Hussam Jouhara

List of Publications by Year
in descending order

138 papers	7,748 citations	53751 45 h-index	56687 83 g-index
146 all docs	146 docs citations	146 times ranked	5793 citing authors

#	Article	IF	Citations
1	Hydrogen sulfide removal from waste tyre pyrolysis gas by inorganics. International Journal of Hydrogen Energy, 2024, 52, 785-799.	3.8	12
2	Comparative assessment of innovative methods to improve solar chimney power plant efficiency. Sustainable Energy Technologies and Assessments, 2022, 49, 101807.	1.7	12
3	Exergo-economic comparison of waste heat recovery cycles for a cement industry case study. Energy Conversion and Management: X, 2022, 13, 100180.	0.9	5
4	Thermal management systems based on heat pipes for batteries in EVs/HEVs. Journal of Energy Storage, 2022, 51, 104384.	3.9	38
5	Ultra-stable silica/exfoliated graphite encapsulated n-hexacosane phase change nanocomposite: A promising material for thermal energy storage applications. Energy, 2022, 250, 123729.	4.5	22
6	Experimental and theoretical investigation of the influence of heat transfer rate on the thermal performance of a multi-channel flat heat pipe. Energy, 2022, 250, 123804.	4.5	22
7	Analysis of energy demand in a residential building using TRNSYS. Energy, 2022, 254, 124357.	4.5	28
8	An efficient optimization of an irreversible Ericsson refrigeration cycle based on thermo-ecological criteria. Thermal Science and Engineering Progress, 2022, 33, 101381.	1.3	6
9	Ultrasonic Technique for Measuring the Mean Flow Velocity behind a Throttle: A Metrological Analysis. Thermal Science and Engineering Progress, 2022, , 101402.	1.3	2
10	The modeling of transient phase changes of water droplets in flue gas flow in the range of temperatures characteristic of condensing economizer technologies. Energy, 2022, 257, 124719.	4.5	3
11	Experimental investigations of water droplet transient phase changes in flue gas flow in the range of temperatures characteristic of condensing economizer technologies. Energy, 2022, 256, 124643.	4.5	5
12	Analytical modelling of a photovoltaics-thermal technology combined with thermal and electrical storage systems. Renewable Energy, 2021, 165, 350-358.	4.3	11
13	Development and validation of a TRNSYS type to simulate heat pipe heat exchangers in transient applications of waste heat recovery. International Journal of Thermofluids, 2021, 9, 100056.	4.0	64
14	The utilisation of useful ambient energy in residential dwellings to improve thermal comfort and reduce energy consumption. International Journal of Thermofluids, 2021, 9, 100059.	4.0	28
15	The removal of tetracycline from water using biochar produced from agricultural discarded material. Science of the Total Environment, 2021, 751, 141755.	3.9	107
16	Annual performance analysis of the PV/T system for the heat demand of a low-energy single-family building. Renewable Energy, 2021, 163, 1923-1931.	4.3	26
17	Thermoelectric generator (TEG) technologies and applications. International Journal of Thermofluids, 2021, 9, 100063.	4.0	170
18	Experimental and theoretical investigation of the performance of an air to water multi-pass heat pipe-based heat exchanger. Energy, 2021, 219, 119624.	4.5	20

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19	The simulation and analysis of wood fuel low-grade heat. Energy, 2021, 218, 119501.	4.5	1
20	Investigation on a full-scale heat pipe heat exchanger in the ceramics industry for waste heat recovery. Energy, 2021, 223, 120037.	4.5	60
21	Comprehensive numerical model for the analysis of potential heat recovery solutions in a ceramic industry. International Journal of Thermofluids, 2021, 10, 100080.	4.0	23
22	Techno-economic assessment of a rotary kiln shell radiation waste heat recovery system. Thermal Science and Engineering Progress, 2021, 23, 100858.	1.3	11
23	An Experimental Investigation of Water Vapor Condensation from Biofuel Flue Gas in a Model of Condenser, (2) Local Heat Transfer in a Calorimetric Tube with Water Injection. Processes, 2021, 9, 1310.	1.3	5
24	Investigation and Computational Modelling of Variable TEG Leg Geometries. ChemEngineering, 2021, 5, 45.	1.0	14
25	Heat pipe based battery thermal management: Evaluating the potential of two novel battery pack integrations. International Journal of Thermofluids, 2021, 12, 100115.	4.0	30
26	Comparative environmental life cycle assessment of conventional energy storage system and innovative thermal energy storage system. International Journal of Thermofluids, 2021, 12, 100116.	4.0	35
27	Condensation, evaporation and boiling of falling films in wickless heat pipes (two-phase closed) Tj ETQq1 1 0.784314 rgBT /Overlock 10 100001.	4.0	37
28	ETEKINA: Analysis of the potential for waste heat recovery in three sectors: Aluminium low pressure die casting, steel sector and ceramic tiles manufacturing sector. International Journal of Thermofluids, 2020, 1-2, 100002.	4.0	32
29	The aluminium industry: A review on state-of-the-art technologies, environmental impacts and possibilities for waste heat recovery. International Journal of Thermofluids, 2020, 1-2, 100007.	4.0	131
30	Investigation, development and experimental analyses of a heat pipe based battery thermal management system. International Journal of Thermofluids, 2020, 1-2, 100004.	4.0	45
31	Renewables for district heating: The case of Lithuania. Energy, 2020, 211, 119064.	4.5	33
32	Evaluation of waste heat recovery technologies for the cement industry. International Journal of Thermofluids, 2020, 7-8, 100040.	4.0	36
33	Waste tyre pyrolysis â€“ Impact of the process and its products on the environment. Thermal Science and Engineering Progress, 2020, 20, 100690.	1.3	29
34	Latent thermal energy storage technologies and applications: A review. International Journal of Thermofluids, 2020, 5-6, 100039.	4.0	148
35	Recent advances and applications of solar photovoltaics and thermal technologies. Energy, 2020, 207, 118254.	4.5	109
36	Energy efficiency in the industrial sector in the EU, Slovenia, and Spain. Energy, 2020, 208, 118398.	4.5	80

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37	An experimental study and computational validation of waste heat recovery from a lab scale ceramic kiln using a vertical multi-pass heat pipe heat exchanger. Energy, 2020, 208, 118325.	4.5	48
38	Performance Evaluation of a Novel Hydrophobic Membrane Used in a Desalination System: A Comparison between Static and Moving Configurations. Key Engineering Materials, 2020, 865, 79-84.	0.4	0
39	Experimental investigation and analytical prediction of a multi-channel flat heat pipe thermal performance. International Journal of Thermofluids, 2020, 5-6, 100038.	4.0	25
40	Removal of methylene blue from aqueous solutions by biochar prepared from the pyrolysis of mixed municipal discarded material. Science of the Total Environment, 2020, 714, 136832.	3.9	105
41	Energy Performance Analysis of a PV/T System Coupled with Domestic Hot Water System. ChemEngineering, 2020, 4, 22.	1.0	21
42	Review of ventilation strategies to reduce the risk of disease transmission in high occupancy buildings. International Journal of Thermofluids, 2020, 7-8, 100045.	4.0	77
43	Modeling radionuclide migration from activated metallic waste disposal in a generic geological repository in Lithuania. Nuclear Engineering and Design, 2020, 370, 110885.	0.8	2
44	Cross-Cutting Technologies for Developing Innovative BIPV Systems in the Framework of the PVadapt Project. Proceedings (mdpi), 2020, 65, .	0.2	0
45	Nucleate pool boiling heat transfer in wickless heat pipes (two-phase closed thermosyphons): A critical review of correlations. Thermal Science and Engineering Progress, 2019, 13, 100384.	1.3	36
46	Dual Media Thermocline (DMT) techno-economic interest for heat storage on the range 80Â°C â€“600Â°C â€“ The SMARTREC project. E3S Web of Conferences, 2019, 116, 00065.	0.2	0
47	Air-to-air heat pump: review of recent advances and future potential. E3S Web of Conferences, 2019, 116, 00074.	0.2	2
48	Waste Heat Recovery in the EU industry and proposed new technologies. Energy Procedia, 2019, 161, 489-496.	1.8	64
49	Design criteria for coatings in next generation condensing economizers. Energy Procedia, 2019, 161, 412-420.	1.8	14
50	Energy efficiency in industry: EU and national policies in Italy and the UK. Energy, 2019, 172, 255-269.	4.5	155
51	Computational study and experimental validation of a solar photovoltaics and thermal technology. Renewable Energy, 2019, 143, 1348-1356.	4.3	34
52	Experimental analysis of waste tyres as a sustainable source of energy. E3S Web of Conferences, 2019, 100, 00012.	0.2	6
53	Removal of copper ions from aqueous solution using low temperature biochar derived from the pyrolysis of municipal solid waste. Science of the Total Environment, 2019, 673, 777-789.	3.9	74
54	Disposal of very low-level radioactive waste: Lithuanian case on the approach and long-term safety aspects. Science of the Total Environment, 2019, 667, 464-474.	3.9	25

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55	Investigation of mass and heat transfer transitional processes of water droplets in wet gas flow in the framework of energy recovery technologies for biofuel combustion and flue gas removal. Energy, 2019, 173, 740-754.	4.5	14
56	Experimental and theoretical investigation on a radiative flat heat pipe heat exchanger. Energy, 2019, 174, 972-984.	4.5	39
57	The trilemma of waste-to-energy: A multi-purpose solution. Energy Policy, 2019, 129, 636-645.	4.2	33
58	Heat recovery at high temperature by molten salts for high temperature processing industries. AIP Conference Proceedings, 2019, , .	0.3	1
59	Heat recovery at high temperature by molten salts for high temperature processing industries. AIP Conference Proceedings, 2019, , .	0.3	4
60	Experimental investigation of a radiative heat pipe for waste heat recovery in a ceramics kiln. Energy, 2019, 170, 636-651.	4.5	54
61	Experimental and CFD validation of the thermal performance of a cryogenic batch freezer with the effect of loading. Energy, 2019, 171, 77-94.	4.5	10
62	Modeling of decay heat removal from CONSTOR RBMK-1500 casks during long-term storage of spent nuclear fuel. Energy, 2019, 170, 978-985.	4.5	13
63	Applications and thermal management of rechargeable batteries for industrial applications. Energy, 2019, 170, 849-861.	4.5	92
64	Experimental investigation on the chemical characterisation of pyrolytic products of discarded food at temperatures up to 300â€Â°C. Thermal Science and Engineering Progress, 2018, 5, 579-588.	1.3	13
65	Numerical modeling of a two-phase twin-screw expander for Trilateral Flash Cycle applications. International Journal of Refrigeration, 2018, 88, 248-259.	1.8	49
66	Mechanical response of a lined pipe under dynamic impact. Engineering Failure Analysis, 2018, 88, 35-53.	1.8	15
67	Heat pump placement, connection and operational modes in European district heating. Energy and Buildings, 2018, 166, 122-144.	3.1	121
68	Experimental and numerical thermo-mechanical analysis of welding in a lined pipe. Journal of Manufacturing Processes, 2018, 32, 857-872.	2.8	7
69	Waste heat recovery technologies and applications. Thermal Science and Engineering Progress, 2018, 6, 268-289.	1.3	606
70	Investigation of warm gas clean-up of biofuel flue and producer gas using electrostatic precipitator. Energy, 2018, 143, 943-949.	4.5	23
71	Pyrolysis of domestic based feedstock at temperatures up to 300â€Â°C. Thermal Science and Engineering Progress, 2018, 5, 117-143.	1.3	89
72	Numerical simulation of thermal and residual stress fields induced by lined pipe welding. Thermal Science and Engineering Progress, 2018, 5, 1-14.	1.3	22

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73	Evaluation of organic coatings for corrosion protection of condensing economizers. Procedia Structural Integrity, 2018, 10, 295-302.	0.3	21
74	Syngas Quality as a Key Factor in the Design of an Energy-Efficient Pyrolysis Plant for Scrap Tyres. Proceedings (mdpi), 2018, 2, .	0.2	4
75	Productsâ€™ composition of food waste low-temperature slow pyrolysis. E3S Web of Conferences, 2018, 44, 00023.	0.2	2
76	Hydrophilic and hydrophobic materials and their applications. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2018, 40, 2686-2725.	1.2	119
77	Investigation of characteristics of solid particles from a mixture of sewage sludge and wood pellets synthetic gas and their clean-up. Waste Management, 2018, 78, 1-7.	3.7	3
78	Surface water filtration using granular media and membranes: A review. Science of the Total Environment, 2018, 639, 1268-1282.	3.9	117
79	An investigation into the use of water as a working fluid in wraparound loop heat pipe heat exchanger for applications in energy efficient HVAC systems. Energy, 2018, 156, 597-605.	4.5	36
80	Editorial: Industrial waste heat recovery. Energy, 2018, 160, 1-2.	4.5	106
81	Numerical study of water flow rates in power plant cooling systems. Thermal Science and Engineering Progress, 2018, 7, 27-32.	1.3	10
82	4.3 Heat Pipes. , 2018, , 70-97.		4
83	Energy efficiency enhancement and waste heat recovery in industrial processes by means of the heat pipe technology: Case of the ceramic industry. Energy, 2018, 158, 656-665.	4.5	88
84	Trends of European research and development in district heating technologies. Renewable and Sustainable Energy Reviews, 2017, 68, 1183-1192.	8.2	157
85	Investigation of the effects of thermal, oxidative and irradiation treatments on the behaviour of poly-ethylene glycol as a phase change material in thermal energy storage systems. Energy, 2017, 136, 196-200.	4.5	9
86	An investigation into the use of the heat pipe technology in thermal energy storage heat exchangers. Energy, 2017, 136, 163-172.	4.5	57
87	The performance of a heat pipe based solar PV/T roof collector and its potential contribution in district heating applications. Energy, 2017, 136, 117-125.	4.5	67
88	Heat pipe based municipal waste treatment unit for home energy recovery. Energy, 2017, 139, 1210-1230.	4.5	39
89	Heat pipe based systems - Advances and applications. Energy, 2017, 128, 729-754.	4.5	363
90	Performance evaluation of a multi-pass air-to-water thermosyphon-based heat exchanger. Energy, 2017, 139, 1243-1260.	4.5	9

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91	Use of pyrolytic gas from waste tire as a fuel: A review. Energy, 2017, 134, 1121-1131.	4.5	226
92	Potential of pyrolysis processes in the waste management sector. Thermal Science and Engineering Progress, 2017, 3, 171-197.	1.3	335
93	Temperature and energy performance of open refrigerated display cabinets using heat pipe shelves. Energy Procedia, 2017, 123, 273-280.	1.8	14
94	Design of radial turbomachinery for supercritical CO 2 systems using theoretical and numerical CFD methodologies. Energy Procedia, 2017, 123, 313-320.	1.8	27
95	CFD model of a lab scale cryogenic batch freezer with the investigation of varying effects on the heat transfer coefficient. Energy Procedia, 2017, 123, 256-264.	1.8	1
96	Potentials of pyrolysis processes in the waste management sector. Energy Procedia, 2017, 123, 387-394.	1.8	68
97	Two-phase chamber modeling of a twin-screw expander for Trilateral Flash Cycle applications. Energy Procedia, 2017, 129, 347-354.	1.8	13
98	Experimental investigation on a flat heat pipe heat exchanger for waste heat recovery in steel industry. Energy Procedia, 2017, 123, 329-334.	1.8	16
99	Development and analysis of a packaged Trilateral Flash Cycle system for low grade heat to power conversion applications. Thermal Science and Engineering Progress, 2017, 4, 113-121.	1.3	34
100	A parametric study of thermal and residual stress fields in lined pipe welding. Thermal Science and Engineering Progress, 2017, 4, 205-218.	1.3	12
101	Municipal waste management systems for domestic use. Energy, 2017, 139, 485-506.	4.5	128
102	Experimental and theoretical investigation of a flat heat pipe heat exchanger for waste heat recovery in the steel industry. Energy, 2017, 141, 1928-1939.	4.5	73
103	Municipal solid waste management and waste-to-energy in the context of a circular economy and energy recycling in Europe. Energy, 2017, 141, 2013-2044.	4.5	580
104	Mathematical model of sulphate ion concentration in a closed cooling system of a power plant. Thermal Science and Engineering Progress, 2017, 4, 160-167.	1.3	5
105	A review on waste heat recovery from exhaust in the ceramics industry. E3S Web of Conferences, 2017, 22, 00034.	0.2	12
106	Acid emissions monitoring needs in ceramic tile industry: challenges derived from new policy trends. E3S Web of Conferences, 2017, 22, 00026.	0.2	1
107	Combined Effects of Gamma Irradiation and Blanching Process on Acrylamide Content in Fried Potato Strips. International Journal of Food Properties, 2016, 19, 1447-1454.	1.3	25
108	Experimental and numerical investigation of a cross flow air-to-water heat pipe-based heat exchanger used in waste heat recovery. International Journal of Heat and Mass Transfer, 2016, 102, 1267-1281.	2.5	70

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109	Three-dimensional CFD simulation of geyser boiling in a two-phase closed thermosyphon. International Journal of Hydrogen Energy, 2016, 41, 16463-16476.	3.8	97
110	Three-dimensional numerical model of heat losses from district heating network pre-insulated pipes buried in the ground. Energy, 2016, 108, 172-184.	4.5	71
111	The performance of a novel flat heat pipe based thermal and PV/T (photovoltaic and thermal systems) solar collector that can be used asÂan energy-active building envelope material. Energy, 2016, 108, 148-154.	4.5	117
112	CFD modelling of a two-phase closed thermosyphon charged with R134a and R404a. Applied Thermal Engineering, 2015, 78, 482-490.	3.0	145
113	Experimental and numerical investigation of an air-to-water heat pipe-based heat exchanger. Applied Thermal Engineering, 2015, 78, 339-350.	3.0	46
114	Heat pipe oven for optical crystals. Instruments and Experimental Techniques, 2015, 58, 302-305.	0.1	1
115	Heat pipe based thermal management systems for energy-efficient data centres. Energy, 2014, 77, 265-270.	4.5	58
116	Experimental and analytical performance investigation of air to air two phase closed thermosyphon based heat exchangers. Energy, 2014, 77, 82-87.	4.5	58
117	Modelling of the thermal behaviour of heat pipes. WIT Transactions on Engineering Sciences, 2014, , .	0.0	6
118	CFD simulation and analysis of a gas to water two-phase closed thermosyphon-based heat exchanger. WIT Transactions on Engineering Sciences, 2014, , .	0.0	0
119	A naturally aspirated convector for domestic heating application with low water temperature sources. Energy and Buildings, 2013, 67, 187-194.	3.1	11
120	Experimental investigation of an inclined-condenser wickless heat pipe charged with water and an ethanolâ€“water azeotropic mixture. Energy, 2013, 61, 139-147.	4.5	47
121	Numerical modelling of the temperature distribution in a two-phase closed thermosyphon. Applied Thermal Engineering, 2013, 60, 122-131.	3.0	203
122	Analysis and simulation of continuous food frying processes. Applied Thermal Engineering, 2013, 53, 332-339.	3.0	24
123	Thermal performance characteristics of a wraparound loop heat pipe (WLHP) charged with R134A. Energy, 2013, 61, 128-138.	4.5	44
124	A novel thermal probe design for the measurement of energy influx in RF remote plasma. Vacuum, 2012, 86, 1898-1904.	1.6	2
125	Modelling of energy flows in potato crisp frying processes. Applied Energy, 2012, 89, 81-88.	5.1	19
126	Experimental investigation of a thermosyphon based heat exchanger used in energy efficient air handling units. Energy, 2012, 39, 82-89.	4.5	78

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127	Heat pipe-based radiator for low grade geothermal energy conversion in domestic space heating. Simulation Modelling Practice and Theory, 2011, 19, 1154-1163.	2.2	40
128	Experimental investigation of small diameter two-phase closed thermosyphons charged with water, FC-84, FC-77 and FC-3283. Applied Thermal Engineering, 2010, 30, 201-211.	3.0	174
129	Experimental investigation of wraparound loop heat pipe heat exchanger used in energy efficient air handling units. Energy, 2010, 35, 4592-4599.	4.5	76
130	Heat pipes as an extra measure to eliminate radioactive contamination in nuclear seawater desalination. Desalination and Water Treatment, 2010, 13, 82-87.	1.0	12
131	Economic assessment of the benefits of wraparound heat pipes in ventilation processes for hot and humid climates. International Journal of Low-Carbon Technologies, 2009, 4, 52-60.	1.2	33
132	Film boiling heat transfer and vapour film collapse on spheres, cylinders and plane surfaces. Nuclear Engineering and Design, 2009, 239, 1885-1900.	0.8	36
133	Modelling and simulation techniques for forced convection heat transfer in heat sinks with rectangular fins. Simulation Modelling Practice and Theory, 2009, 17, 871-882.	2.2	16
134	Potential of heat pipe technology in nuclear seawater desalination. Desalination, 2009, 249, 1055-1061.	4.0	44
135	An Experimental Study of Small-Diameter Wickless Heat Pipes Operating in the Temperature Range 200Â°C to 450Â°C. Heat Transfer Engineering, 2009, 30, 1041-1048.	1.2	28
136	Forced Convection Film Boiling on Spherical and Plane Geometries. Chemical Engineering Research and Design, 2002, 80, 284-289.	2.7	12
137	Dynamic simulator for the miniature neutron source reactor. Progress in Nuclear Energy, 2000, 36, 379-385.	1.3	5
138	Heat Pipe Based Heat Exchanger for Clean Yerba Mate Drying Process. , 0, , .		0