Mohammad H Ahmadi

List of Publications by Citations

302 papers	10,035 citations	57 h-index	82 g-index
310 ext. papers	12,039 ext. citations	4.6 avg, IF	7.35 L-index

#	Paper	IF	Citations
302	A review of thermal conductivity of various nanofluids. *Journal of Molecular Liquids*, **2018**, 265, 181-188	6	222
301	Designing a solar powered Stirling heat engine based on multiple criteria: Maximized thermal efficiency and power. *Energy Conversion and Management*, **2013**, 75, 282-291	10.6	192
300	Exergy analysis of a Combined Cooling, Heating and Power system integrated with wind turbine and compressed air energy storage system. *Energy Conversion and Management*, **2017**, 131, 69-78	10.6	164
299	Application of the multi-objective optimization method for designing a powered Stirling heat engine: Design with maximized power, thermal efficiency and minimized pressure loss. *Renewable Energy*, **2013**, 60, 313-322	8.1	163
298	Thermo-economic multi-objective optimization of solar dish-Stirling engine by implementing evolutionary algorithm. *Energy Conversion and Management*, **2013**, 73, 370-380	10.6	157
297	Thermoelectric cooler and thermoelectric generator devices: A review of present and potential applications, modeling and materials. *Energy*, **2019**, 186, 115849	7.9	155
296	Solar power technology for electricity generation: A critical review. *Energy Science and Engineering*, **2018**, 6, 340-361	3.4	146
295	Multi-objective thermodynamic-based optimization of output power of Solar Dish-Stirling engine by implementing an evolutionary algorithm. *Energy Conversion and Management*, **2013**, 75, 438-445	10.6	144
294	Application of Nanofluids in Thermal Performance Enhancement of Parabolic Trough Solar Collector: State-of-the-Art. *Applied Sciences (Switzerland)*, **2019**, 9, 463	2.6	134
293	Experimental and numerical analysis of a nanofluidic thermosyphon heat exchanger. *Engineering Applications of Computational Fluid Mechanics*, **2019**, 13, 40-47	4.5	133
292	Experimental investigation of graphene oxide nanofluid on heat transfer enhancement of pulsating heat pipe. *International Communications in Heat and Mass Transfer*, **2018**, 91, 90-94	5.8	129
291	Techno-economic assessment of a Kalina cycle driven by a parabolic Trough solar collector. *Energy Conversion and Management*, **2015**, 105, 1328-1339	10.6	125
290	Design of a cost-effective wind/photovoltaic/hydrogen energy system for supplying a desalination unit by a heuristic approach. *Solar Energy*, **2016**, 139, 666-675	6.8	125
289	Thermodynamic analysis and multi objective optimization of performance of solar dish Stirling engine by the centrality of entransy and entropy generation. *International Journal of Electrical Power and Energy Systems*, **2016**, 78, 88-95	5.1	103
288	Multi-objective optimization of Stirling engine using non-ideal adiabatic method. *Energy Conversion and Management*, **2014**, 80, 54-62	10.6	102
287	Thermodynamic analysis of a combined gas turbine, ORC cycle and absorption refrigeration for a CCHP system. *Applied Thermal Engineering*, **2017**, 111, 397-406	5.8	102
286	Exergoeconomic analysis and multi objective optimization of performance of a Carbon dioxide power cycle driven by geothermal energy with liquefied natural gas as its heat sink. *Energy Conversion and Management*, **2016**, 119, 422-434	10.6	102

285	Sensitivity analysis and application of machine learning methods to predict the heat transfer performance of CNT/water nanofluid flows through coils. *International Journal of Heat and Mass Transfer*, **2019**, 128, 825-835	4.9	94
284	Comparing various machine learning approaches in modeling the dynamic viscosity of CuO/water nanofluid. *Journal of Thermal Analysis and Calorimetry*, **2020**, 139, 2585-2599	4.1	94
283	Optimization of performance of Combined Solar Collector-Geothermal Heat Pump Systems to supply thermal load needed for heating greenhouses. *Energy Conversion and Management*, **2015**, 97, 382-392	10.6	90
282	Factorial experimental design for the thermal performance of a double pipe heat exchanger using Al2O3-TiO2 hybrid nanofluid. *International Communications in Heat and Mass Transfer*, **2018**, 97, 92-102	5.8	90
281	Thermal models for analysis of performance of Stirling engine: A review. *Renewable and Sustainable Energy Reviews*, **2017**, 68, 168-184	16.2	89
280	Thermodynamic and exergy analysis and optimization of a transcritical CO2 power cycle driven by geothermal energy with liquefied natural gas as its heat sink. *Applied Thermal Engineering*, **2016**, 109, 640-652	5.8	88
279	Thermodynamic and thermo-economic analysis and optimization of performance of irreversible four-temperature-level absorption refrigeration. *Energy Conversion and Management*, **2014**, 88, 1051-1059	10.6	88
278	Optimal design of a solar driven heat engine based on thermal and thermo-economic criteria. *Energy Conversion and Management*, **2013**, 75, 635-642	10.6	88
277	Exergy analysis of a hydrogen and water production process by a solar-driven transcritical CO 2 power cycle with Stirling engine. *Journal of Cleaner Production*, **2017**, 158, 165-181	10.3	87
276	Multi-objective optimization of an irreversible Stirling cryogenic refrigerator cycle. *Energy Conversion and Management*, **2014**, 82, 351-360	10.6	87
275	Thermo-economic optimization of Stirling heat pump by using non-dominated sorting genetic algorithm. *Energy Conversion and Management*, **2015**, 91, 315-322	10.6	86
274	Thermodynamic and thermo-economic analysis and optimization of an irreversible regenerative closed Brayton cycle. *Energy Conversion and Management*, **2015**, 94, 124-129	10.6	85
273	A review on pulsating heat pipes: From solar to cryogenic applications. *Applied Energy*, **2018**, 222, 475-484	10.7	84
272	Thermodynamic analysis and performance optimization of irreversible Carnot refrigerator by using multi-objective evolutionary algorithms (MOEAs). *Renewable and Sustainable Energy Reviews*, **2015**, 51, 1055-1070	16.2	82
271	Battery thermal management system employing phase change material with cell-to-cell air cooling. *Applied Thermal Engineering*, **2019**, 161, 114199	5.8	81
270	Utilization of hybrid nanofluids in solar energy applications: A review. *Nano Structures Nano Objects*, **2019**, 20, 100386	5.6	80
269	Thermal conductivity ratio prediction of Al2O3/water nanofluid by applying connectionist methods. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2018**, 541, 154-164	5.1	80
268	Application of nanofluids in thermosyphons: A review. *Journal of Molecular Liquids*, **2018**, 272, 395-402	6	80

267	A review on the utilized machine learning approaches for modeling the dynamic viscosity of nanofluids. *Renewable and Sustainable Energy Reviews*, **2019**, 114, 109345	16.2	78
266	Numerical simulation of PV cooling by using single turn pulsating heat pipe. *International Journal of Heat and Mass Transfer*, **2018**, 127, 203-208	4.9	78
265	Multi objective optimization of performance of three-heat-source irreversible refrigerators based algorithm NSGAII. *Renewable and Sustainable Energy Reviews*, **2016**, 60, 784-794	16.2	75
264	A proposed model to predict thermal conductivity ratio of Al2O3/EG nanofluid by applying least squares support vector machine (LSSVM) and genetic algorithm as a connectionist approach. *Journal of Thermal Analysis and Calorimetry*, **2019**, 135, 271-281	4.1	75
263	Connectionist intelligent model estimates output power and torque of stirling engine. *Renewable and Sustainable Energy Reviews*, **2015**, 50, 871-883	16.2	74
262	Renewable energy harvesting with the application of nanotechnology: A review. *International Journal of Energy Research*, **2019**, 43, 1387-1410	4.5	72
261	Smart modeling by using artificial intelligent techniques on thermal performance of flat-plate solar collector using nanofluid. *Energy Science and Engineering*, **2019**, 7, 1649-1658	3.4	71
260	Thermo-ecological analysis and optimization performance of an irreversible three-heat-source absorption heat pump. *Energy Conversion and Management*, **2015**, 90, 175-183	10.6	69
259	Thermodynamic analysis and optimization of an irreversible Ericsson cryogenic refrigerator cycle. *Energy Conversion and Management*, **2015**, 89, 147-155	10.6	69
258	Evaluation of the maximized power of a regenerative endoreversible Stirling cycle using the thermodynamic analysis. *Energy Conversion and Management*, **2013**, 76, 561-570	10.6	69
257	Developing an ANFIS-based swarm concept model for estimating the relative viscosity of nanofluids. *Engineering Applications of Computational Fluid Mechanics*, **2019**, 13, 26-39	4.5	69
256	Thermodynamic and exergy analysis of a hydrogen and permeate water production process by a solar-driven transcritical CO2 power cycle with liquefied natural gas heat sink. *Renewable Energy*, **2017**, 113, 1215-1228	8.1	68
255	How to improve the thermal performance of pulsating heat pipes: A review on working fluid. *Renewable and Sustainable Energy Reviews*, **2018**, 91, 630-638	16.2	68
254	Thermodynamic analysis and optimization for an irreversible heat pump working on reversed Brayton cycle. *Energy Conversion and Management*, **2016**, 110, 260-267	10.6	67
253	Thermodynamic optimization of Stirling heat pump based on multiple criteria. *Energy Conversion and Management*, **2014**, 80, 319-328	10.6	66
252	Thermodynamic analysis and optimization of a waste heat recovery system for proton exchange membrane fuel cell using transcritical carbon dioxide cycle and cold energy of liquefied natural gas. *Journal of Natural Gas Science and Engineering*, **2016**, 34, 428-438	4.6	64
251	Using GMDH Neural Networks to Model the Power and Torque of a Stirling Engine. *Sustainability*, **2015**, 7, 2243-2255	3.6	64
250	Energy, exergy and economic analyses of a novel system to recover waste heat and water in steam power plants. *Energy Conversion and Management*, **2017**, 144, 351-360	10.6	62

249	Predicting the efficiency of CuO/water nanofluid in heat pipe heat exchanger using neural network. *International Communications in Heat and Mass Transfer*, **2019**, 104, 33-40	5.8	59
248	Heat transfer and entropy generation of the nanofluid flow inside sinusoidal wavy channels. *Journal of Molecular Liquids*, **2018**, 269, 229-240	6	59
247	A review of magnetic field influence on natural convection heat transfer performance of nanofluids in square cavities. *Journal of Thermal Analysis and Calorimetry*, **2021**, 145, 2581-2623	4.1	59
246	Prediction of power in solar stirling heat engine by using neural network based on hybrid genetic algorithm and particle swarm optimization. *Neural Computing and Applications*, **2013**, 22, 1141-1150	4.8	58
245	Optimization density power and thermal efficiency of an endoreversible Braysson cycle by using non-dominated sorting genetic algorithm. *Energy Conversion and Management*, **2015**, 93, 31-39	10.6	56
244	Thermodynamic evaluation and multi-objective optimization of molten carbonate fuel cell-supercritical CO2 Brayton cycle hybrid system. *Energy Conversion and Management*, **2017**, 153, 538-556	10.6	55
243	Cooling performance of nanofluid submerged vs. nanofluid circulated battery thermal management systems. *Journal of Cleaner Production*, **2019**, 240, 118131	10.3	54
242	A review on the approaches applied for cooling fuel cells. *International Journal of Heat and Mass Transfer*, **2019**, 139, 517-525	4.9	54
241	Thermodynamic analysis and evolutionary algorithm based on multi-objective optimization performance of actual power generating thermal cycles. *Applied Thermal Engineering*, **2016**, 99, 996-1005	5.8	52
240	Thermo-economic and thermodynamic analysis and optimization of a two-stage irreversible heat pump. *Energy Conversion and Management*, **2015**, 99, 81-91	10.6	51
239	Exergy and economic analyses of replacing feedwater heaters in a Rankine cycle with parabolic trough collectors. *Energy Reports*, **2018**, 4, 243-251	4.6	51
238	Exergy and exergo-economic analysis and optimization of a solar double pressure organic Rankine cycle. *Thermal Science and Engineering Progress*, **2018**, 6, 72-86	3.6	51
237	Performance Optimization of a Solar-Driven Multi-Step Irreversible Brayton Cycle Based on a Multi-Objective Genetic Algorithm. *Oil and Gas Science and Technology*, **2016**, 71, 16	1.9	50
236	Optimization performance and thermodynamic analysis of an irreversible nano scale Brayton cycle operating with MaxwellBoltzmann gas. *Energy Conversion and Management*, **2015**, 101, 592-605	10.6	49
235	Optimization of powered Stirling heat engine with finite speed thermodynamics. *Energy Conversion and Management*, **2016**, 108, 96-105	10.6	49
234	Thermo-economic analysis and multi-objective optimization of a transcritical CO 2 power cycle driven by solar energy and LNG cold recovery. *Thermal Science and Engineering Progress*, **2017**, 4, 185-196	3.6	48
233	Artificial neural network, ANN-PSO and ANN-ICA for modelling the Stirling engine. *International Journal of Ambient Energy*, **2016**, 37, 456-468	2	48
232	Thermodynamic and economic analysis of performance evaluation of all the thermal power plants: A review. *Energy Science and Engineering*, **2019**, 7, 30-65	3.4	48

231	A review on application of nanofluid in various types of heat pipes. *Journal of Central South University*, **2019**, 26, 1021-1041	2.1	47
230	Optimum insulation thickness determination of a building wall using exergetic life cycle assessment. *Applied Thermal Engineering*, **2016**, 106, 307-315	5.8	47
229	A numerical and experimental study on the energy efficiency of a regenerative Heat and Mass Exchanger utilizing the counter-flow Maisotsenko cycle. *Engineering Applications of Computational Fluid Mechanics*, **2020**, 14, 1-12	4.5	47
228	Multi-objective performance optimization of irreversible molten carbonate fuel cellBraysson heat engine and thermodynamic analysis with ecological objective approach. *Energy*, **2018**, 144, 707-722	7.9	46
227	Design and exergy analysis of waste heat recovery system and gas engine for power generation in Tehran cement factory. *Thermal Science and Engineering Progress*, **2019**, 9, 299-307	3.6	45
226	Performance assessment and optimization of an irreversible nano-scale Stirling engine cycle operating with Maxwell-Boltzmann gas. *European Physical Journal Plus*, **2015**, 130, 1	3.1	44
225	Energy, exergy and economics analysis of an ORC working with several fluids and utilizes smelting furnace gases as heat source. *Thermal Science and Engineering Progress*, **2018**, 5, 230-237	3.6	44
224	Rigorous smart model for predicting dynamic viscosity of Al2O3/water nanofluid. *Journal of Thermal Analysis and Calorimetry*, **2019**, 137, 307-316	4.1	44
223	GMDH modeling and experimental investigation of thermal performance enhancement of hemispherical cavity receiver using MWCNT/oil nanofluid. *Solar Energy*, **2018**, 171, 790-803	6.8	43
222	Thermodynamic analysis and evolutionary algorithm based on multi-objective optimization of performance for irreversible four-temperature-level refrigeration. *Mechanics and Industry*, **2015**, 16, 207	0.8	43
221	Evaluation of electrical efficiency of photovoltaic thermal solar collector. *Engineering Applications of Computational Fluid Mechanics*, **2020**, 14, 545-565	4.5	42
220	Applying GMDH artificial neural network in modeling CO2 emissions in four nordic countries. *International Journal of Low-Carbon Technologies*, **2018**, 13, 266-271	2.8	42
219	Evolving connectionist approaches to compute thermal conductivity of TiO2/water nanofluid. *Physica A: Statistical Mechanics and Its Applications*, **2020**, 540, 122489	3.3	42
218	Exergetic sustainability evaluation and multi-objective optimization of performance of an irreversible nanoscale Stirling refrigeration cycle operating with MaxwellBoltzmann gas. *Renewable and Sustainable Energy Reviews*, **2017**, 78, 80-92	16.2	41
217	Generation and combination of the solar cells: A current model review. *Energy Science and Engineering*, **2019**, 7, 305-322	3.4	41
216	Applicability of connectionist methods to predict dynamic viscosity of silver/water nanofluid by using ANN-MLP, MARS and MPR algorithms. *Engineering Applications of Computational Fluid Mechanics*, **2019**, 13, 220-228	4.5	40
215	Optimisation of the thermodynamic performance of the Stirling engine. *International Journal of Ambient Energy*, **2016**, 37, 149-161	2	40
214	Designing a powered combined Otto and Stirling cycle power plant through multi-objective optimization approach. *Renewable and Sustainable Energy Reviews*, **2016**, 62, 585-595	16.2	40

213	Prediction of Thermo-Physical Properties of TiO-AlO/Water Nanoparticles by Using Artificial Neural Network. *Nanomaterials*, **2020**, 10,	5.4	40
212	Development of multilayer perceptron artificial neural network (MLP-ANN) and least square support vector machine (LSSVM) models to predict Nusselt number and pressure drop of TiO2/water nanofluid flows through non-straight pathways. *Numerical Heat Transfer; Part A: Applications*, **2018**, 74, 1190-1206	2.3	40
211	Optimization of Output Power and Thermal Efficiency of Solar-Dish Stirling Engine Using Finite Time Thermodynamic Analysis. *Heat Transfer - Asian Research*, **2015**, 44, 347-376	2.8	39
210	Modeling of heat transfer performance of carbon nanotube nanofluid in a tube with fixed wall temperature by using ANN□A. *European Physical Journal Plus*, **2020**, 135, 1	3.1	39
209	Prediction and modeling of MWCNT/Carbon (60/40)/SAE 10 W 40/SAE 85 W 90(50/50) nanofluid viscosity using artificial neural network (ANN) and self-organizing map (SOM). *Journal of Thermal Analysis and Calorimetry*, **2018**, 134, 2275-2286	4.1	39
208	Modeling and experimental verification of a 25W fabricated PEM fuel cell by parametric and GMDH-type neural network. *Mechanics and Industry*, **2016**, 17, 105	0.8	38
207	Energy and Exergy Analyses of a Solid Oxide Fuel Cell-Gas Turbine-Organic Rankine Cycle Power Plant with Liquefied Natural Gas as Heat Sink. *Entropy*, **2018**, 20,	2.8	38
206	Thermoeconomic analysis and multiobjective optimization of a combined gas turbine, steam, and organic Rankine cycle. *Energy Science and Engineering*, **2018**, 6, 506-522	3.4	38
205	Determination of thermal conductivity ratio of CuO/ethylene glycol nanofluid by connectionist approach. *Journal of the Taiwan Institute of Chemical Engineers*, **2018**, 91, 383-395	5.3	37
204	Ground source heat pump carbon emissions and ground-source heat pump systems for heating and cooling of buildings: A review. *Environmental Progress and Sustainable Energy*, **2018**, 37, 1241-1265	2.5	37
203	Thermodynamic analyses of different scenarios in a CCHP system with micro turbine □Absorption chiller, and heat exchanger. *Energy Conversion and Management*, **2019**, 198, 111919	10.6	36
202	Applying GMDH neural network to estimate the thermal resistance and thermal conductivity of pulsating heat pipes. *Engineering Applications of Computational Fluid Mechanics*, **2019**, 13, 327-336	4.5	36
201	A review on the applications of intelligence methods in predicting thermal conductivity of nanofluids. *Journal of Thermal Analysis and Calorimetry*, **2019**, 138, 827	4.1	36
200	Experimental evaluation and artificial neural network modeling of thermal conductivity of water based nanofluid containing magnetic copper nanoparticles. *Physica A: Statistical Mechanics and Its Applications*, **2020**, 551, 124127	3.3	36
199	Thermal conductivity and dynamic viscosity modeling of Fe2O3/water nanofluid by applying various connectionist approaches. *Numerical Heat Transfer; Part A: Applications*, **2018**, 74, 1301-1322	2.3	36
198	ANN model to predict the performance of parabolic dish collector with tubular cavity receiver. *Mechanics and Industry*, **2017**, 18, 408	0.8	35
197	Connectionist intelligent model estimates of convective heat transfer coefficient of nanofluids in circular cross-sectional channels. *Journal of Thermal Analysis and Calorimetry*, **2018**, 132, 1213-1239	4.1	34
196	Experimental Investigation on Stability, Viscosity, and Electrical Conductivity of Water-Based Hybrid Nanofluid of MWCNT-FeO. *Nanomaterials*, **2021**, 11,	5.4	34

195	Thermodynamic model to study a solar collector for its application to Stirling engines. *Energy Conversion and Management*, **2014**, 79, 666-673	10.6	33
194	Energy, Exergy analysis and performance evaluation of a vacuum evaporator for solar thermal power plant Zero Liquid Discharge Systems. *Journal of Thermal Analysis and Calorimetry*, **2020**, 139, 1275-1290	4.1	33
193	An insight into the prediction of TiO2/water nanofluid viscosity through intelligence schemes. *Journal of Thermal Analysis and Calorimetry*, **2020**, 139, 2381-2394	4.1	33
192	Thermo-economic modeling and optimization of an irreversible solar-driven heat engine. *Energy Conversion and Management*, **2015**, 103, 616-622	10.6	32
191	Analysis of stakeholder roles and the challenges of solar energy utilization in Iran. *International Journal of Low-Carbon Technologies*, **2018**, 13, 438-451	2.8	32
190	Optimal Design of a Solar-Driven Heat Engine Based on Thermal and Ecological Criteria. *Journal of Energy Engineering - ASCE*, **2015**, 141, 04014012	1.7	31
189	Process development and thermodynamic analysis of a novel power generation plant driven by geothermal energy with liquefied natural gas as its heat sink. *Applied Thermal Engineering*, **2018**, 133, 645-658	5.8	31
188	Parametric investigation of phosphoric acid fuel cell - Thermally regenerative electro chemical hybrid system. *Journal of Cleaner Production*, **2018**, 203, 585-600	10.3	30
187	Prediction of the pressure drop for CuO/(Ethylene glycol-water) nanofluid flows in the car radiator by means of Artificial Neural Networks analysis integrated with genetic algorithm. *Physica A: Statistical Mechanics and Its Applications*, **2020**, 546, 124008	3.3	30
186	Applicability of connectionist methods to predict thermal resistance of pulsating heat pipes with ethanol by using neural networks. *International Journal of Heat and Mass Transfer*, **2018**, 126, 1079-1086	4.9	30
185	Overview on the Current Status of Hydrogen Energy Research and Development in India. *Chemical Engineering and Technology*, **2020**, 43, 613-624	2	29
184	Geothermal energy use in hydrogen production: A review. *International Journal of Energy Research*, **2019**, 43, 7823	4.5	29
183	Exergoeconomic analysis and optimization of a transcritical CO2 power cycle driven by solar energy based on nanofluid with liquefied natural gas as its heat sink. *Journal of Thermal Analysis and Calorimetry*, **2020**, 139, 451-473	4.1	29
182	Energy and exergy analyses of solid oxide fuel cell-gas turbine hybrid systems fed by different renewable biofuels: A comparative study. *Journal of Cleaner Production*, **2021**, 280, 124383	10.3	29
181	The effect of hydrodynamic and ultrasonic cavitation on biodiesel production: An exergy analysis approach. *Energy*, **2018**, 160, 478-489	7.9	29
180	Multi-Criteria Decision Making (MCDM) Approach for Selecting Solar Plants Site and Technology: A Review. *International Journal of Renewable Energy Development*, **2019**, 8, 15	1.5	28
179	Thermo-economic and exergy assessment and optimization of performance of a hydrogen production system by using geothermal energy. *Energy and Environment*, **2018**, 29, 1373-1392	2.4	28
178	Meeting the Electrical Energy Needs of a Residential Building with a Wind-Photovoltaic Hybrid System. *Sustainability*, **2015**, 7, 2554-2569	3.6	28

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176	A review on solar-assisted gas turbines. *Energy Science and Engineering*, **2018**, 6, 658-674	3.4	28
175	GMDH algorithm for modeling the outlet temperatures of a solar chimney based on the ambient temperature. *Mechanics and Industry*, **2017**, 18, 216	0.8	27
174	Theoretical and experimental studies of heat transfer in a double-pipe heat exchanger equipped with twisted tape and nanofluid. *European Physical Journal Plus*, **2020**, 135, 1	3.1	27
173	Numerical simulation of pressure pulsation effects of a snubber in a CNG station for increasing measurement accuracy. *Engineering Applications of Computational Fluid Mechanics*, **2019**, 13, 642-663	4.5	26
172	Precise smart model for estimating dynamic viscosity of SiO2/ethylene glycol□water nanofluid. *Engineering Applications of Computational Fluid Mechanics*, **2019**, 13, 1095-1105	4.5	26
171	Application of N-doped carbon nanotube-supported Pt-Ru as electrocatalyst layer in passive direct methanol fuel cell. *International Journal of Hydrogen Energy*, **2020**, 45, 25307-25316	6.7	26
170	Impacts of Traffic Tidal Flow on Pollutant Dispersion in a Non-Uniform Urban Street Canyon. *Atmosphere*, **2018**, 9, 82	2.7	26
169	Towards experimental and modeling study of heat transfer performance of water- SiO2 nanofluid in quadrangular cross-section channels. *Engineering Applications of Computational Fluid Mechanics*, **2019**, 13, 453-469	4.5	25
168	Comparative performance analyses of molten carbonate fuel cell-alkali metal thermal to electric converter and molten carbonate fuel cell-thermo-electric generator hybrid systems. *Energy Reports*, **2020**, 6, 10-16	4.6	25
167	Modeling and improvement of solid oxide fuel cell-single effect absorption chiller hybrid system by using nanofluids as heat transporters. *Applied Thermal Engineering*, **2020**, 166, 114707	5.8	25
166	Thermodynamic analysis and optimisation of an irreversible radiative-type heat engine by using non-dominated sorting genetic algorithm. *International Journal of Ambient Energy*, **2016**, 37, 403-408	2	25
165	Status of carbon capture and storage in India□s coal fired power plants: A critical review. *Environmental Technology and Innovation*, **2019**, 13, 94-103	7	25
164	Exergy analysis of a hybrid solar-fossil fuel power plant. *Energy Science and Engineering*, **2019**, 7, 146-161	3.4	24
163	A review on the applications of micro-/nano-encapsulated phase change material slurry in heat transfer and thermal storage systems. *Journal of Thermal Analysis and Calorimetry*, **2021**, 145, 245-268	4.1	24
162	Thermodynamic analysis and optimization of the Atkinson engine by using NSGA-II. *International Journal of Low-Carbon Technologies*, **2016**, 11, 317-324	2.8	23
161	A review on using nanofluids in heat pipes. *Journal of Thermal Analysis and Calorimetry*, **2019**, 137, 1847-1855	4.1	23
160	Numerical investigation into mutual effects of soil thermal and isothermal properties on heat and moisture transfer in unsaturated soil applied as thermal storage system. *Numerical Heat Transfer; Part A: Applications*, **2018**, 73, 466-481	2.3	23

159	Study of particle migration and deposition in mixed convective pipe flow of nanofluids at different inclination angles. *Journal of Thermal Analysis and Calorimetry*, **2019**, 135, 1563-1575	4.1	23
158	Technical, economic, and environmental modeling of solar water pump for irrigation of rice in Mazandaran province in Iran: A case study. *Journal of Cleaner Production*, **2019**, 239, 118007	10.3	22
157	Optimization methods using artificial intelligence algorithms to estimate thermal efficiency of PV/T system. *Energy Science and Engineering*, **2019**, 7, 821-834	3.4	22
156	Magnetohydrodynamic convection behaviours of nanofluids in non-square enclosures: A comprehensive review. *Mathematical Methods in the Applied Sciences*, **2020**,	2.3	22
155	Combination of baffling technique and high-thermal conductivity fluids to enhance the overall performances of solar channels. *Engineering With Computers*, **2020**, 1	4.5	22
154	Aggregation study of Brownian nanoparticles in convective phenomena. *Journal of Thermal Analysis and Calorimetry*, **2019**, 135, 111-121	4.1	22
153	Thermodynamic analysis and evolutionary algorithm based on multi-objective optimisation of the Rankine cycle heat engine. *International Journal of Ambient Energy*, **2016**, 37, 363-371	2	21
152	Optimal design of an Otto cycle based on thermal criteria. *Mechanics and Industry*, **2016**, 17, 111	0.8	21
151	Optimizing flow properties of the different nanofluids inside a circular tube by using entropy generation minimization approach. *Journal of Thermal Analysis and Calorimetry*, **2019**, 135, 801-811	4.1	21
150	Energy and exergy analyses and thermo-economic optimization of geothermal heat pump for domestic water heating. *International Journal of Low-Carbon Technologies*, **2019**, 14, 108-121	2.8	21
149	Application GMDH artificial neural network for modeling of Al2O3/water and Al2O3/Ethylene glycol thermal conductivity. *International Journal of Heat and Technology*, **2018**, 36, 773-782	2.2	20
148	Applications of nanofluids in geothermal: A review. *Mathematical Modelling of Engineering Problems* , **2018**, 5, 281-285	3.5	20
147	Medical and dental applications of renewable energy systems. *International Journal of Low-Carbon Technologies*, **2018**, 13, 320-326	2.8	20
146	Multi-objective optimization and exergetic-sustainability of an irreversible nano scale Braysson cycle operating with MaxwellBoltzmann gas. *AEJ - Alexandria Engineering Journal*, **2016**, 55, 1785-1798	6.1	19
145	Entransy analysis and optimization of performance of nano-scale irreversible Otto cycle operating with Maxwell-Boltzmann ideal gas. *Chemical Physics Letters*, **2016**, 658, 293-302	2.5	19
144	Investigating the effect of using PCM in building materials for energy saving: Case study of Sharif Energy Research Institute. *Energy Science and Engineering*, **2020**, 8, 959-972	3.4	19
143	Electricity price forecasting using neural networks with an improved iterative training algorithm. *International Journal of Ambient Energy*, **2018**, 39, 147-158	2	18
142	Optimisation of a combined Stirling cycleOrganic Rankine cycle using a genetic algorithm. *International Journal of Ambient Energy*, **2016**, 37, 398-402	2	18

141	Precise prediction of biogas thermodynamic properties by using ANN algorithm. *Renewable Energy*, **2020**, 147, 179-191	8.1	18
140	Investigating the effect of using nanofluids on the performance of a double-effect absorption refrigeration cycle combined with a solar collector. *Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy*, **2020**, 234, 981-993	1.6	18
139	Solar driven Stirling engine - chemical heat pump - absorption refrigerator hybrid system as environmental friendly energy system. *Journal of Environmental Management*, **2019**, 232, 455-461	7.9	18
138	A novel process configuration for hydrocarbon recovery process with auto□efrigeration system. *Journal of Natural Gas Science and Engineering*, **2017**, 42, 262-270	4.6	17
137	Analysis, economical and technical enhancement of an organic Rankine cycle recovering waste heat from an exhaust gas stream. *Energy Science and Engineering*, **2019**, 7, 230-254	3.4	17
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