

Omid Ali Akbari

List of Publications by Year in descending order

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81
papers

5,902
citations

53794

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74163

75
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docs citations

81
times ranked

2367
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermal performance and entropy generation for nanofluid jet injection on a ribbed microchannel with oscillating heat flux: Investigation of the first and second laws of thermodynamics. Chinese Journal of Chemical Engineering, 2022, 42, 450-464.	3.5	6
2	Numerical study of natural convection of nanofluid in a rectangular closed enclosure (RCE) affected by hot and cold flow in a two-layer microchannel. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2022, 44, 1.	1.6	2
3	Modifications in the physical structure of a new two-layer micro-size heat sink with sinusoidal shaped cavities for heat transfer augmentation of nanofluid flow. AEJ - Alexandria Engineering Journal, 2022, 61, 11019-11030.	6.4	8
4	Natural convection of Water/MWCNT nanofluid flow in an enclosure for investigation of the first and second laws of thermodynamics. AEJ - Alexandria Engineering Journal, 2022, 61, 11687-11713.	6.4	9
5	Numerical investigation of heat and mass transfer of water-silver nanofluid in a spiral heat exchanger using a two-phase mixture method. Journal of Thermal Analysis and Calorimetry, 2021, 144, 1003-1012.	3.6	14
6	The effects of oil/MWCNT nanofluids and geometries on the solid oxide fuel cell cooling systems: a CFD study. Journal of Thermal Analysis and Calorimetry, 2021, 144, 245-256.	3.6	6
7	Mixed convection heat transfer of a nanofluid in a closed elbow-shaped cavity (CESC). Journal of Thermal Analysis and Calorimetry, 2021, 144, 2295-2316.	3.6	22
8	Numerical investigation of mixed convection of nanofluid flow in oblique rectangular microchannels with nanofluid jet injection. European Physical Journal Plus, 2021, 136, .	2.6	10
9	Numerical investigation of the effect of water-Al ₂ O ₃ nanofluid on heat transfer in trapezoidal, sinusoidal and stepped microchannels. International Journal of Numerical Methods for Heat and Fluid Flow, 2020, 30, 2439-2465.	2.8	24
10	Numerical simulation of the effect of using nanofluid in phase change process of cooling fluid. International Journal of Numerical Methods for Heat and Fluid Flow, 2020, 30, 2913-2934.	2.8	6
11	Forced convection in a double tube heat exchanger using nanofluids with constant and variable thermophysical properties. International Journal of Numerical Methods for Heat and Fluid Flow, 2020, 30, 3247-3265.	2.8	38
12	Effects of magnetic field on micro cross jet injection of dispersed nanoparticles in a microchannel. International Journal of Numerical Methods for Heat and Fluid Flow, 2020, 30, 2683-2704.	2.8	94
13	Eulerian-Eulerian multi-phase RPI modeling of turbulent forced convective of boiling flow inside the tube with porous medium. International Journal of Numerical Methods for Heat and Fluid Flow, 2020, 30, 2739-2757.	2.8	10
14	A comprehensive study of two-phase flow and heat transfer of water/Ag nanofluid in an elliptical curved minichannel. Chinese Journal of Chemical Engineering, 2020, 28, 383-402.	3.5	28
15	Numerical study on mixed convection of a non-Newtonian nanofluid with porous media in a two lid-driven square cavity. Journal of Thermal Analysis and Calorimetry, 2020, 140, 1121-1145.	3.6	153
16	Computational modeling of porous medium inside a channel with homogeneous nanofluid. Journal of Thermal Analysis and Calorimetry, 2020, 140, 843-858.	3.6	11
17	Accurate meso-scale simulation of mixed convective heat transfer in a porous media for a vented square with hot elliptic obstacle: An LBM approach. Physica A: Statistical Mechanics and Its Applications, 2020, 537, 122439.	2.6	33
18	Numerical investigation of turbulent flow and heat transfer of nanofluid inside a wavy microchannel with different wavelengths. Journal of Thermal Analysis and Calorimetry, 2020, 139, 2365-2380.	3.6	110

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19	Analysis of buckling of a multi-layered nanocomposite rectangular plate reinforced by single-walled carbon nanotubes on elastic medium considering nonlocal theory of Eringen and variational approach. <i>Indian Journal of Physics</i> , 2020, 94, 1009-1023.	1.8	4
20	Investigating the thermal energy storage inside a double-wall tank utilizing phase-change materials (PCMs). <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 139, 2283-2294.	3.6	36
21	Numerical simulation of turbulent flow and forced heat transfer of water/CuO nanofluid inside a horizontal dimpled fin. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 139, 3711-3724.	3.6	7
22	Natural convection heat transfer enhancement of different nanofluids by adding dimple fins on a vertical channel wall. <i>Chinese Journal of Chemical Engineering</i> , 2020, 28, 643-659.	3.5	25
23	Numerical investigation of mixed convection heat transfer behavior of nanofluid in a cavity with different heat transfer areas. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 140, 2779-2803.	3.6	60
24	Hydrothermal performance of nanofluid flow in a sinusoidal double layer microchannel in order to geometric optimization. <i>International Communications in Heat and Mass Transfer</i> , 2020, 117, 104700.	5.6	46
25	Optimization of geometry and nano-fluid properties on microchannel performance using Taguchi method and genetic algorithm. <i>International Communications in Heat and Mass Transfer</i> , 2020, 119, 104952.	5.6	25
26	Numerical investigation of nanofluid laminar forced convection heat transfer between two horizontal concentric cylinders in the presence of porous medium. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 141, 2095-2108.	3.6	40
27	Numerical study of mixed convection heat transfer inside a vertical microchannel with two-phase approach. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 135, 1119-1134.	3.6	23
28	Numerical investigation of turbulent flow and heat transfer in flat tube. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 135, 3471-3483.	3.6	24
29	Effect of radiation on laminar natural convection of nanofluid in a vertical channel with single- and two-phase approaches. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 138, 779-794.	3.6	101
30	Two-phase modeling of nanofluid forced convection in different arrangements of elliptical tube banks. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2019, 30, 1937-1966.	2.8	6
31	A numerical investigation on the effects of mixed convection of Ag-water nanofluid inside a sim-circular lid-driven cavity on the temperature of an electronic silicon chip. <i>Applied Thermal Engineering</i> , 2019, 162, 114298.	6.0	58
32	Numerical investigation of thermal performance augmentation of nanofluid flow in microchannel heat sinks by using of novel nozzle structure: sinusoidal cavities and rectangular ribs. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2019, 41, 1.	1.6	7
33	Numerical Simulation of Natural Convection Heat Transfer of Nanofluid With Cu, MWCNT, and Al ₂ O ₃ Nanoparticles in a Cavity With Different Aspect Ratios. <i>Journal of Thermal Science and Engineering Applications</i> , 2019, 11, .	1.5	73
34	Heat Transfer of Oil/MWCNT Nanofluid Jet Injection Inside a Rectangular Microchannel. <i>Symmetry</i> , 2019, 11, 757.	2.2	46
35	Computational fluid dynamics and laminar heat transfer of water/Cu nanofluid in ribbed microchannel with a two-phase approach. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2019, 29, 1563-1589.	2.8	12
36	Numerical investigation of heat transfer of nanofluid flow through a microchannel with heat sinks and sinusoidal cavities by using novel nozzle structure. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 138, 737-752.	3.6	22

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37	Lattice-Boltzmann method for analysis of combined forced convection and radiation heat transfer in a channel with sinusoidal distribution on walls. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2019, 526, 121066.	2.6	24
38	Investigating the effect of nanoparticles diameter on turbulent flow and heat transfer properties of non-Newtonian carboxymethyl cellulose/CuO fluid in a microtube. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2019, 29, 1699-1723.	2.8	66
39	Thermal performance improvement in water nanofluid/GNP+SDBS in novel design of double-layer microchannel heat sink with sinusoidal cavities and rectangular ribs. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 136, 1333-1345.	3.6	76
40	Numerical study of biomagnetic fluid flow in a duct with a constriction affected by a magnetic field. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 473, 42-50.	2.3	36
41	The effect of using water/CuO nanofluid and L-shaped porous ribs on the performance evaluation criterion of microchannels. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 135, 145-159.	3.6	100
42	Application of nanofluid to improve the thermal performance of horizontal spiral coil utilized in solar ponds: Geometric study. <i>Renewable Energy</i> , 2018, 122, 1-16.	8.9	139
43	The numerical modeling of water/FMWCNT nanofluid flow and heat transfer in a backward-facing contracting channel. <i>Physica B: Condensed Matter</i> , 2018, 537, 176-183.	2.7	167
44	Numerical study of turbulent nanofluid heat transfer in a tubular heat exchanger with twin twisted-tape inserts. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 132, 741-759.	3.6	106
45	Simultaneous investigations the effects of non-Newtonian nanofluid flow in different volume fractions of solid nanoparticles with slip and no-slip boundary conditions. <i>Thermal Science and Engineering Progress</i> , 2018, 5, 263-277.	2.7	108
46	Effects of external wind breakers of Heller dry cooling system in power plants. <i>Applied Thermal Engineering</i> , 2018, 129, 1124-1134.	6.0	37
47	Turbulent flow and heat transfer of Water/Al ₂ O ₃ nanofluid inside a rectangular ribbed channel. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2018, 96, 73-84.	2.7	108
48	Numerical investigation of flow and heat transfer characteristics in smooth, sinusoidal and zigzag-shaped microchannel with and without nanofluid. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 131, 1757-1766.	3.6	127
49	The effect of attack angle of triangular ribs on heat transfer of nanofluids in a microchannel. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 131, 2893-2912.	3.6	125
50	The effect of rib shape on the behavior of laminar flow of oil/MWCNT nanofluid in a rectangular microchannel. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 134, 1611-1628.	3.6	93
51	Investigation into the effects of slip boundary condition on nanofluid flow in a double-layer microchannel. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 131, 2975-2991.	3.6	104
52	Investigation of turbulent heat transfer and nanofluid flow in a double pipe heat exchanger. <i>Advanced Powder Technology</i> , 2018, 29, 273-282.	4.1	215
53	Numerical study of flow and heat transfer of water-Al ₂ O ₃ nanofluid inside a channel with an inner cylinder using Eulerian-Lagrangian approach. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 132, 651-665.	3.6	46
54	Technical and environmental analysis of repowering the existing CHP system in a petrochemical plant: A case study. <i>Energy</i> , 2018, 159, 937-949.	8.8	39

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55	Application of lattice Boltzmann method and spinodal decomposition phenomenon for simulating two-phase thermal flows. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2018, 509, 673-689.	2.6	50
56	CFD analysis of thermal and hydrodynamic characteristics of hybrid nanofluid in a new designed sinusoidal double-layered microchannel heat sink. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 134, 2305-2315.	3.6	108
57	Melting process in porous media around two hot cylinders: Numerical study using the lattice Boltzmann method. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2018, 509, 316-335.	2.6	107
58	Investigation of volume fraction of nanoparticles effect and aspect ratio of the twisted tape in the tube. <i>Journal of Thermal Analysis and Calorimetry</i> , 2017, 129, 1911-1922.	3.6	123
59	The effect of aspect ratios of rib on the heat transfer and laminar water/TiO ₂ nanofluid flow in a two-dimensional rectangular microchannel. <i>Journal of Molecular Liquids</i> , 2017, 236, 254-265.	4.9	156
60	Solar parallel feed water heating repowering of a steam power plant: A case study in Iran. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 77, 474-485.	16.4	105
61	The numerical investigation of heat transfer and pressure drop of turbulent flow in a triangular microchannel. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017, 93, 179-189.	2.7	120
62	Increasing heat transfer of non-Newtonian nanofluid in rectangular microchannel with triangular ribs. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017, 93, 167-178.	2.7	127
63	The effect of semi-attached and offset mid-truncated ribs and Water/TiO ₂ nanofluid on flow and heat transfer properties in a triangular microchannel. <i>Thermal Science and Engineering Progress</i> , 2017, 2, 140-150.	2.7	95
64	Experimental and numerical investigations on heat transfer of a water-cooled lance for blowing oxidizing gas in an electrical arc furnace. <i>Energy Conversion and Management</i> , 2017, 148, 43-56.	9.2	53
65	Heat transfer improvement of water/single-wall carbon nanotubes (SWCNT) nanofluid in a novel design of a truncated double-layered microchannel heat sink. <i>International Journal of Heat and Mass Transfer</i> , 2017, 113, 780-795.	4.8	212
66	Analysis of heat transfer and nanofluid fluid flow in microchannels with trapezoidal, rectangular and triangular shaped ribs. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017, 91, 15-31.	2.7	176
67	Influence of T-semi attached rib on turbulent flow and heat transfer parameters of a silver-water nanofluid with different volume fractions in a three-dimensional trapezoidal microchannel. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017, 88, 60-76.	2.7	167
68	The investigation of simultaneous heat transfer of water/Al ₂ O ₃ nanofluid in a close enclosure by applying homogeneous magnetic field. <i>International Journal of Mechanical Sciences</i> , 2017, 133, 674-688.	6.7	100
69	Application of a novel conical strip insert to improve the efficacy of water-Ag nanofluid for utilization in thermal systems: A two-phase simulation. <i>Energy Conversion and Management</i> , 2017, 151, 573-586.	9.2	125
70	The numerical investigation of angle of attack of inclined rectangular rib on the turbulent heat transfer of Water-Al ₂ O ₃ nanofluid in a tube. <i>International Journal of Mechanical Sciences</i> , 2017, 131-132, 1106-1116.	6.7	110
71	Evaluation of synchronous execution of full repowering and solar assisting in a 200 MW steam power plant, a case study. <i>Applied Thermal Engineering</i> , 2017, 112, 111-123.	6.0	90
72	The effect of velocity and dimension of solid nanoparticles on heat transfer in non-Newtonian nanofluid. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017, 86, 68-75.	2.7	154

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73	Energy and exergy analyses of partial repowering of a natural gas-fired steam power plant. International Journal of Exergy, 2017, 23, 149.	0.4	22
74	Efficiency improvement of a steam power plant through solar repowering. International Journal of Exergy, 2017, 22, 158.	0.4	64
75	Numerical simulation of heat transfer and turbulent flow of water nanofluids copper oxide in rectangular microchannel with semi-attached rib. Advances in Mechanical Engineering, 2016, 8, 168781401664101.	1.6	115
76	A modified two-phase mixture model of nanofluid flow and heat transfer in a 3-D curved microtube. Advanced Powder Technology, 2016, 27, 2175-2185.	4.1	169
77	Investigation of rib's height effect on heat transfer and flow parameters of laminar water-Al ₂ O ₃ nanofluid in a rib-microchannel. Applied Mathematics and Computation, 2016, 290, 135-153.	2.2	217
78	Studying the Effect of Indentation on Flow Parameters and Slow Heat Transfer of Water-Silver Nano-Fluid with Varying Volume Fraction in a Rectangular Two-Dimensional Micro Channel. Indian Journal of Science and Technology, 2015, 8, .	0.7	47
79	Impact of ribs on flow parameters and laminar heat transfer of water-aluminum oxide nanofluid with different nanoparticle volume fractions in a three-dimensional rectangular microchannel. Advances in Mechanical Engineering, 2015, 7, 168781401561815.	1.6	86
80	Performance Evaluation of Nanofluids in an Inclined Ribbed Microchannel for Electronic Cooling Applications. , 0, , .		58
81	Natural convection heat transfer of water/Ag nanofluid inside an elliptical enclosure with different attack angles. Mathematical Methods in the Applied Sciences, 0, , .	2.3	31