Morteza Khoshvaght-Aliabadi

List of Publications by Year
in descending order

90 papers	2,730 citations	117453 34 h-index	214527 47 g-index
90 all docs	90 docs citations	90 times ranked	1208 citing authors

#	Article	IF	Citations
1	Experimental study on cooling performance of sinusoidalâ€“wavy minichannel heat sink. Applied Thermal Engineering, 2016, 92, 50-61.	3.0	105
2	Performance of nanofluid flow in corrugated minichannels heat sink (CMCHS). Energy Conversion and Management, 2016, 108, 297-308.	4.4	101
3	Influence of different design parameters and Al 2 O 3 -water nanofluid flow on heat transfer and flow characteristics of sinusoidal-corrugated channels. Energy Conversion and Management, 2014, 88, 96-105.	4.4	93
4	Performance of a plate-fin heat exchanger with vortex-generator channels: 3D-CFD simulation and experimental validation. International Journal of Thermal Sciences, 2015, 88, 180-192.	2.6	87
5	Water cooled corrugated minichannel heat sink for electronic devices: Effect of corrugation shape. International Communications in Heat and Mass Transfer, 2016, 76, 188-196.	2.9	85
6	Experimental analysis of thermalâ€“hydraulic performance of copperâ€“water nanofluid flow in different plate-fin channels. Experimental Thermal and Fluid Science, 2014, 52, 248-258.	1.5	83
7	Role of channel shape on performance of plate-fin heat exchangers: Experimental assessment. International Journal of Thermal Sciences, 2014, 79, 183-193.	2.6	80
8	Effects of geometrical parameters on performance of plate-fin heat exchanger: Vortex-generator as core surface and nanofluid as working media. Applied Thermal Engineering, 2014, 70, 565-579.	3.0	72
9	Influence of twist length variations on thermalâ€“hydraulic specifications of twisted-tape inserts in presence of Cuâ€“water nanofluid. Experimental Thermal and Fluid Science, 2015, 61, 230-240.	1.5	70
10	An experimental study on vortex-generator insert with different arrangements of delta-winglets. Energy, 2015, 82, 629-639.	4.5	64
11	Performance enhancement of straight and wavy miniature heat sinks using pin-fin interruptions and nanofluids. Chemical Engineering and Processing: Process Intensification, 2017, 122, 90-108.	1.8	63
12	Effects of pin-fins geometry and nanofluid on the performance of a pin-fin miniature heat sink (PFMHS). International Journal of Mechanical Sciences, 2018, 148, 442-458.	3.6	54
13	Analysis of straight and wavy miniature heat sinks equipped with straight and wavy pin-fins. International Journal of Thermal Sciences, 2019, 146, 106071.	2.6	53
14	Thermalâ€“hydraulic performance of wavy plate-fin heat exchanger using passive techniques: Perforations, winglets, and nanofluids. International Communications in Heat and Mass Transfer, 2016, 78, 231-240.	2.9	52
15	Enhancement of laminar forced convection cooling in wavy heat sink with rectangular ribs and Al 2 O 3 /water nanofluids. Experimental Thermal and Fluid Science, 2017, 89, 199-210.	1.5	48
16	Effects of nooks configuration on hydrothermal performance of zigzag channels for nanofluid-cooled microelectronic heat sink. Microelectronics Reliability, 2017, 79, 153-165.	0.9	48
17	Effects of splitter shape on thermal-hydraulic characteristics of plate-pin-fin heat sink (PPFHS). International Journal of Heat and Mass Transfer, 2019, 143, 118586.	2.5	48
18	Comparison of hydrothermal performance between plate fins and plate-pin fins subject to nanofluid-cooled corrugated miniature heat sinks. Microelectronics Reliability, 2017, 70, 84-96.	0.9	47

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19	Effects of different pin-fin interruptions on performance of a nanofluid-cooled zigzag miniature heat sink (MHS). International Communications in Heat and Mass Transfer, 2017, 81, 19-27.	2.9	47
20	Analysis on Al2O3/water nanofluid flow in a channel by inserting corrugated/perforated fins for solar heating heat exchangers. Renewable Energy, 2018, 115, 1099-1108.	4.3	47
21	Al 2 O 3 â€“water nanofluid inside wavy mini-channel with different cross-sections. Journal of the Taiwan Institute of Chemical Engineers, 2016, 58, 8-18.	2.7	46
22	Experimental and parametric studies on a miniature heat sink with offset-strip pins and Al2O3/water nanofluids. Applied Thermal Engineering, 2017, 111, 1342-1352.	3.0	44
23	Experimental evaluation of thermal performance and entropy generation inside a twisted U-tube equipped with twisted-tape inserts. International Journal of Thermal Sciences, 2019, 145, 106051.	2.6	44
24	Wavy Channel and Different Nanofluids Effects on Performance of Plate-Fin Heat Exchangers. Journal of Thermophysics and Heat Transfer, 2014, 28, 474-484.	0.9	42
25	Thermal-hydraulic characteristics of plate-fin heat exchangers with corrugated/vortex-generator plate-fin (CVGPF). Applied Thermal Engineering, 2016, 98, 690-701.	3.0	42
26	Influence of chevron fin interruption on thermo-fluidic transport characteristics of nanofluid-cooled electronic heat sink. Chemical Engineering Science, 2018, 191, 436-447.	1.9	42
27	Forced convection in twisted minichannel (TMC) with different cross section shapes: A numerical study. Applied Thermal Engineering, 2016, 93, 101-112.	3.0	41
28	Performance of agitated-vessel U tube heat exchanger using spiky twisted tapes and water based metallic nanofluids. Chemical Engineering Research and Design, 2018, 133, 26-39.	2.7	41
29	Proposing new configurations for twisted square channel (TSC): Nanofluid as working fluid. Applied Thermal Engineering, 2016, 108, 709-719.	3.0	39
30	Experimental investigation of water based nanofluid containing copper nanoparticles across helical microtubes. International Communications in Heat and Mass Transfer, 2016, 70, 84-92.	2.9	39
31	Experimental assessment of different inserts inside straight tubes: Nanofluid as working media. Chemical Engineering and Processing: Process Intensification, 2015, 97, 1-11.	1.8	38
32	Heat transfer intensification of agitated U-tube heat exchanger using twisted-tube and twisted-tape as passive techniques. Chemical Engineering and Processing: Process Intensification, 2018, 133, 137-147.	1.8	38
33	An experimental study of Cuâ€“water nanofluid flow inside serpentine tubes with variable straight-section lengths. Experimental Thermal and Fluid Science, 2015, 61, 1-11.	1.5	36
34	Influence of Al 2 O 3 â€“H 2 O nanofluid on performance of twisted minichannels. Advanced Powder Technology, 2016, 27, 1514-1525.	2.0	36
35	An empirical study on vortex-generator insert fitted in tubular heat exchangers with dilute Cuâ€“water nanofluid flow. Chinese Journal of Chemical Engineering, 2016, 24, 728-736.	1.7	33
36	An investigation of heat transfer in heat exchange devices with spirally-coiled twisted-ducts using nanofluid. Applied Thermal Engineering, 2018, 143, 358-375.	3.0	31

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37	Turbulent flow of Al 2 O 3 -water nanofluid through plate-fin heat exchanger (PFHE) with offset-strip channels. Thermal Science and Engineering Progress, 2018, 6, 164-176.	1.3	28
38	Empirical and numerical assessments on corrugated and twisted channels as two enhanced geometries. International Journal of Mechanical Sciences, 2019, 157-158, 25-44.	3.6	28
39	Performance intensification of tubular heat exchangers using compound twisted-tape and twisted-tube. Chemical Engineering and Processing: Process Intensification, 2020, 148, 107799.	1.8	28
40	Employing wavy structure to enhance thermal efficiency of spiral-coil utilized in solar ponds. Solar Energy, 2020, 199, 552-569.	2.9	28
41	Performance of agitated serpentine heat exchanger using metallic nanofluids. Chemical Engineering Research and Design, 2016, 109, 53-64.	2.7	26
42	On thermal management of pouch type lithium-ion batteries by novel designs of wavy minichannel cold plates: Comparison of co-flow with counter-flow. Journal of Energy Storage, 2022, 52, 104819.	3.9	26
43	Numerical investigation on Al2O3/water nanofluid flow through twisted-serpentine tube with empirical validation. Applied Thermal Engineering, 2018, 137, 296-309.	3.0	25
44	Comparative analysis on thermalâ€“hydraulic performance of curved tubes: Different geometrical parameters and working fluids. Energy, 2015, 91, 588-600.	4.5	24
45	Analysis on performance of nanofluid-cooled vortex-generator channels with variable longitudinal spacing among delta-winglets. Applied Thermal Engineering, 2017, 122, 1-10.	3.0	24
46	Proximity effects of straight and wavy fins and their interruptions on performance of heat sinks utilized in battery thermal management. International Journal of Heat and Mass Transfer, 2021, 173, 121259.	2.5	24
47	Investigation of corrugated channel performance with different wave shapes. Journal of Thermal Analysis and Calorimetry, 2019, 138, 3159-3174.	2.0	23
48	Heat transfer and flow characteristics of novel patterns of chevron minichannel heat sink: An insight into thermal management of microelectronic devices. International Communications in Heat and Mass Transfer, 2021, 122, 105044.	2.9	23
49	Heat transfer intensification in pin-fin heat sink by changing pin-length/longitudinal-pitch. Chemical Engineering and Processing: Process Intensification, 2019, 141, 107544.	1.8	22
50	Compound heat transfer enhancement of helical channel with corrugated wall structure. International Journal of Heat and Mass Transfer, 2020, 146, 118858.	2.5	21
51	Performance enhancement of water bath heater at natural gas city gate station using twisted tubes. Chinese Journal of Chemical Engineering, 2020, 28, 165-179.	1.7	20
52	Thermal performance of plate-fin heat exchanger using passive techniques: vortex-generator and nanofluid. Heat and Mass Transfer, 2016, 52, 819-828.	1.2	19
53	Evaluation of heat transfer and pressure drop in a mini-channel using transverse rectangular vortex-generators with various non-uniform heights. Applied Thermal Engineering, 2019, 161, 114196.	3.0	19
54	Comparison of Co- and counter-current modes of operation for wavy minichannel heat sinks (WMHSs). International Journal of Thermal Sciences, 2022, 171, 107189.	2.6	19

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55	Experimental study on metallic water nanofluids flow inside rectangular duct equipped with circular pins (pin channel). Experimental Thermal and Fluid Science, 2016, 72, 18-30.	1.5	18
56	Heat Transfer Enhancement by Using Copperâ€“Water Nanofluid Flow Inside a Pin Channel. Experimental Heat Transfer, 2015, 28, 446-463.	2.3	17
57	Effect of Wave-and-Lance Length Variations on Performance of Wavy and Offset Strip Plate-Fin Heat Exchangers. Arabian Journal for Science and Engineering, 2013, 38, 3515-3529.	1.1	16
58	Effects of ribs on thermal performance of curved absorber tube used in cylindrical solar collectors. Renewable Energy, 2020, 161, 1260-1275.	4.3	16
59	Design of novel geometries for minichannels to reduce junction temperature of heat sinks and enhance temperature uniformity. Applied Thermal Engineering, 2021, 192, 116926.	3.0	16
60	Thermalâ€“Hydraulic Characteristics of Novel Configurations of Wavy Channel: Nanofluid as Working Fluid. Heat Transfer Engineering, 2017, 38, 1382-1395.	1.2	15
61	Evaluation of water-cooled heat sink with complex designs of groove for application in fusion energy management. Fusion Engineering and Design, 2019, 140, 107-116.	1.0	15
62	Intensified single-phase forced convective heat transfer with helical-twisted tube in coil heat exchangers. Annals of Nuclear Energy, 2021, 154, 108108.	0.9	15
63	Improving thermal performance of microchannels by combining rectangular pin with chamber. Applied Thermal Engineering, 2021, 186, 116373.	3.0	14
64	Experimental and numerical studies of air flow and heat transfer due to insertion of novel delta-winglet tapes in a heated channel. International Journal of Heat and Mass Transfer, 2021, 169, 120912.	2.5	14
65	Effects of transversely twisted-turbulators on heat transfer and pressure drop of a channel with uniform wall heat flux. Chemical Engineering and Processing: Process Intensification, 2020, 154, 108027.	1.8	13
66	Heat Transfer of Cuâ€“Water Nanofluid in Parallel, Corrugated, and Strip Channels. Journal of Thermophysics and Heat Transfer, 2015, 29, 747-756.	0.9	12
67	Effects of delta winglets on performance of wavy plate-fin in PFHEs. Journal of Thermal Analysis and Calorimetry, 2018, 131, 1625-1640.	2.0	12
68	Profit and performance boost of straight, wavy, and combined minichannel heat sinks by counter-current pattern. Journal of Energy Storage, 2021, 43, 103220.	3.9	11
69	Experimental investigation on thermal-hydraulic characteristics of a tube equipped with modified vortex-generator inserts. Experimental Heat Transfer, 2017, 30, 11-24.	2.3	10
70	Analysis of flow and heat transfer of different miniature chambers with/and/without rectangular pin: Numerical investigation with empirical validation. Applied Thermal Engineering, 2019, 150, 923-936.	3.0	10
71	Investigation on Heat Transfer and Pressure Drop of Copperâ€“Water Nanofluid Flow in Plain and Perforated Channels. Experimental Heat Transfer, 2016, 29, 427-444.	2.3	9
72	Three-Dimensional Numerical Study on Thermal-Hydraulic Performance of Twisted Mini-Channel Using Al₂O₃-H₂O Nanofluid. Heat Transfer Engineering, 2020, 41, 271-287.	1.2	9

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73	Effects of cross-section geometry on performance of corrugated miniature heat sink: Uniform, convergent, divergent, and hybrid cases. International Communications in Heat and Mass Transfer, 2021, 127, 105269.	2.9	9
74	Heat transfer enhancement by combination of serpentine curves and nanofluid flow in microtube. Experimental Heat Transfer, 2017, 30, 235-252.	2.3	8
75	Analysis of serpentine coil with alternating flattened axis: An insight into performance enhancement of solar ponds. Solar Energy, 2021, 217, 292-307.	2.9	8
76	Performance intensification of discontinuous twisted turbulators by using delta-winglets: Experimental study. Chemical Engineering and Processing: Process Intensification, 2021, 164, 108393.	1.8	8
77	Surface modification of transversely twisted-turbulator using perforations and winglets: An extended study. International Communications in Heat and Mass Transfer, 2021, 120, 105020.	2.9	7
78	A parametric study on heat transfer and pressure drop characteristics of circular tube with alternating flattened flow path. International Journal of Thermal Sciences, 2021, 160, 106671.	2.6	6
79	Experimental study of Cuâ€“water nanofluid forced convective flow inside a louvered channel. Heat and Mass Transfer, 2015, 51, 423-432.	1.2	5
80	Enhanced heat transfer in pin fin heat sink working with nitrogen gasâ€“water two-phase flow: variable pin length and longitudinal pitch. Journal of Thermal Analysis and Calorimetry, 2020, 140, 2875-2901.	2.0	5
81	Effects of central cut on performance intensification of counter-flow integral heat sinks. Chemical Engineering and Processing: Process Intensification, 2022, 172, 108811.	1.8	5
82	Experimental and numerical analysis of curved turbulators in different arrangements through a rectangular channel. Experimental Heat Transfer, 2022, 35, 22-44.	2.3	4
83	Enhancement of heat extraction from solar ponds by using twisted coilâ€tubes. Environmental Progress and Sustainable Energy, 2021, 40, e13604.	1.3	3
84	Employing enhanced geometries in water bath heating system of natural gas pressure drop stations: Comparative study. Journal of Natural Gas Science and Engineering, 2021, 87, 103775.	2.1	3
85	Comparative study of heat transfer and pressure drop for curved-twisted tubes utilized in chemical engineering. Chinese Journal of Chemical Engineering, 2021, 40, 53-64.	1.7	3
86	Temperature nonuniformity management in heat sinks through applying counter-flow design complex minichannels. Korean Journal of Chemical Engineering, 2022, 39, 1436-1449.	1.2	3
87	Analysis of twisted structure absorber tube and effects of specific design factor in solar collectors. Sustainable Energy Technologies and Assessments, 2022, 52, 102113.	1.7	3
88	Effects of geometrical parameters on thermal-hydraulic performance of wavy microtube. Heat and Mass Transfer, 2018, 54, 631-639.	1.2	1
89	Hydrothermal Performance Augmentation of a Rectangular Channel Via Novel Designs of Transverse Turbulators: An Insight into Performance Improvement of Solar Air Heaters. Experimental Techniques, 0, , 1.	0.9	1
90	Performance evaluation and entropy generation of chevron-type plate-fin equipped with ribs and holes. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 0, , 095440622110127.	1.1	0