i> , 2018, 89, 112-121.	3.4	22
70	Experimental investigation of R410A and R32 falling film evaporation on horizontal enhanced tubes. <i>Applied Thermal Engineering</i> , 2018, 137, 739-748.	6.0	44
71	A multi-block lattice Boltzmann method for the thermal contact resistance at the interface of two solids. <i>Applied Thermal Engineering</i> , 2018, 138, 122-132.	6.0	38
72	Study of thermal contact resistance of rough surfaces based on the practical topography. <i>Computers and Fluids</i> , 2018, 164, 2-11.	2.5	44

#	ARTICLE	IF	CITATIONS
73	Numerical simulation of nucleate boiling in shallow liquid. Computers and Fluids, 2018, 164, 35-40.	2.5	10
74	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
75	Cross Vapor Stream Effect on Falling Film Evaporation in Horizontal Tube Bundle Using R134a. Heat Transfer Engineering, 2018, 39, 724-737.	1.9	16
76	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
77	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
78	Application Analysis of Contract Energy Management in Industrial Parks. , 2018, , .		1
79	Quantitative Study on the Support and Restriction of Energy to the Economy. , 2018, , .		0
80	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
81	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
82	Lattice Boltzmann method for conjugated heat and mass transfer with general interfacial conditions. Physical Review E, 2018, 98, .	2.1	21
83	Experimental Characterization of the Thermal Conductivity and Microstructure of Opacifier-Fiber-Aerogel Composite. Molecules, 2018, 23, 2198.	3.8	25
84	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
85	A test-validated prediction model of thermal contact resistance for Ti-6Al-4V alloy. Applied Energy, 2018, 228, 1601-1617.	10.1	37
86	Modeling a hybrid methodology for evaluating and forecasting regional energy efficiency in China. Applied Energy, 2017, 185, 1769-1777.	10.1	60
87	Experimental investigations of R134a and R123 falling film evaporation on enhanced horizontal tubes. International Journal of Refrigeration, 2017, 75, 190-203.	3.4	56
88	Lattice Boltzmann modeling of pool boiling with large liquid-gas density ratio. International Journal of Thermal Sciences, 2017, 114, 172-183.	4.9	84
89	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
90	A physically consistent FVM interpolation scheme based on the discretized convectionâ€“diffusion equation. Numerical Heat Transfer, Part B: Fundamentals, 2017, 71, 443-455.	0.9	5

#	ARTICLE	IF	CITATIONS
91	A two-dimensional simulation method of the solar chimney power plant with a new radiation model for the collector. <i>International Communications in Heat and Mass Transfer</i> , 2017, 85, 100-106.	5.6	18
92	Evaluation of thermal hydrolysis efficiency of mechanically dewatered sewage sludge via rheological measurement. <i>Water Research</i> , 2017, 116, 34-43.	11.3	57
93	A parallel scalable multigrid method and HOC scheme for anisotropy elliptic problems. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2017, 71, 346-358.	0.9	4
94	Pore-scale study of multiphase reactive transport in fibrous electrodes of vanadium redox flow batteries. <i>Electrochimica Acta</i> , 2017, 248, 425-439.	5.2	64
95	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. <i>Applied Thermal Engineering</i> , 2017, 125, 1114-1122.	6.0	24
96	An example for the effect of round-off errors on numerical heat transfer. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2017, 72, 21-32.	0.9	2
97	Numerical Study of the Solid Particle Erosion on H-Type Finned Circular/Elliptic Tube Surface. <i>Communications in Computational Physics</i> , 2017, 21, 466-489.	1.7	9
98	Numerical predictions of the effective thermal conductivity of the rigid polyurethane foam. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2017, 32, 703-708.	1.0	6
99	Nucleate boiling performance evaluation of cavities at mesoscale level. <i>International Journal of Heat and Mass Transfer</i> , 2017, 106, 708-719.	4.8	62
100	Review of methodologies and polices for evaluation of energy efficiency in high energy-consuming industry. <i>Applied Energy</i> , 2017, 187, 203-215.	10.1	229
101	Study on method of comprehensive energy efficiency evaluation for distributed energy system. , 2017, , .		8
102	Research on load classification based on user's typical daily load curve. , 2017, , .		2
103	Grand Canonical Monte Carlo Simulation of Nitrogen Adsorption in a Silica Aerogel Model. <i>Computation</i> , 2016, 4, 18.	2.0	5
104	Heat transfer correlation of the falling film evaporation on a single horizontal smooth tube. <i>Applied Thermal Engineering</i> , 2016, 103, 177-186.	6.0	72
105	CFD analysis of SVOC mass transfer in different chambers. <i>International Journal of Heat and Mass Transfer</i> , 2016, 99, 613-621.	4.8	14
106	Parametric study and multiple correlations of an H-type finned tube bank in a fully developed region. <i>Numerical Heat Transfer; Part A: Applications</i> , 2016, 70, 64-78.	2.1	16
107	Numerical predictions of the effective thermal conductivity for needled C/C-SiC composite materials. <i>Numerical Heat Transfer; Part A: Applications</i> , 2016, 70, 1101-1117.	2.1	25
108	Molecular dynamics simulation of water permeation through the Nafion membrane. <i>Numerical Heat Transfer; Part A: Applications</i> , 2016, 70, 1232-1241.	2.1	11

#	ARTICLE	IF	CITATIONS
109	A compressible lattice Boltzmann finite volume model for high subsonic and transonic flows on regular lattices. <i>Computers and Fluids</i> , 2016, 131, 45-55.	2.5	37
110	Effect of vapor flow on the falling film evaporation of R134a outside a horizontal tube bundle. <i>International Journal of Heat and Mass Transfer</i> , 2016, 92, 1171-1181.	4.8	51
111	Effective Thermal Conductivity of MOF-5 Powder under a Hydrogen Atmosphere. <i>Computation</i> , 2015, 3, 558-573.	2.0	3
112	Numerical Solutions of Nano/Microphenomena Coupled With Macroscopic Process of Heat Transfer and Fluid Flow: A Brief Review. <i>Journal of Heat Transfer</i> , 2015, 137, .	2.1	13
113	A New Hybrid Algorithm for Numerical Simulation of VOC Emissions Using Single-Layer and Multilayer Approaches. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2015, 67, 211-230.	0.9	11
114	Lattice Boltzmann study on thermoacoustic onset in a Rijke tube. <i>European Physical Journal Plus</i> , 2015, 130, 1.	2.6	10
115	Nanoscale simulation of shale transport properties using the lattice Boltzmann method: permeability and diffusivity. <i>Scientific Reports</i> , 2015, 5, 8089.	3.3	206
116	Analysis and extension of field synergy principle (FSP) for compressible boundary-layer heat transfer. <i>International Journal of Heat and Mass Transfer</i> , 2015, 84, 1061-1069.	4.8	17
117	Generalized lattice Boltzmann model for flow through tight porous media with Klinkenberg's effect. <i>Physical Review E</i> , 2015, 91, 033004.	2.1	96
118	A three-dimensional volume of fluid & level set (VOSET) method for incompressible two-phase flow. <i>Computers and Fluids</i> , 2015, 118, 293-304.	2.5	48
119	Numerical Simulation of Finned Tube Bank Across a Staggered Circular-Pin-Finned Tube Bundle. <i>Numerical Heat Transfer; Part A: Applications</i> , 2015, 68, 737-760.	2.1	27
120	Molecular Dynamics-Continuum Hybrid Simulation for the Impingement of Droplet on a Liquid Film. <i>Numerical Heat Transfer; Part A: Applications</i> , 2015, 68, 512-525.	2.1	9
121	Numerical prediction of effective thermal conductivities of 3D four-directional braided composites. <i>Composite Structures</i> , 2015, 125, 499-508.	5.8	59
122	Numerical study of effective thermal conductivities of plain woven composites by unit cells of different sizes. <i>International Journal of Heat and Mass Transfer</i> , 2015, 91, 829-840.	4.8	41
123	Premixed Combustion in a Porous Burner with Different Fuels. <i>Combustion Science and Technology</i> , 2015, 187, 489-504.	2.3	29
124	Pore-scale study of dissolution-induced changes in hydrologic properties of rocks with binary minerals. <i>Water Resources Research</i> , 2014, 50, 9343-9365.	4.2	91
125	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.	2.1	9
126	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.	2.1	6



#	ARTICLE	IF	CITATIONS
127	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.	4.0	5
128	The influences of microstructural parameters on the gaseous thermal conductivity in nanoporous material. , 2014, , .		0
129	A Direct Numerical Simulation for Nucleate Boiling by the VOSET Method. <i>Numerical Heat Transfer; Part A: Applications</i> , 2014, 65, 949-971.	2.1	29
130	Mesoscopic study of the formation of pseudomorphs with presence of chemical fluids. <i>Geosciences Journal</i> , 2014, 18, 469-475.	1.2	1
131	A Compressible Thermal Lattice Boltzmann Model with Factorization Symmetry. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2014, 66, 544-562.	0.9	5
132	Numerical studies on the inherent interrelationship between field synergy principle and entransy dissipation extreme principle for enhancing convective heat transfer. <i>International Journal of Heat and Mass Transfer</i> , 2014, 74, 196-205.	4.8	62
133	A critical review of the pseudopotential multiphase lattice Boltzmann model: Methods and applications. <i>International Journal of Heat and Mass Transfer</i> , 2014, 76, 210-236.	4.8	574
134	The Temperature Effect on the Diffusion Processes of Water and Proton in the Proton Exchange Membrane Using Molecular Dynamics Simulation. <i>Numerical Heat Transfer; Part A: Applications</i> , 2014, 65, 216-228.	2.1	41
135	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.	0.9	7
136	Research on energy efficiency evaluation based on indicators for industry sectors in China. <i>Applied Energy</i> , 2014, 134, 550-562.	10.1	25
137	Investigation of Re -independence of turbulent flow and pollutant dispersion in urban street canyon using numerical wind tunnel (NWT) models. <i>International Journal of Heat and Mass Transfer</i> , 2014, 79, 176-188.	4.8	42
138	Multi-scale modeling of proton exchange membrane fuel cell by coupling finite volume method and lattice Boltzmann method. <i>International Journal of Heat and Mass Transfer</i> , 2013, 63, 268-283.	4.8	101
139	Coupled numerical approach combining finite volume and lattice Boltzmann methods for multi-scale multi-physicochemical processes. <i>Journal of Computational Physics</i> , 2013, 255, 83-105.	3.8	64
140	Numerical investigation of the coupled water and thermal management in PEM fuel cell. <i>Applied Energy</i> , 2013, 112, 1115-1125.	10.1	169
141	An Improved Paving Method of Automatic Quadrilateral Mesh Generation. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2013, 64, 218-238.	0.9	3
142	Pore-scale modeling of multiphase reactive transport with phase transitions and dissolution-precipitation processes in closed systems. <i>Physical Review E</i> , 2013, 87, 043306.	2.1	131
143	Study on the Second-Order Additional Source Term Method for Handling Boundary Conditions. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2013, 63, 44-61.	0.9	4
144	Comparative Study on Triangular and Quadrilateral Meshes by a Finite-Volume Method with a Central Difference Scheme. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2012, 62, 243-263.	0.9	12

#	ARTICLE	IF	CITATIONS
145	Multiscale Simulations of Heat Transfer and Fluid Flow Problems. Journal of Heat Transfer, 2012, 134, .	2.1	61
146	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
147	Study on General Governing Equations of Computational Heat Transfer and Fluid Flow. Communications in Computational Physics, 2012, 12, 1482-1494.	1.7	5
148	Application of Combined Enhanced Techniques for Design of Highly Efficient Air Heat Transfer Surface. Heat Transfer Engineering, 2012, 33, 52-62.	1.9	14
149	MLPG/SUPG Method for Convection-Dominated Problems. Numerical Heat Transfer, Part B: Fundamentals, 2012, 61, 36-51.	0.9	11
150	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
151	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
152	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
153	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
154	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
155	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
156	Roughness effect on flow and thermal boundaries in microchannel/nanochannel flow using molecular dynamics-continuum hybrid simulation. International Journal for Numerical Methods in Engineering, 2012, 89, 2-19.	2.8	37
157	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
158	Parametric Numerical Study of Flow and Heat Transfer in Microchannels With Wavy Walls. Journal of Heat Transfer, 2011, 133, .	2.1	154
159	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
160	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
161	Scale effect on flow and thermal boundaries in micro- $\epsilon$ -nanochannel flow using molecular dynamics-continuum hybrid simulation method. International Journal for Numerical Methods in Engineering, 2010, 81, 207-228.	2.8	49
162	A stabilized MLPG method for steady state incompressible fluid flow simulation. Journal of Computational Physics, 2010, 229, 8564-8577.	3.8	33

#	ARTICLE	IF	CITATIONS
163	Numerical studies of simultaneously developing laminar flow and heat transfer in microtubes with thick wall and constant outside wall temperature. <i>International Journal of Heat and Mass Transfer</i> , 2010, 53, 3977-3989.	4.8	56
164	A Design and Rating Method for Shell-and-Tube Heat Exchangers With Helical Baffles. <i>Journal of Heat Transfer</i> , 2010, 132, .	2.1	21
165	Multiscale Simulations of Heat Transfer and Fluid Flow Problems. , 2010, , .		3
166	Estimation of Unknown Boundary Heat Flux in Laminar Circular Pipe Flow Using Functional Optimization Approach: Effects of Reynolds Number. <i>Journal of Heat Transfer</i> , 2009, 131, .	2.1	3
167	Numerical Study of Flow and Heat Transfer Enhancement by Using Delta Winglets in a Triangular Wavy Fin-and-Tube Heat Exchanger. <i>Journal of Heat Transfer</i> , 2009, 131, .	2.1	23
168	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.	1.6	18
169	Molecular dynamics-continuum hybrid simulation for condensation of gas flow in a microchannel. <i>Microfluidics and Nanofluidics</i> , 2009, 7, 407-422.	2.2	28
170	Coupled solid (FVM)-fluid (DSMC) simulation of micro-nozzle with unstructured-grid. <i>Microfluidics and Nanofluidics</i> , 2009, 7, 621-631.	2.2	18
171	Extension of the pressure correction method to zero-Mach number compressible flows. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 1583-1595.	0.9	1
172	Implementation of an efficient segregated algorithm-IDEAL on 3D collocated grid system. <i>Science Bulletin</i> , 2009, 54, 929-942.	9.0	14
173	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. <i>International Journal of Heat and Mass Transfer</i> , 2009, 52, 5381-5389.	4.8	81
174	An Efficient Solver for the Algebraic Equations Resulting from Discretization of the Governing Equations for Fluid Flow and Heat Transfer. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2009, 56, 58-74.	0.9	3
175	Meshless method based on the local weak-forms for steady-state heat conduction problems. <i>International Journal of Heat and Mass Transfer</i> , 2008, 51, 3103-3112.	4.8	74
176	Numerical investigation and analysis of heat transfer enhancement in channel by longitudinal vortex based on field synergy principle. <i>Frontiers of Energy and Power Engineering in China</i> , 2008, 2, 71-78.	0.4	3
177	Three-dimensional numerical simulation of the basic pulse tube refrigerator. <i>Frontiers of Energy and Power Engineering in China</i> , 2008, 2, 48-53.	0.4	1
178	Study on forced air convection cooling for electronic assemblies. <i>Frontiers of Energy and Power Engineering in China</i> , 2008, 2, 158-163.	0.4	2
179	No New Physics in Single-Phase Fluid Flow and Heat Transfer in Mini- and Micro-Channels: Is It a Conclusion?. , 2008, , .		4
180	Discussion on Numerical Treatment of Periodic Boundary Condition for Temperature. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2007, 52, 429-448.	0.9	9

#	ARTICLE	IF	CITATIONS
181	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
182	Numerical analysis on heat transfer enhancement by longitudinal vortex based on field synergy principle. Frontiers of Energy and Power Engineering in China, 2007, 1, 365-369.	0.4	1
183	A New General Convective Boundedness Criterion. Numerical Heat Transfer, Part B: Fundamentals, 2006, 49, 585-598.	0.9	7
184	Three-dimensional transport model of PEM fuel cell with straight flow channels. Journal of Power Sources, 2006, 158, 25-35.	7.8	40
185	A NEW HIGH-ORDER-ACCURATE AND BOUNDED SCHEME FOR INCOMPRESSIBLE FLOW. Numerical Heat Transfer, Part B: Fundamentals, 2003, 43, 19-41.	0.9	41
186	304 Numerical study on the pressure drop and heat transfer characteristics of internally finned tubes with blocked inserted tubes. The Proceedings of the Computational Mechanics Conference, 2003, 2003.16, 179-180.	0.0	0
187	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
188	Experimental and Numerical Study of Turbulent Heat Transfer in Twisted Square Ducts. Journal of Heat Transfer, 2001, 123, 868-877.	2.1	35
189	Six convective difference schemes on different grid systems for fluid flow and heat transfer with SIMPLE algorithm. Journal of Thermal Science, 1999, 8, 250-261.	1.9	1
190	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
191	Stability-Controllable Second-order Difference scheme for convection term. Journal of Thermal Science, 1998, 7, 119-130.	1.9	18
192	Uniform Deterministic Discrete Method for three dimensional systems. Journal of Thermal Science, 1997, 6, 117-122.	1.9	0
193	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
194	Numerical evaluation of contaminants mixing uniformity in a full-scale test chamber with mixing fan. Indoor and Built Environment, 0, , 1420326X2097902.	2.8	3
195	<b>Numerical examination of high-pressure fuel injection in common rail injector based on hydro-mechanical model</b>. Physics of Fluids, 0, , .	4.0	0