Shahram Khalilarya

List of Publications by Year
in descending order

75	1,989	186265 28	265206 42
papers	citations	h-index	g-index

75	75	75	1483
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Energy and exergy assessments of a novel trigeneration system based on a solid oxide fuel cell. Energy Conversion and Management, 2014, 87, 318-327.	9.2	174
2	Thermodynamic analysis of a novel combined cooling, heating and power system driven by solar energy. Applied Thermal Engineering, 2018, 129, 1219-1229.	6.0	79
3	Multi-objective optimization using response surface methodology and exergy analysis of a novel integrated biomass gasification, solid oxide fuel cell and high-temperature sodium heat pipe system. Applied Thermal Engineering, 2019, 156, 627-639.	6.0	79
4	A complete energetic and exergetic analysis of a solar powered trigeneration system with two novel organic Rankine cycle (ORC) configurations. Journal of Cleaner Production, 2021, 281, 124552.	9.3	76
5	Diesel engine spray characteristics prediction with hybridized artificial neural network optimized by genetic algorithm. Energy, 2014, 71, 656-664.	8.8	66
6	An exhaustive experimental study of a novel air-water based thermoelectric cooling unit. Applied Energy, 2016, 181, 357-366.	10.1	66
7	Appraisal of artificial neural networks to the emission analysis and prediction of CO2, soot, and NOx of n-heptane fueled engine. Journal of Cleaner Production, 2016, 112, 1729-1739.	9.3	60
8	Power generation enhancement in a biomass-based combined cycle using solar energy: Thermodynamic and environmental analysis. Applied Thermal Engineering, 2019, 153, 128-141.	6.0	58
9	Engine structure modifications effect on the flow behavior, combustion, and performance characteristics of DI diesel engine. Energy Conversion and Management, 2014, 85, 20-32.	9.2	55
10	Diesel engine optimization with multi-objective performance characteristics by non-evolutionary Nelder-Mead algorithm: Sobol sequence and Latin hypercube sampling methods comparison in DoE process. Fuel, 2018, 228, 349-367.	6.4	54
11	Numerical study on the thermal and electrical performance of an annular thermoelectric generator under pulsed heat power with different types of input functions. Energy Conversion and Management, 2018, 167, 102-112.	9.2	52
12	Performance assessment of a combined heat and power system: A novel integrated biomass gasification, solid oxide fuel cell and high-temperature sodium heat pipe system part I: Thermodynamic analysis. Energy Conversion and Management, 2018, 171, 287-297.	9.2	51
13	Multi-objective optimization and decision analysis of a system based on biomass fueled SOFC using couple method of entropy/VIKOR. Energy Conversion and Management, 2020, 203, 112260.	9.2	51
14	A numerical investigation on the influence of EGR in a supercharged SI engine fueled with gasoline and alternative fuels. Energy Conversion and Management, 2014, 83, 260-269.	9.2	50
15	A thermodynamic and exergoeconomic numerical study of two-stage annular thermoelectric generator. Applied Thermal Engineering, 2019, 156, 371-381.	6.0	49
16	Proposal of a combined heat and power plant hybridized with regeneration organic Rankine cycle: Energy-Exergy evaluation. Energy Conversion and Management, 2016, 122, 357-365.	9.2	45
17	Study of synthesis gas composition, exergy assessment, and multi-criteria decision-making analysis of fluidized bed gasifier. International Journal of Hydrogen Energy, 2019, 44, 27726-27740.	7.1	44
18	Numerical investigation of the effect of injection timing under various equivalence ratios on energy and exergy terms in a direct injection SI hydrogen fueled engine. International Journal of Hydrogen Energy, 2013, 38, 1189-1199.	7.1	43

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19	Numerical energetic and exergetic analysis of CI diesel engine performance for different fuels of hydrogen, dimethyl ether, and diesel under various engine speeds. International Journal of Hydrogen Energy, 2014, 39, 9515-9526.	7.1	42
20	A comprehensive second law analysis for tube-in-tube helically coiled heat exchangers. Experimental Thermal and Fluid Science, 2016, 76, 118-125.	2.7	41
21	A comprehensive energy efficiency study of segmented annular thermoelectric generator; thermal, exergetic and economic analysis. Applied Thermal Engineering, 2020, 181, 115996.	6.0	41
22	Performance and profit analysis of thermoelectric power generators mounted on channels with different cross-sectional shapes. Applied Thermal Engineering, 2020, 176, 115455.	6.0	40
23	Comprehensive comparison of SOFCs with proton-conducting electrolyte and oxygen ion-conducting electrolyte: Thermoeconomic analysis and multi-objective optimization. Energy Conversion and Management, 2020, 205, 112455.	9.2	39
24	Novel experiments on COP improvement of thermoelectric air coolers. Energy Conversion and Management, 2019, 187, 328-338.	9.2	37
25	Co-generation of electricity and heating using a SOFC-ScCO2 Brayton cycle-ORC integrated plant: Investigation and multi-objective optimization. International Journal of Hydrogen Energy, 2020, 45, 27713-27729.	7.1	36
26	A comprehensive exergy analysis of a prototype Peltier air-cooler; experimental investigation. Renewable Energy, 2019, 131, 308-317.	8.9	33
27	Exergy and exergoeconomic analysis and optimisation of diesel engine based Combined Heat and Power (CHP) system using genetic algorithm. International Journal of Exergy, 2013, 12, 139.	0.4	29
28	Investigation and optimization of a Co-Generation plant integrated of gasifier, gas turbine and heat pipes using minimization of Gibbs free energy, Lagrange method and response surface methodology. International Journal of Hydrogen Energy, 2020, 45, 19027-19044.	7.1	29
29	Multi-objective optimization of power, CO2 emission and exergy efficiency of a novel solar-assisted CCHP system using RSM and TOPSIS coupled method. Renewable Energy, 2022, 185, 506-524.	8.9	28
30	Comparing multi-objective non-evolutionary NLPQL and evolutionary genetic algorithm optimization of a DI diesel engine: DoE estimation and creating surrogate model. Energy Conversion and Management, 2016, 126, 385-399.	9.2	27
31	A numerical investigation on the wall heat flux in a DI diesel engine fueled with n-heptane using a coupled CFD and ANN approach. Fuel, 2015, 140, 227-236.	6.4	26
32	Multi-objective optimization of a power generation system based SOFC using Taguchi/AHP/TOPSIS triple method. Sustainable Energy Technologies and Assessments, 2020, 38, 100674.	2.7	26
33	Implementation of ANN on CCHP system to predict trigeneration performance with consideration of various operative factors. Energy Conversion and Management, 2015, 101, 503-514.	9.2	23
34	An empirical correlation for exergy destruction of fluid flow through helical tubes. Applied Thermal Engineering, 2018, 140, 679-685.	6.0	23
35	Tube bundle replacement for segmental and helical shell and tube heat exchangers: Experimental test and economic analysis. Applied Thermal Engineering, 2014, 62, 622-632.	6.0	21
36	The effects of injected fuel temperature on exergy balance under the various operating loads in a DI diesel engine. International Journal of Exergy, 2015, 17, 35.	0.4	20

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37	Energy and exergy analyses of homogeneous charge compressin ignition (HCCI) engine. Thermal Science, 2013, 17, 107-117.	1.1	18
38	Effectively designed NTW shell-tube heat exchangers with segmental baffles using flow hydraulic network method. Applied Thermal Engineering, 2017, 120, 635-644.	6.0	17
39	Numerical simulation of diesel injector nozzle flow and in-cylinder spray evolution. Applied Mathematical Modelling, 2016, 40, 8617-8629.	4.2	16
40	Exergy analysis of combustion in VGT-modified diesel engine with detailed chemical kinetics mechanism. Energy, 2015, 93, 740-748.	8.8	14
41	The effect of position-dependent magnetic field on nanofluid forced convective heat transfer and entropy generation in a microchannel. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 345-355.	1.6	14
42	Combined systems based on <scp>OSOFC</scp> / <scp>HSOFC</scp> : Comparative analysis and multiâ€objective optimization of power and emission. International Journal of Energy Research, 2021, 45, 5449-5469.	4.5	14
43	Design and parametric study of a novel solarâ€driven trigeneration application utilizing a heliostat field with thermal energy storage. International Journal of Energy Research, 2021, 45, 14658-14679.	4.5	14
44	Computational fluid dynamics simulation of the combustion process, emission formation and the flow field in an in-direct injection diesel engine. Thermal Science, 2013, 17, 11-23.	1.1	12
45	Towards modeling of combined cooling, heating and power system with artificial neural network for exergy destruction and exergy efficiency prognostication of tri-generation components. Applied Thermal Engineering, 2015, 89, 156-168.	6.0	12
46	Comprehensive thermodynamic investigation of three cogeneration systems including GT-HRSG/RORC as the base system, intermediate system and solar hybridized system. Energy, 2019, 181, 1252-1272.	8.8	12
47	On the modeling of a MEMS-based capacitive wall shear stress sensor. Measurement: Journal of the International Measurement Confederation, 2009, 42, 202-207.	5.0	11
48	On the modeling of convective heat transfer coefficient of hydrogen fueled diesel engine as affected by combustion parameters using a coupled numerical-artificial neural network approach. International Journal of Hydrogen Energy, 2015, 40, 4370-4381.	7.1	10
49	Adaptive neuro-fuzzy system (ANFIS) based appraisal of accumulated heat from hydrogen-fueled engine. International Journal of Hydrogen Energy, 2015, 40, 8206-8218.	7.1	10
50	Experimental investigation on the effect of natural gas premixed ratio on combustion and emissions in an IDI engine. Journal of Thermal Analysis and Calorimetry, 2019, 138, 3977-3986.	3.6	10
51	Determination of flow pattern and its effect on NOx emission in a tangentially fired single chamber square furnace. Thermal Science, 2010, 14, 493-503.	1.1	10
52	3-D numerical consideration of nozzle structure on combustion and emission characteristics of DI diesel injector. Applied Mathematical Modelling, 2016, 40, 8630-8646.	4.2	9
53	Energy and exergy analyses of a combined cycle Kalina and organic Rankine cycles using waste heat. International Journal of Exergy, 2018, 27, 251.	0.4	9
54	Improvement of performance and emission in a leanâ€burn gas fueled spark ignition engine by using a new preâ€chamber. Environmental Progress and Sustainable Energy, 2021, 40, e13637.	2.3	7

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55	A Mathematical-Numerical Model to Calculate Load Distribution, Contact Stiffness and Transmission Error in Involute Spur Gears. , 2009, , .		6
56	Effectively designed shellâ€tube heat exchangers considering cost minimization and energy management. Heat Transfer - Asian Research, 2017, 46, 1488-1498.	2.8	6
57	Threeâ€dimensional energetic and exergetic analysis of the injection orientation of <scp>DI</scp> diesel engine under different engine speeds. Energy Science and Engineering, 2015, 3, 360-370.	4.0	5
58	A RANS simulation toward the effect of turbulence and cavitation on spray propagation and combustion characteristics. Theoretical and Computational Fluid Dynamics, 2016, 30, 349-362.	2.2	5
59	Modeling for Shell-Side Heat Transfer Coefficient and Pressure Drop of Helical Baffle Heat Exchangers. Heat Transfer Engineering, 2017, 38, 265-277.	1.9	5
60	Diesel combustion in heavy-duty engine with single- and double-injection strategies. Journal of Mechanical Science and Technology, 2018, 32, 1889-1896.	1.5	4
61	Evaluation of a diesel engine optimized by non-evolutionary NLPQL and evolutionary genetic algorithms and assessing second law efficiency: Analysis in exergy loss and chemical exergy. Applied Thermal Engineering, 2019, 159, 113794.	6.0	4
62	Developing of a new comprehensive spark ignition engines code for heat loss analysis within combustion chamber walls. Thermal Science, 2010, 14, 1013-1025.	1.1	4
63	Analysis of exergy and total life cycle cost for segmental and helical baffles in a shell-and-tube heat exchanger. International Journal of Exergy, 2016, 20, 269.	0.4	3
64	Application of genetic algorithm in extracting cell dielectric characteristics with electrorotation. Journal of Electrical Bioimpedance, 2019, 8, 34-39.	0.9	3
65	A semi-analytical model for the prediction of the behavior of turbulent coaxial gaseous jets. Thermal Science, 2013, 17, 1221-1232.	1.1	2
66	Exergoeconomic evaluation and optimisation of a novel combined power and absorption-ejector refrigeration cycle driven by natural gas. International Journal of Exergy, 2016, 19, 232.	0.4	2
67	Energy and exergy analyses of a novel combined heating, power and absorption-ejector refrigeration cycle driven by biomass fuel. International Journal of Exergy, 2016, 19, 481.	0.4	2
68	Entropy and exergy analysis of a Ranque-Hilsch vortex tube with two vortex chambers. International Journal of Exergy, 2016, 19, 55.	0.4	2
69	Extended semi-analytical model for the prediction of flow and concentration fields in a tangentially-fired furnace. Thermal Science, 2013, 17, 1233-1243.	1.1	2
70	Exegetic Modeling and Second Law Based Optimization of Cogeneration Heat and Power System Using Evolutionary Algorithm (Genetic Algorithm). , 2010, , .		1
71	A numerical model to calculate Elastohydrodynamic (EHL) properties in involute spur gears. , 2010, , .		1
72	An optimization aproach for design parameters in involute spur gears considering transmission error, gear size and lubrication parameters using Grey Relational Analysis Technique. , 2010, , .		0

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73	Thermodynamic evaluation of gas compression station from the point of energy and exergy view with an approach to reduce energy consumptions and emissions: A case study. Mechanics and Industry, 2015, 16, 303.	1.3	0
74	Energy and exergoeconomic analysis of the gas compression station: A case study. Mechanics and Industry, 2015, 16, 510.	1.3	0
75	Effects of changing nozzle holes-diameter in double-injection strategies using numerical modeling. Australian Journal of Mechanical Engineering, 2020, 18, 140-146.	2.1	0