Zeng-Yao Li

List of Publications by Year
in descending order

50 papers	980 citations	430754 18 h-index	477173 29 g-index
50 all docs	50 docs citations	50 times ranked	675 citing authors

#	Article	IF	Citations
1	Numerical investigations on fully-developed mixed turbulent convection in dimpled parabolic trough receiver tubes. Applied Thermal Engineering, 2017, 114, 1287-1299.	3.0	119
2	Numerical Study on Heat Transfer Enhancement in a Receiver Tube of Parabolic Trough Solar Collector with Dimples, Protrusions and Helical Fins. Energy Procedia, 2015, 69, 1306-1316.	1.8	95
3	The influence of gaseous heat conduction to the effective thermal conductivity of nano-porous materials. International Communications in Heat and Mass Transfer, 2015, 68, 158-161.	2.9	54
4	A theoretical and numerical study on the gas-contributed thermal conductivity in aerogel. International Journal of Heat and Mass Transfer, 2017, 108, 1982-1990.	2.5	44
5	A multi-level fractal model for the effective thermal conductivity of silica aerogel. Journal of Non-Crystalline Solids, 2015, 430, 43-51.	1.5	41
6	Design and optimization of core/shell structures as highly efficient opacifiers for silica aerogels as high-temperature thermal insulation. International Journal of Thermal Sciences, 2018, 133, 206-215.	2.6	37
7	Modeling of the apparent solid thermal conductivity of aerogel. International Journal of Heat and Mass Transfer, 2018, 120, 724-730.	2.5	34
8	Three-dimensional numerical study on fully-developed mixed laminar convection in parabolic trough solar receiver tube. Energy, 2016, 113, 1288-1303.	4.5	33
9	Film condensing heat transfer of R134a on single horizontal tube coated with open cell copper foam. Applied Thermal Engineering, 2015, 76, 335-343.	3.0	30
10	A Direct Numerical Simulation for Nucleate Boiling by the VOSET Method. Numerical Heat Transfer; Part A: Applications, 2014, 65, 949-971.	1.2	29
11	Investigation of the effect of the gas permeation induced by pressure gradient on transient heat transfer in silica aerogel. International Journal of Heat and Mass Transfer, 2016, 95, 1026-1037.	2.5	29
12	Pool boiling heat transfer of R134a on single horizontal tube surfaces sintered with open-celled copper foam. International Journal of Thermal Sciences, 2011, 50, 2248-2255.	2.6	27
13	Numerical modeling of the gas-contributed thermal conductivity of aerogels. International Journal of Heat and Mass Transfer, 2019, 131, 217-225.	2.5	26
14	Geometric optimization of aerogel composites for high temperature thermal insulation applications. Journal of Non-Crystalline Solids, 2020, 547, 120306.	1.5	26
15	Design and characterization of a high-flux non-coaxial concentrating solar simulator. Applied Thermal Engineering, 2018, 145, 201-211.	3.0	25
16	Pool boiling heat transfer of R134a outside reentrant cavity tubes at higher heat flux. Applied Thermal Engineering, 2017, 127, 1364-1371.	3.0	22
17	Design and thermal insulation performance analysis of endothermic opacifiers doped silica aerogels. International Journal of Thermal Sciences, 2019, 145, 105995.	2.6	21
18	Coupled solid (FVM)â€“fluid (DSMC) simulation of micro-nozzle with unstructured-grid. Microfluidics and Nanofluidics, 2009, 7, 621-631.	1.0	18

#	Article	IF	Citations
19	Experimental and numerical analysis of the hydraulic and thermal performances of the gradually-varied porous volumetric solar receiver. Science China Technological Sciences, 2020, 63, 1224-1234.	2.0	17
20	Theoretical and DSMC Studies on Heat Conduction of Gas Confined in a Cuboid Nanopore. Journal of Heat Transfer, 2017, 139, .	1.2	16
21	The effective thermal conductivity of coated/uncoated fiber-reinforced composites with different fiber arrangements. Energy, 2021, 230, 120756.	4.5	16
22	An ideal nano-porous insulation material: Design, modeling and numerical validation. Applied Thermal Engineering, 2014, 72, 34-40.	3.0	15
23	Study on Unit Cell Models and the Effective Thermal Conductivities of Silica Aerogel. Journal of Nanoscience and Nanotechnology, 2015, 15, 3218-3223.	0.9	15
24	Particle-in-cell and Monte Carlo collision simulations of the cathode sheath in an atmospheric direct-current arc discharge. Plasma Sources Science and Technology, 2016, 25, 05LT01.	1.3	14
25	Thermal conductivity modeling of hollow fiber-based porous structures for thermal insulation applications. Journal of Non-Crystalline Solids, 2022, 575, 121188.	1.5	14
26	Kinetic analysis of direct-current driven microdischarges with thermo-field electron emission at atmospheric pressure. Journal Physics D: Applied Physics, 2020, 53, 455201.	1.3	13
27	A novel flux mapping system for high-flux solar simulators based on the indirect method. Solar Energy, 2019, 179, 89-98.	2.9	12
28	Condensation of R134a and R22 in Shell and Tube Condensers Mounted With High-Density Low-Fin Tubes. Journal of Heat Transfer, 2018, 140, .	1.2	11
29	A review on heat transfer in nanoporous silica aerogel insulation materials and its modeling. Energy Storage and Saving, 2022, 1, 217-240.	3.0	11
30	Preparation and thermal insulation performance characterization of endothermic opacifier doped silica aerogel. International Journal of Thermal Sciences, 2022, 174, 107431.	2.6	10
31	Discussion on Numerical Treatment of Periodic Boundary Condition for Temperature. Numerical Heat Transfer, Part B: Fundamentals, 2007, 52, 429-448.	0.6	9
32	Numerical Study on Some Improvements in the Passive Cooling System of a Radio Base Station Base on Multiscale Thermal Modeling Methodologyâ€"Part I: Confirmation of Simplified Models. Numerical Heat Transfer; Part A: Applications, 2014, 65, 844-862.	1.2	9
33	Nonlocal Effects and Slip Heat Flow in Nanolayers. Scientific Reports, 2017, 7, 9568.	1.6	9
34	A two-level variational multiscale meshless local Petrovâ€"Galerkin (VMS-MLPG) method for convection-diffusion problems with large Peclet number. Computers and Fluids, 2018, 164, 73-82.	1.3	9
35	Effective thermal conductivity modeling of hollow nanosphere packing structures. International Journal of Heat and Mass Transfer, 2020, 161, 120298.	2.5	8
36	A general effective thermal conductivity model for composites reinforced by non-contact spherical particles. International Journal of Thermal Sciences, 2021, 168, 107088.	2.6	8

#	Article	IF	Citations
37	Unified modeling and kinetic analysis of the near-cathode region and hot cathode in atmospheric-pressure arc discharges. Physics of Fluids, 2022, 34, .	1.6	8
38	Grand canonical Monte Carlo simulations of hydrogen adsorption in carbon aerogels. International Journal of Hydrogen Energy, 2021, 46, 34807-34821.	3.8	7
39	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.	1.2	6
40	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.	0.6	6
41	The Calculation of Thermal Conductivities by Three Dimensional Direct Simulation Monte Carlo Method. Journal of Nanoscience and Nanotechnology, 2015, 15, 3299-3304.	0.9	5
42	A physically consistent FVM interpolation scheme based on the discretized convectionâ€"diffusion equation. Numerical Heat Transfer, Part B: Fundamentals, 2017, 71, 443-455.	0.6	5
43	A meshless local Petrovâ€"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.	0.6	5
44	Numerical modeling of effective thermal conductivity of hollow silica nanosphere packings. International Journal of Heat and Mass Transfer, 2022, 182, 122032.	2.5	5
45	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.	1.2	4
46	Modeling of the Conductive Heat Transfer between Two Touching Nanoparticles in Nanoparticle-Based Materials. International Journal of Heat and Mass Transfer, 2021, 167, 120723.	2.5	2
47	A two-level variational multiscale meshless local Petrov-Galerkin (VMS-MLPG) method for incompressible Navier-Stokes equations. Numerical Heat Transfer, Part B: Fundamentals, 2021, 79, 1-15.	0.6	1
48	The influences of microstructural parameters on the gaseous thermal conductivity in nanoporous material. , 2014, , .		0
49	Theoretical and DSMC Study on Heat Conduction of Gas in Nanoscale Pores. , 2016, , .		0
50	A general self-adaptive under-relaxation strategy for fast and robust convergence of iterative calculation of incompressible flow. Numerical Heat Transfer, Part B: Fundamentals, 2020, 77, 299-310.	0.6	0