

# Hussam Jouhara

## List of Publications by Year in descending order

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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	Waste heat recovery technologies and applications. Thermal Science and Engineering Progress, 2018, 6, 268-289.	1.3	606
2	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
3	Heat pipe based systems - Advances and applications. Energy, 2017, 128, 729-754.	4.5	363
4	Potential of pyrolysis processes in the waste management sector. Thermal Science and Engineering Progress, 2017, 3, 171-197.	1.3	335
5	Use of pyrolytic gas from waste tire as a fuel: A review. Energy, 2017, 134, 1121-1131.	4.5	226
6	Numerical modelling of the temperature distribution in a two-phase closed thermosyphon. Applied Thermal Engineering, 2013, 60, 122-131.	3.0	203
7	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
8	Thermoelectric generator (TEG) technologies and applications. International Journal of Thermofluids, 2021, 9, 100063.	4.0	170
9	Trends of European research and development in district heating technologies. Renewable and Sustainable Energy Reviews, 2017, 68, 1183-1192.	8.2	157
10	Energy efficiency in industry: EU and national policies in Italy and the UK. Energy, 2019, 172, 255-269.	4.5	155
11	Latent thermal energy storage technologies and applications: A review. International Journal of Thermofluids, 2020, 5-6, 100039.	4.0	148
12	CFD modelling of a two-phase closed thermosyphon charged with R134a and R404a. Applied Thermal Engineering, 2015, 78, 482-490.	3.0	145
13	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
14	Municipal waste management systems for domestic use. Energy, 2017, 139, 485-506.	4.5	128
15	Heat pump placement, connection and operational modes in European district heating. Energy and Buildings, 2018, 166, 122-144.	3.1	121
16	Hydrophilic and hydrophobic materials and their applications. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2018, 40, 2686-2725.	1.2	119
17	The performance of a novel flat heat pipe based thermal and PV/T (photovoltaic and thermal systems) solar collector that can be used as an energy-active building envelope material. Energy, 2016, 108, 148-154.	4.5	117
18	Surface water filtration using granular media and membranes: A review. Science of the Total Environment, 2018, 639, 1268-1282.	3.9	117

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19	Recent advances and applications of solar photovoltaics and thermal technologies. <i>Energy</i> , 2020, 207, 118254.	4.5	109
20	The removal of tetracycline from water using biochar produced from agricultural discarded material. <i>Science of the Total Environment</i> , 2021, 751, 141755.	3.9	107
21	Editorial: Industrial waste heat recovery. <i>Energy</i> , 2018, 160, 1-2.	4.5	106
22	Removal of methylene blue from aqueous solutions by biochar prepared from the pyrolysis of mixed municipal discarded material. <i>Science of the Total Environment</i> , 2020, 714, 136832.	3.9	105
23	Three-dimensional CFD simulation of geyser boiling in a two-phase closed thermosyphon. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 16463-16476.	3.8	97
24	Applications and thermal management of rechargeable batteries for industrial applications. <i>Energy</i> , 2019, 170, 849-861.	4.5	92
25	Pyrolysis of domestic based feedstock at temperatures up to 300°C. <i>Thermal Science and Engineering Progress</i> , 2018, 5, 117-143.	1.3	89
26	Energy efficiency enhancement and waste heat recovery in industrial processes by means of the heat pipe technology: Case of the ceramic industry. <i>Energy</i> , 2018, 158, 656-665.	4.5	88
27	Energy efficiency in the industrial sector in the EU, Slovenia, and Spain. <i>Energy</i> , 2020, 208, 118398.	4.5	80
28	Experimental investigation of a thermosyphon based heat exchanger used in energy efficient air handling units. <i>Energy</i> , 2012, 39, 82-89.	4.5	78
29	Review of ventilation strategies to reduce the risk of disease transmission in high occupancy buildings. <i>International Journal of Thermofluids</i> , 2020, 7-8, 100045.	4.0	77
30	Experimental investigation of wraparound loop heat pipe heat exchanger used in energy efficient air handling units. <i>Energy</i> , 2010, 35, 4592-4599.	4.5	76
31	Removal of copper ions from aqueous solution using low temperature biochar derived from the pyrolysis of municipal solid waste. <i>Science of the Total Environment</i> , 2019, 673, 777-789.	3.9	74
32	Experimental and theoretical investigation of a flat heat pipe heat exchanger for waste heat recovery in the steel industry. <i>Energy</i> , 2017, 141, 1928-1939.	4.5	73
33	Three-dimensional numerical model of heat losses from district heating network pre-insulated pipes buried in the ground. <i>Energy</i> , 2016, 108, 172-184.	4.5	71
34	Experimental and numerical investigation of a cross flow air-to-water heat pipe-based heat exchanger used in waste heat recovery. <i>International Journal of Heat and Mass Transfer</i> , 2016, 102, 1267-1281.	2.5	70
35	Potentials of pyrolysis processes in the waste management sector. <i>Energy Procedia</i> , 2017, 123, 387-394.	1.8	68
36	The performance of a heat pipe based solar PV/T roof collector and its potential contribution in district heating applications. <i>Energy</i> , 2017, 136, 117-125.	4.5	67

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37	Waste Heat Recovery in the EU industry and proposed new technologies. <i>Energy Procedia</i> , 2019, 161, 489-496.	1.8	64
38	Development and validation of a TRNSYS type to simulate heat pipe heat exchangers in transient applications of waste heat recovery. <i>International Journal of Thermofluids</i> , 2021, 9, 100056.	4.0	64
39	Investigation on a full-scale heat pipe heat exchanger in the ceramics industry for waste heat recovery. <i>Energy</i> , 2021, 223, 120037.	4.5	60
40	Heat pipe based thermal management systems for energy-efficient data centres. <i>Energy</i> , 2014, 77, 265-270.	4.5	58
41	Experimental and analytical performance investigation of air to air two phase closed thermosyphon based heat exchangers. <i>Energy</i> , 2014, 77, 82-87.	4.5	58
42	An investigation into the use of the heat pipe technology in thermal energy storage heat exchangers. <i>Energy</i> , 2017, 136, 163-172.	4.5	57
43	Experimental investigation of a radiative heat pipe for waste heat recovery in a ceramics kiln. <i>Energy</i> , 2019, 170, 636-651.	4.5	54
44	Numerical modeling of a two-phase twin-screw expander for Trilateral Flash Cycle applications. <i>International Journal of Refrigeration</i> , 2018, 88, 248-259.	1.8	49
45	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. <i>Energy</i> , 2020, 208, 118325.	4.5	48
46	Experimental investigation of an inclined-condenser wickless heat pipe charged with water and an ethanol-water azeotropic mixture. <i>Energy</i> , 2013, 61, 139-147.	4.5	47
47	Experimental and numerical investigation of an air-to-water heat pipe-based heat exchanger. <i>Applied Thermal Engineering</i> , 2015, 78, 339-350.	3.0	46
48	Investigation, development and experimental analyses of a heat pipe based battery thermal management system. <i>International Journal of Thermofluids</i> , 2020, 1-2, 100004.	4.0	45
49	Potential of heat pipe technology in nuclear seawater desalination. <i>Desalination</i> , 2009, 249, 1055-1061.	4.0	44
50	Thermal performance characteristics of a wraparound loop heat pipe (WLHP) charged with R134A. <i>Energy</i> , 2013, 61, 128-138.	4.5	44
51	Heat pipe-based radiator for low grade geothermal energy conversion in domestic space heating. <i>Simulation Modelling Practice and Theory</i> , 2011, 19, 1154-1163.	2.2	40
52	Heat pipe based municipal waste treatment unit for home energy recovery. <i>Energy</i> , 2017, 139, 1210-1230.	4.5	39
53	Experimental and theoretical investigation on a radiative flat heat pipe heat exchanger. <i>Energy</i> , 2019, 174, 972-984.	4.5	39
54	Thermal management systems based on heat pipes for batteries in EVs/HEVs. <i>Journal of Energy Storage</i> , 2022, 51, 104384.	3.9	38

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55	Condensation, evaporation and boiling of falling films in wickless heat pipes (two-phase closed) Tj ETQq1 1 0.784314 rgBT /Overlock 100001.	4.0	37
56	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
57	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
58	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
59	Evaluation of waste heat recovery technologies for the cement industry. International Journal of Thermofluids, 2020, 7-8, 100040.	4.0	36
60	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
61	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
62	Computational study and experimental validation of a solar photovoltaics and thermal technology. Renewable Energy, 2019, 143, 1348-1356.	4.3	34
63	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
64	The trilemma of waste-to-energy: A multi-purpose solution. Energy Policy, 2019, 129, 636-645.	4.2	33
65	Renewables for district heating: The case of Lithuania. Energy, 2020, 211, 119064.	4.5	33
66	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
67	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
68	Waste tyre pyrolysis – Impact of the process and its products on the environment. Thermal Science and Engineering Progress, 2020, 20, 100690.	1.3	29
69	An Experimental Study of Small-Diameter Wickless Heat Pipes Operating in the Temperature Range 200°C to 450°C. Heat Transfer Engineering, 2009, 30, 1041-1048.	1.2	28
70	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
71	Analysis of energy demand in a residential building using TRNSYS. Energy, 2022, 254, 124357.	4.5	28
72	Design of radial turbomachinery for supercritical CO <sub>2</sub> systems using theoretical and numerical CFD methodologies. Energy Procedia, 2017, 123, 313-320.	1.8	27

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73	Annual performance analysis of the PV/T system for the heat demand of a low-energy single-family building. <i>Renewable Energy</i> , 2021, 163, 1923-1931.	4.3	26
74	Combined Effects of Gamma Irradiation and Blanching Process on Acrylamide Content in Fried Potato Strips. <i>International Journal of Food Properties</i> , 2016, 19, 1447-1454.	1.3	25
75	Disposal of very low-level radioactive waste: Lithuanian case on the approach and long-term safety aspects. <i>Science of the Total Environment</i> , 2019, 667, 464-474.	3.9	25
76	Experimental investigation and analytical prediction of a multi-channel flat heat pipe thermal performance. <i>International Journal of Thermofluids</i> , 2020, 5-6, 100038.	4.0	25
77	Analysis and simulation of continuous food frying processes. <i>Applied Thermal Engineering</i> , 2013, 53, 332-339.	3.0	24
78	Investigation of warm gas clean-up of biofuel flue and producer gas using electrostatic precipitator. <i>Energy</i> , 2018, 143, 943-949.	4.5	23
79	Comprehensive numerical model for the analysis of potential heat recovery solutions in a ceramic industry. <i>International Journal of Thermofluids</i> , 2021, 10, 100080.	4.0	23
80	Numerical simulation of thermal and residual stress fields induced by lined pipe welding. <i>Thermal Science and Engineering Progress</i> , 2018, 5, 1-14.	1.3	22
81	Ultra-stable silica/exfoliated graphite encapsulated n-hexacosane phase change nanocomposite: A promising material for thermal energy storage applications. <i>Energy</i> , 2022, 250, 123729.	4.5	22
82	Experimental and theoretical investigation of the influence of heat transfer rate on the thermal performance of a multi-channel flat heat pipe. <i>Energy</i> , 2022, 250, 123804.	4.5	22
83	Evaluation of organic coatings for corrosion protection of condensing economizers. <i>Procedia Structural Integrity</i> , 2018, 10, 295-302.	0.3	21
84	Energy Performance Analysis of a PV/T System Coupled with Domestic Hot Water System. <i>ChemEngineering</i> , 2020, 4, 22.	1.0	21
85	Experimental and theoretical investigation of the performance of an air to water multi-pass heat pipe-based heat exchanger. <i>Energy</i> , 2021, 219, 119624.	4.5	20
86	Modelling of energy flows in potato crisp frying processes. <i>Applied Energy</i> , 2012, 89, 81-88.	5.1	19
87	Modelling and simulation techniques for forced convection heat transfer in heat sinks with rectangular fins. <i>Simulation Modelling Practice and Theory</i> , 2009, 17, 871-882.	2.2	16
88	Experimental investigation on a flat heat pipe heat exchanger for waste heat recovery in steel industry. <i>Energy Procedia</i> , 2017, 123, 329-334.	1.8	16
89	Mechanical response of a lined pipe under dynamic impact. <i>Engineering Failure Analysis</i> , 2018, 88, 35-53.	1.8	15
90	Temperature and energy performance of open refrigerated display cabinets using heat pipe shelves. <i>Energy Procedia</i> , 2017, 123, 273-280.	1.8	14

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91	Design criteria for coatings in next generation condensing economizers. Energy Procedia, 2019, 161, 412-420.	1.8	14
92	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
93	Investigation and Computational Modelling of Variable TEG Leg Geometries. ChemEngineering, 2021, 5, 45.	1.0	14
94	Two-phase chamber modeling of a twin-screw expander for Trilateral Flash Cycle applications. Energy Procedia, 2017, 129, 347-354.	1.8	13
95	Experimental investigation on the chemical characterisation of pyrolytic products of discarded food at temperatures up to 300°C. Thermal Science and Engineering Progress, 2018, 5, 579-588.	1.3	13
96	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
97	Forced Convection Film Boiling on Spherical and Plane Geometries. Chemical Engineering Research and Design, 2002, 80, 284-289.	2.7	12
98	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
99	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
100	A review on waste heat recovery from exhaust in the ceramics industry. E3S Web of Conferences, 2017, 22, 00034.	0.2	12
101	Comparative assessment of innovative methods to improve solar chimney power plant efficiency. Sustainable Energy Technologies and Assessments, 2022, 49, 101807.	1.7	12
102	Hydrogen sulfide removal from waste tyre pyrolysis gas by inorganics. International Journal of Hydrogen Energy, 2024, 52, 785-799.	3.8	12
103	A naturally aspirated convector for domestic heating application with low water temperature sources. Energy and Buildings, 2013, 67, 187-194.	3.1	11
104	Analytical modelling of a photovoltaics-thermal technology combined with thermal and electrical storage systems. Renewable Energy, 2021, 165, 350-358.	4.3	11
105	Techno-economic assessment of a rotary kiln shell radiation waste heat recovery system. Thermal Science and Engineering Progress, 2021, 23, 100858.	1.3	11
106	Numerical study of water flow rates in power plant cooling systems. Thermal Science and Engineering Progress, 2018, 7, 27-32.	1.3	10
107	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
108	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

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109	Performance evaluation of a multi-pass air-to-water thermosyphon-based heat exchanger. Energy, 2017, 139, 1243-1260.	4.5	9
110	Experimental and numerical thermo-mechanical analysis of welding in a lined pipe. Journal of Manufacturing Processes, 2018, 32, 857-872.	2.8	7
111	Experimental analysis of waste tyres as a sustainable source of energy. E3S Web of Conferences, 2019, 100, 00012.	0.2	6
112	Modelling of the thermal behaviour of heat pipes. WIT Transactions on Engineering Sciences, 2014, , .	0.0	6
113	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
114	Dynamic simulator for the miniature neutron source reactor. Progress in Nuclear Energy, 2000, 36, 379-385.	1.3	5
115	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
116	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
117	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
118	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
119	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
120	4.3 Heat Pipes. , 2018, , 70-97.		4
121	Heat recovery at high temperature by molten salts for high temperature processing industries. AIP Conference Proceedings, 2019, , .	0.3	4
122	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
123	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
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	Productsâ€™ composition of food waste low-temperature slow pyrolysis. E3S Web of Conferences, 2018, 44, 00023.	0.2	2
126	Air-to-air heat pump: review of recent advances and future potential. E3S Web of Conferences, 2019, 116, 00074.	0.2	2



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127	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
128	Ultrasonic Technique for Measuring the Mean Flow Velocity behind a Throttle: A Metrological Analysis. Thermal Science and Engineering Progress, 2022, , 101402.	1.3	2
129	Heat pipe oven for optical crystals. Instruments and Experimental Techniques, 2015, 58, 302-305.	0.1	1
130	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
131	Acid emissions monitoring needs in ceramic tile industry: challenges derived from new policy trends. E3S Web of Conferences, 2017, 22, 00026.	0.2	1
132	Heat recovery at high temperature by molten salts for high temperature processing industries. AIP Conference Proceedings, 2019, , .	0.3	1
133	The simulation and analysis of wood fuel low-grade heat. Energy, 2021, 218, 119501.	4.5	1
134	Dual Media Thermocline (DMT) techno-economic interest for heat storage on the range 80Å°C â€“600Å°C â€“ The SMARTREC project. E3S Web of Conferences, 2019, 116, 00065.	0.2	0
135	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
136	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
137	Heat Pipe Based Heat Exchanger for Clean Yerba Mate Drying Process. , 0, , .		0
138	Cross-Cutting Technologies for Developing Innovative BIPV Systems in the Framework of the PVadapt Project. Proceedings (mdpi), 2020, 65, .	0.2	0