## Jahar Sarkar

List of Publications by Year in descending order

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Ιλμλο ζλοκλο

#	Article	IF	CITATIONS
1	Numerical Analysis on Hydrothermal Behavior of Various Ribbed Minichannel Heat Sinks with Different Hybrid Nanofluids. Arabian Journal for Science and Engineering, 2022, 47, 6209-6221.	1.7	5
2	Experimentation and Performance Analysis of Solar-Assisted Heat Pump Dryer for Intermittent Drying of Food Chips. Journal of Solar Energy Engineering, Transactions of the ASME, 2022, 144, .	1.1	2
3	Energy, exergy and economic assessments of the dual-mode evaporative cooler for various international climate zones. Building Services Engineering Research and Technology, 2022, 43, 179-196.	0.9	2
4	Machine learning model of regenerative evaporative cooler for performance prediction based on experimental investigation. International Journal of Refrigeration, 2022, 137, 178-187.	1.8	4
5	Experimental exergy, economic and sustainability analyses of the dual-mode evaporative cooler. International Journal of Refrigeration, 2022, 135, 121-130.	1.8	8
6	Generalized Nusselt Number Correlation for Binary Hybrid Nano-Oils as Heat Transfer Fluid in Solar Thermal Systems. Journal of Heat Transfer, 2022, 144, .	1.2	1
7	Thermodynamic, economic and environmental analyses of novel solar-powered ejector refrigeration systems. Energy Conversion and Management, 2022, 264, 115730.	4.4	19
8	Improving hydrothermal performance of double-tube heat exchanger with modified twisted tape inserts using hybrid nanofluid. Journal of Thermal Analysis and Calorimetry, 2021, 143, 4287-4298.	2.0	41
9	Effect of surface modifications and using hybrid nanofluids on energy-exergy performance of regenerative evaporative cooler. Building and Environment, 2021, 189, 107507.	3.0	19
10	Effects of nanoparticle shape and size on the thermohydraulic performance of plate evaporator using hybrid nanofluids. Journal of Thermal Analysis and Calorimetry, 2021, 143, 767-779.	2.0	30
11	Performance simulation of polymer-based nanoparticle and void dispersed photonic structures for radiative cooling. Scientific Reports, 2021, 11, 893.	1.6	12
12	Single-Phase Natural Circulation Loop Using Oils and Ternary Hybrid Nanofluids: Steady-State and Transient Thermo-Hydraulics. Journal of Thermal Science and Engineering Applications, 2021, 13, .	0.8	2
13	Thermohydraulic behavior of concentric tube heat exchanger inserted with conical wire coil using mono/hybrid nanofluids. International Communications in Heat and Mass Transfer, 2021, 122, 105134.	2.9	21
14	A generalized Nusselt number correlation for nanofluids, and look-up diagrams to select a heat transfer fluid for medium temperature solar thermal applications. Applied Thermal Engineering, 2021, 190, 116469.	3.0	15
15	Effects of various modeling assumptions on steady-state and transient performances of single-phase natural circulation loop. International Communications in Heat and Mass Transfer, 2021, 124, 105247.	2.9	4
16	Thermodynamic, economic, and environmental analyses of various novel ejector refrigeration subcooled transcritical <scp> CO <sub>2</sub> </scp> systems. International Journal of Energy Research, 2021, 45, 16115-16133.	2.2	9
17	Thermal-hydraulic behavior of lotus like structured rGO-ZnO composite dispersed hybrid nanofluid in mini channel heat sink. International Journal of Thermal Sciences, 2021, 164, 106886.	2.6	17
18	Performance enhancement of regenerative evaporative cooler by surface alterations and using ternary hybrid nanofluids. Energy, 2021, 225, 120199.	4.5	32

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19	Hydrothermal performance comparison of modified twisted tapes and wire coils in tubular heat exchanger using hybrid nanofluid. International Journal of Thermal Sciences, 2021, 166, 106990.	2.6	34
20	Performance assessment of dual-mode evaporative cooler for futuristic climatic scenarios considering climate change effect. Journal of Building Engineering, 2021, 42, 103043.	1.6	4
21	Development and experimental analysis of a novel dual-mode counter-flow evaporative cooling device. Building and Environment, 2021, 205, 108176.	3.0	3
22	Novel combined desalination, heating and power system: Energy, exergy, economic and environmental assessments. Renewable and Sustainable Energy Reviews, 2021, 151, 111612.	8.2	12
23	Energy, exergy, economic and ecological analyses of a diurnal radiative water cooler. Renewable and Sustainable Energy Reviews, 2021, 152, 111676.	8.2	8
24	Steadyâ€state and transient hydrothermal analyses of singleâ€phase natural circulation loop using waterâ€based triâ€hybrid nanofluids. AICHE Journal, 2021, 67, e17179.	1.8	23
25	Performance improvement of CO2 air conditioner by integrating photonic radiative cooler as sub-cooler or/and roof envelope. Energy Conversion and Management, 2021, 251, 115019.	4.4	3
26	Energetic and Exergetic Performances of Plate Heat Exchanger Using Brine-Based Hybrid Nanofluid for Milk Chilling Application. Heat Transfer Engineering, 2020, 41, 522-535.	1.2	31
27	Energetic and exergetic performance simulation of open-type heat pump dryer with next-generation refrigerants. Drying Technology, 2020, 38, 1011-1023.	1.7	16
28	Hydrothermal performance of different alumina hybrid nanofluid types in plate heat exchanger. Journal of Thermal Analysis and Calorimetry, 2020, 139, 3777-3787.	2.0	47
29	Particle ratio optimization of Al2O3-MWCNT hybrid nanofluid in minichannel heat sink for best hydrothermal performance. Applied Thermal Engineering, 2020, 165, 114546.	3.0	81
30	Proposal and performance comparison of various solar-driven novel combined cooling, heating and power system topologies. Energy Conversion and Management, 2020, 205, 112342.	4.4	22
31	Effect of different nanoparticle-dispersed nanofluids on hydrothermal-economic performance of minichannel heat sink. Journal of Thermal Analysis and Calorimetry, 2020, 141, 1477-1488.	2.0	9
32	Transient thermo-hydraulics and performance characteristics of single-phase natural circulation loop using hybrid nanofluids. International Communications in Heat and Mass Transfer, 2020, 110, 104433.	2.9	13
33	Experimental hydrothermal characteristics of minichannel heat sink using various types of hybrid nanofluids. Advanced Powder Technology, 2020, 31, 621-631.	2.0	39
34	Experimental hydrothermal behavior of hybrid nanofluid for various particle ratios and comparison with other fluids in minichannel heat sink. International Communications in Heat and Mass Transfer, 2020, 110, 104397.	2.9	56
35	Review on passive daytime radiative cooling: Fundamentals, recent researches, challenges and opportunities. Renewable and Sustainable Energy Reviews, 2020, 133, 110263.	8.2	84
36	Climate change effect on the cooling performance and assessment of passive daytime photonic radiative cooler in India. Renewable and Sustainable Energy Reviews, 2020, 134, 110303.	8.2	14

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37	Environmental effect on the performance of passive daytime photonic radiative cooling and building energy-saving potential. Journal of Cleaner Production, 2020, 274, 123119.	4.6	36
38	Experiment on waste heat recoveryâ€assisted heat pump drying of food chips: Performance, economic, and exergoeconomic analyses. Journal of Food Processing and Preservation, 2020, 44, e14699.	0.9	15
39	Experimentation on solar-assisted heat pump dryer: Thermodynamic, economic and exergoeconomic assessments. Solar Energy, 2020, 208, 150-159.	2.9	48
40	Thermodynamic, economic and environmental analyses of a novel solar energy driven small-scale combined cooling, heating and power system. Energy Conversion and Management, 2020, 226, 113542.	4.4	25
41	Heat transfer characteristics of plate heat exchanger using hybrid nanofluids: effect of nanoparticle mixture ratio. Heat and Mass Transfer, 2020, 56, 2457-2472.	1.2	15
42	Comparative performance analysis of different novel regenerative evaporative cooling device topologies. Applied Thermal Engineering, 2020, 176, 115474.	3.0	21
43	Exergy, economic, environmental and sustainability analyses of possible regenerative evaporative cooling device topologies. Building and Environment, 2020, 180, 107033.	3.0	21
44	Hydrothermal performance of plate heat exchanger with an alumina–graphene hybrid nanofluid: experimental study. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	0.8	17
45	Experimental energyâ€exergy performance and kinetics analyses of compact dualâ€mode heat pump drying of food chips. Journal of Food Process Engineering, 2020, 43, e13404.	1.5	20
46	Experimental performance analysis of novel indirect-expansion solar-infrared assisted heat pump dryer for agricultural products. Solar Energy, 2020, 206, 907-917.	2.9	58
47	Improving hydrothermal performance of hybrid nanofluid in double tube heat exchanger using tapered wire coil turbulator. Advanced Powder Technology, 2020, 31, 2092-2100.	2.0	61
48	Experimental energy, exergy, economic and exergoeconomic analyses of batch-type solar-assisted heat pump dryer. Renewable Energy, 2020, 156, 1107-1116.	4.3	62
49	Improvement in Energy Performance of Tubular Heat Exchangers Using Nanofluids: A Review. Current Nanoscience, 2020, 16, 136-156.	0.7	8
50	Comparative analyses on a batch-type heat pump dryer using low GWP refrigerants. Food and Bioproducts Processing, 2019, 117, 1-13.	1.8	24
51	Experimentation on effect of particle ratio on hydrothermal performance of plate heat exchanger using hybrid nanofluid. Applied Thermal Engineering, 2019, 162, 114309.	3.0	75
52	Numerical and experimental investigations on heat transfer and pressure drop characteristics of Al2O3-TiO2 hybrid nanofluid in minichannel heat sink with different mixture ratio. Powder Technology, 2019, 345, 717-727.	2.1	99
53	Research and development on composite nanofluids as next-generation heat transfer medium. Journal of Thermal Analysis and Calorimetry, 2019, 137, 1133-1154.	2.0	15
54	Steady-State Energetic and Exergetic Performances of Single-Phase Natural Circulation Loop With Hybrid Nanofluids. Journal of Heat Transfer, 2019, 141, .	1.2	68

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55	Proposal and month-wise performance evaluation of a novel dual-mode evaporative cooler. Heat and Mass Transfer, 2019, 55, 3523-3536.	1.2	10
56	Performance assessment of novel biomass gasification based CCHP systems integrated with syngas production. Energy, 2019, 167, 379-390.	4.5	16
57	Improving thermal performance of micro-channel electronic heat sink using supercritical CO2 as coolant. Thermal Science, 2019, 23, 243-253.	0.5	11
58	Discrete phase numerical model and experimental study of hybrid nanofluid heat transfer and pressure drop in plate heat exchanger. International Communications in Heat and Mass Transfer, 2018, 91, 262-273.	2.9	119
59	Two-phase numerical simulation of hybrid nanofluid heat transfer in minichannel heat sink and experimental validation. International Communications in Heat and Mass Transfer, 2018, 91, 239-247.	2.9	76
60	Energy-Economic Analysis of Plate Evaporator using Brine-based Hybrid Nanofluids as Secondary Refrigerant. International Journal of Air-Conditioning and Refrigeration, 2018, 26, 1850003.	0.8	18
61	A Novel Pinch Point Design Methodology Based Energy and Economic Analyses of Organic Rankine Cycle. Journal of Energy Resources Technology, Transactions of the ASME, 2018, 140, .	1.4	24
62	Generalized pinch point design method of subcritical-supercritical organic Rankine cycle for maximum heat recovery. Energy, 2018, 143, 141-150.	4.5	47
63	Improving the performance of refrigeration systems by using nanofluids: A comprehensive review. Renewable and Sustainable Energy Reviews, 2018, 82, 3656-3669.	8.2	119
64	Energy, exergy and economic assessments of shell and tube condenser using hybrid nanofluid as coolant. International Communications in Heat and Mass Transfer, 2018, 98, 41-48.	2.9	56
65	Novel pinch point method based exergetic optimisation of subcritical organic Rankine cycle for waste heat recovery. International Journal of Exergy, 2018, 25, 281.	0.2	1
66	Novel pinch point method based exergetic optimisation of subcritical organic Rankine cycle for waste heat recovery. International Journal of Exergy, 2018, 25, 281.	0.2	0
67	Performance Enhancement for Wavy Fin Automotive Radiator Using Optimum PG Brine Based Nanofluids. Heat Transfer - Asian Research, 2017, 46, 585-597.	2.8	1
68	Heat transfer performance characteristics of hybrid nanofluids as coolant in louvered fin automotive radiator. Heat and Mass Transfer, 2017, 53, 1923-1931.	1.2	44
69	Proposal and design of a new biomass based syngas production system integrated with combined heat and power generation. Energy, 2017, 133, 986-997.	4.5	28
70	Performance Analysis of a Louvered Fin Automotive Radiator Using Hybrid Nanofluid as Coolant. Heat Transfer - Asian Research, 2017, 46, 978-995.	2.8	17
71	Exergetic analysis of plate evaporator using hybrid nanofluids as secondary refrigerant for low-temperature applications. International Journal of Exergy, 2017, 24, 1.	0.2	21
72	Energy and exergy comparisons of water based optimum brines as coolants for rectangular fin automotive radiator. International Journal of Heat and Mass Transfer, 2017, 105, 690-696.	2.5	26

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73	Performance analyses of novel two-phase ejector enhanced multi-evaporator refrigeration systems. Applied Thermal Engineering, 2017, 110, 1635-1642.	3.0	50
74	Property-based selection criteria of low GWP working fluids for organic Rankine cycle. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 1419-1428.	0.8	18
75	Performance comparison of various coolants for louvered fin tube automotive radiator. Thermal Science, 2017, 21, 2871-2881.	0.5	15
76	Exergetic analysis of plate evaporator using hybrid nanofluids as secondary refrigerant for low-temperature applications. International Journal of Exergy, 2017, 24, 1.	0.2	1
77	Extended Exergy Analysis Based Comparison of Subcritical and Transcritical Refrigeration Systems. International Journal of Air-Conditioning and Refrigeration, 2016, 24, 1650009.	0.8	6
78	Advanced exergy analysis of transcritical CO2 heat pump system based on experimental data. Sadhana - Academy Proceedings in Engineering Sciences, 2016, 41, 1349-1356.	0.8	8
79	Performance characteristics of low global warming potential R134a alternative refrigerants in ejector-expansion refrigeration system. Archives of Thermodynamics, 2016, 37, 55-72.	1.0	3
80	Comprehensive study on the role of eco-friendly working fluid properties on ORC performances. International Journal of Thermodynamics, 2016, 19, 198-204.	0.4	2
81	Potential of organic Rankine cycle technology in India: Working fluid selection and feasibility study. Energy, 2015, 90, 1618-1625.	4.5	49
82	Performance improvement of double-tube gas cooler in CO2 refrigeration system using nanofluids. Thermal Science, 2015, 19, 109-118.	0.5	6
83	Particle concentration levels of various nanofluids in plate heat exchanger for best performance. International Journal of Heat and Mass Transfer, 2015, 89, 1110-1118.	2.5	97
84	Review and future trends of supercritical CO2 Rankine cycle for low-grade heat conversion. Renewable and Sustainable Energy Reviews, 2015, 48, 434-451.	8.2	198
85	Analyses and optimization of a supercritical N2O Rankine cycle for low-grade heat conversion. Energy, 2015, 81, 344-351.	4.5	10
86	A review on hybrid nanofluids: Recent research, development and applications. Renewable and Sustainable Energy Reviews, 2015, 43, 164-177.	8.2	916
87	Numerical investigation of heat transfer and fluid flow in plate heat exchanger using nanofluids. International Journal of Thermal Sciences, 2014, 85, 93-103.	2.6	107
88	Combined energy and exergy analysis of a corrugated plate heat exchanger and experimental investigation. International Journal of Exergy, 2014, 15, 395.	0.2	12
89	A review on thermodynamic optimization of irreversible refrigerator and verification with transcritical CO2 system. International Journal of Thermodynamics, 2014, 17, .	0.4	1
90	Performance optimization of transcritical CO <sub>2</sub> refrigeration cycle with thermoelectric subcooler. International Journal of Energy Research, 2013, 37, 121-128.	2.2	63

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91	Performance comparison of the plate heat exchanger using different nanofluids. Experimental Thermal and Fluid Science, 2013, 49, 141-151.	1.5	151
92	Performance of a flat-plate solar thermal collector using supercritical carbon dioxide as heat transfer fluid. International Journal of Sustainable Energy, 2013, 32, 531-543.	1.3	19
93	Heat transfer and pressure drop characteristics of CeO2/water nanofluid in plate heat exchanger. Applied Thermal Engineering, 2013, 57, 24-32.	3.0	128
94	Exergy analysis of vortex tube expansion vapour compression refrigeration system. International Journal of Exergy, 2013, 13, 431.	0.2	9
95	Performance analysis of louvered fin tube automotive radiator using nanofluids as coolants. International Journal of Nanomanufacturing, 2013, 9, 51.	0.3	32
96	Performance comparison of natural refrigerants based cascade systems for ultra-low-temperature applications. International Journal of Sustainable Energy, 2013, 32, 406-420.	1.3	10
97	Selection of suitable natural refrigerants pairs for cascade refrigeration system. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2013, 227, 612-622.	0.8	13
98	PERFORMANCE EVALUATION OF USING WATER-BASED NANOFLUIDS AS COOLANTS IN THE GAS COOLER OF A TRANSCRITICAL CO2 REFRIGERANT SYSTEM. Journal of Enhanced Heat Transfer, 2013, 20, 389-397.	0.5	3
99	TRANSCRITICAL <font>CO<sub>2</sub></font> REFRIGERATION SYSTEMS: COMPARISON WITH CONVENTIONAL SOLUTIONS AND APPLICATIONS. International Journal of Air-Conditioning and Refrigeration, 2012, 20, 1250017.	0.8	25
100	Ejector enhanced vapor compression refrigeration and heat pump systems—A review. Renewable and Sustainable Energy Reviews, 2012, 16, 6647-6659.	8.2	198
101	Operating characteristics of transcritical CO2 heat pump for simultaneous water cooling and heating. Archives of Thermodynamics, 2011, 33, 23-40.	1.0	163
102	Performance of nanofluid-cooled shell and tube gas cooler in transcritical CO2 refrigeration systems. Applied Thermal Engineering, 2011, 31, 2541-2548.	3.0	31
103	Thermodynamic analysis and optimization of a novel two-stage transcritical N2O cycle. International Journal of Refrigeration, 2011, 34, 991-999.	1.8	12
104	A critical review on convective heat transfer correlations of nanofluids. Renewable and Sustainable Energy Reviews, 2011, 15, 3271-3277.	8.2	278
105	Thermodynamic analyses and optimization of a recompression N2O Brayton power cycle. Energy, 2010, 35, 3422-3428.	4.5	20
106	Performance optimization of transcritical CO2 cycle with parallel compression economization. International Journal of Thermal Sciences, 2010, 49, 838-843.	2.6	77
107	Geometric parameter optimization of ejector-expansion refrigeration cycle with natural refrigerants. International Journal of Energy Research, 2010, 34, 84-94.	2.2	63
108	Performance characteristics of refrigeration cycle with parallel compression economization. International Journal of Energy Research, 2010, 34, 1205-1214.	2.2	1

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109	Thermodynamic analyses and optimization of a transcritical N2O refrigeration cycle. International Journal of Refrigeration, 2010, 33, 33-40.	1.8	19
110	Performance characteristics of multi-evaporator transcritical CO2 refrigeration cycles with hybrid compression/ejection. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2010, 224, 773-780.	0.8	13
111	Experimental investigation of transcritical CO2 heat pump for simultaneous water cooling and heating. Thermal Science, 2010, 14, 57-64.	0.5	10
112	Performance characteristics of natural-refrigerants- based ejector expansion refrigeration cycles. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2009, 223, 543-550.	0.8	43
113	Optimization of recompression S-CO2 power cycle with reheating. Energy Conversion and Management, 2009, 50, 1939-1945.	4.4	184
114	A transcritical CO <sub>2</sub> heat pump for simultaneous water cooling and heating: Test results and model validation. International Journal of Energy Research, 2009, 33, 100-109.	2.2	43
115	Thermodynamic analysis and optimization of a novel N2O–CO2 cascade system for refrigeration and heating. International Journal of Refrigeration, 2009, 32, 1077-1084.	1.8	71
116	Second law analysis of supercritical CO2 recompression Brayton cycle. Energy, 2009, 34, 1172-1178.	4.5	219
117	Irreversibility minimization of heat exchangers for transcritical CO2 systems. International Journal of Thermal Sciences, 2009, 48, 146-153.	2.6	9
118	Assessment of blends of CO2 with butane and isobutane as working fluids for heat pump applications. International Journal of Thermal Sciences, 2009, 48, 1460-1465.	2.6	70
119	Cycle parameter optimization of vortex tube expansion transcritical CO2 system. International Journal of Thermal Sciences, 2009, 48, 1823-1828.	2.6	49
120	Optimization of ejector-expansion transcritical CO2 heat pump cycle. Energy, 2008, 33, 1399-1406.	4.5	119
121	CO2–C3H8 cascade refrigeration–heat pump system: Heat exchanger inventory optimization and its numerical verification. International Journal of Refrigeration, 2008, 31, 1207-1213.	1.8	20
122	Analysis and Optimization of an Ammonia Based Transcritical Rankine Cycle for Power Generation. , 2008, , .		1
123	Optimization of two-stage transcritical carbon dioxide heat pump cycles. International Journal of Thermal Sciences, 2007, 46, 180-187.	2.6	92
124	Exergy maximization of cascade refrigeration cycles and its numerical verification for a transcritical CO2–C3H8 system. International Journal of Refrigeration, 2007, 30, 624-632.	1.8	42
125	Overall conductance and heat transfer area minimization of refrigerators and heat pumps with finite heat reservoirs. Energy Conversion and Management, 2007, 48, 803-808.	4.4	21
126	Analytical minimization of overall conductance and heat transfer area in refrigeration and heat pump systems and its numerical confirmation. Energy Conversion and Management, 2007, 48, 1245-1250.	4.4	2

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127	Natural refrigerant-based subcritical and transcritical cycles for high temperature heating. International Journal of Refrigeration, 2007, 30, 3-10.	1.8	46
128	Transcritical CO2Heat Pump Dryer: Part 2. Validation and Simulation Results. Drying Technology, 2006, 24, 1593-1600.	1.7	20
129	Transcritical CO2Heat Pump Dryer: Part 1. Mathematical Model and Simulation. Drying Technology, 2006, 24, 1583-1591.	1.7	26
130	Simulation of a transcritical CO2 heat pump cycle for simultaneous cooling and heating applications. International Journal of Refrigeration, 2006, 29, 735-743.	1.8	112
131	Transcritical CO2 heat pump systems: exergy analysis including heat transfer and fluid flow effects. Energy Conversion and Management, 2005, 46, 2053-2067.	4.4	72
132	Optimization of a CO2–C3H8 cascade system for refrigeration and heating. International Journal of Refrigeration, 2005, 28, 1284-1292.	1.8	101
133	Optimization of a transcritical CO2 heat pump cycle for simultaneous cooling and heating applications. International Journal of Refrigeration, 2004, 27, 830-838.	1.8	274
134	Experimental hydrothermal characteristics of concentric tube heat exchanger with V-cut twisted tape turbulator using PCM dispersed mono/hybrid nanofluids. Experimental Heat Transfer, 0, , 1-22.	2.3	29
135	Experimental investigation on novel heat pump system for combined drying and air conditioning for arid climate. Drying Technology, 0, , 1-12.	1.7	2