

Brian Elmegaard

List of Publications by Year in descending order

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84
papers

3,500
citations

94269

37
h-index

149479

56
g-index

86
all docs

86
docs citations

86
times ranked

2716
citing authors

#	ARTICLE	IF	CITATIONS
1	Condensation heat transfer and pressure drop characteristics of zeotropic mixtures of R134a/R245fa in plate heat exchangers. <i>International Journal of Heat and Mass Transfer</i> , 2021, 164, 120577.	2.5	32
2	Condensation heat transfer and pressure drop correlations in plate heat exchangers for heat pump and organic Rankine cycle systems. <i>Applied Thermal Engineering</i> , 2021, 183, 116231.	3.0	24
3	Identification of optimal measurement points for energy monitoring of industrial processes: The case of milk powder production. <i>Journal of Cleaner Production</i> , 2021, 284, 124634.	4.6	3
4	Steady state behavior of a booster heat pump for hot water supply in ultra-low temperature district heating network. <i>Energy</i> , 2021, 237, 121528.	4.5	16
5	Analysis of energy integration opportunities in the retrofit of a milk powder production plant using the Bridge framework. <i>Journal of Cleaner Production</i> , 2021, 328, 129402.	4.6	1
6	Further development of the RDRA method for the optimal acquisition of data in process integration retrofit projects. <i>Journal of Cleaner Production</i> , 2021, 329, 129443.	4.6	0
7	Economic feasibility of ultra-low temperature district heating systems in newly built areas supplied by renewable energy. <i>Energy</i> , 2020, 191, 116496.	4.5	37
8	Drinking water supply as low-temperature source in the district heating system: A case study for the city of Copenhagen. <i>Energy</i> , 2020, 194, 116773.	4.5	9
9	Combined provision of primary frequency regulation from Vehicle-to-Grid (V2G) capable electric vehicles and community-scale heat pump. <i>Sustainable Energy, Grids and Networks</i> , 2020, 23, 100382.	2.3	23
10	Comparison of COP estimation methods for large-scale heat pumps used in energy planning. <i>Energy</i> , 2020, 205, 117994.	4.5	15
11	Optimizing control of two-stage ammonia heat pump for fast regulation of power uptake. <i>Applied Energy</i> , 2020, 271, 115126.	5.1	25
12	Optimal Design and Dispatch of Electrically Driven Heat Pumps and Chillers for a New Development Area. <i>Environmental and Climate Technologies</i> , 2020, 24, 470-482.	0.5	6
13	A comparative assessment of electrification strategies for industrial sites: Case of milk powder production. <i>Applied Energy</i> , 2019, 250, 1383-1401.	5.1	42
14	Thermodynamic competitiveness of high temperature vapor compression heat pumps for boiler substitution. <i>Energy</i> , 2019, 182, 110-121.	4.5	42
15	Performance of heat pumps using pure and mixed refrigerants with maldistribution effects in plate heat exchanger evaporators. <i>International Journal of Refrigeration</i> , 2019, 104, 390-403.	1.8	9
16	Assessment of a combination of three heat sources for heat pumps to supply district heating. <i>Energy</i> , 2019, 176, 156-170.	4.5	38
17	Condensation heat transfer and pressure drop characteristics of R134a, R1234ze(E), R245fa and R1233zd(E) in a plate heat exchanger. <i>International Journal of Heat and Mass Transfer</i> , 2019, 128, 136-149.	2.5	61
18	Heat pump working fluid selection – economic and thermodynamic comparison of criteria and boundary conditions. <i>International Journal of Refrigeration</i> , 2019, 98, 500-513.	1.8	36

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19	Analysis of temperature glide matching of heat pumps with zeotropic working fluid mixtures for different temperature glides. Energy, 2018, 153, 650-660.	4.5	77
20	Dynamic exergoeconomic analysis of a heat pump system used for ancillary services in an integrated energy system. Energy, 2018, 152, 154-165.	4.5	31
21	Spatiotemporal and economic analysis of industrial excess heat as a resource for district heating. Energy, 2018, 151, 715-728.	4.5	38
22	Performance of a reversible heat pump/organic Rankine cycle unit coupled with a passive house to get a positive energy building. Journal of Building Performance Simulation, 2018, 11, 19-35.	1.0	15
23	Thermodynamic comparison of three small-scale gas liquefaction systems. Applied Thermal Engineering, 2018, 128, 712-724.	3.0	37
24	Allocation of investment costs for large-scale heat pumps supplying district heating. Energy Procedia, 2018, 147, 358-367.	1.8	28
25	Design of centrifugal compressors for heat pump systems. Applied Energy, 2018, 232, 139-156.	5.1	50
26	Reverse Engineering of Working Fluid Selection for Industrial Heat Pump Based on Monte Carlo Sampling and Uncertainty Analysis. Industrial & Engineering Chemistry Research, 2018, 57, 13463-13477.	1.8	12
27	Deriving guidelines for the design of plate evaporators in heat pumps using zeotropic mixtures. Energy, 2018, 156, 492-508.	4.5	6
28	Evaluation of energy saving potentials, costs and uncertainties in the chemical industry in Germany. Applied Energy, 2018, 228, 2037-2049.	5.1	20
29	Identification and Evaluation of Cases for Excess Heat Utilisation Using GIS. Energies, 2018, 11, 762.	1.6	9
30	Energy, exergy and advanced exergy analysis of a milk processing factory. Energy, 2018, 162, 576-592.	4.5	72
31	Design of serially connected district heating heat pumps utilising a geothermal heat source. Energy, 2017, 137, 865-877.	4.5	29
32	Continuous versus pulsating flow boiling. Experimental comparison, visualization, and statistical analysis. Science and Technology for the Built Environment, 2017, 23, 983-996.	0.8	4
33	Performance of ultra low temperature district heating systems with utility plant and booster heat pumps. Energy, 2017, 137, 544-555.	4.5	62
34	Industrial excess heat for district heating in Denmark. Applied Energy, 2017, 205, 991-1001.	5.1	80
35	Two Thermoeconomic Diagnosis Methods Applied to Representative Operating Data of a Commercial Transcritical Refrigeration Plant. Entropy, 2017, 19, 69.	1.1	6
36	Synthesis of preliminary system designs for offshore oil and gas production. Computer Aided Chemical Engineering, 2016, , 1419-1424.	0.3	1

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37	Process and Economic Optimisation of a Milk Processing Plant with Solar Thermal Energy. Computer Aided Chemical Engineering, 2016, , 1347-1352.	0.3	9
38	Energy efficiency measures for offshore oil and gas platforms. Energy, 2016, 117, 325-340.	4.5	58
39	Advanced exergy analysis of a R744 booster refrigeration system with parallel compression. Energy, 2016, 107, 562-571.	4.5	73
40	Assessment of thermodynamic models for the design, analysis and optimisation of gas liquefaction systems. Applied Energy, 2016, 183, 43-60.	5.1	15
41	Integration of large-scale heat pumps in the district heating systems of Greater Copenhagen. Energy, 2016, 107, 321-334.	4.5	105
42	Energy and exergy analyses of the Danish industry sector. Applied Energy, 2016, 184, 1447-1459.	5.1	67
43	CO2-mitigation options for the offshore oil and gas sector. Applied Energy, 2016, 161, 673-694.	5.1	48
44	Lowering district heating temperatures – Impact to system performance in current and future Danish energy scenarios. Energy, 2016, 94, 273-291.	4.5	72
45	Energy and environmental performance assessment of R744 booster supermarket refrigeration systems operating in warm climates. International Journal of Refrigeration, 2016, 64, 61-79.	1.8	136
46	Integration of space heating and hot water supply in low temperature district heating. Energy and Buildings, 2016, 124, 255-264.	3.1	67
47	Technical and economic working domains of industrial heat pumps: Part 2 – Ammonia-water hybrid absorption-compression heat pumps. International Journal of Refrigeration, 2015, 55, 183-200.	1.8	54
48	Maldistribution in air–water heat pump evaporators. Part 1: Effects on evaporator, heat pump and system level. International Journal of Refrigeration, 2015, 50, 207-216.	1.8	11
49	Maldistribution in air–water heat pump evaporators. Part 2: Economic analysis of counteracting technologies. International Journal of Refrigeration, 2015, 50, 217-226.	1.8	5
50	On the development of high temperature ammonia–water hybrid absorption–compression heat pumps. International Journal of Refrigeration, 2015, 58, 79-89.	1.8	47
51	Exergoeconomic optimization of an ammonia–water hybrid absorption–compression heat pump for heat supply in a spray-drying facility. International Journal of Energy and Environmental Engineering, 2015, 6, 195-211.	1.3	16
52	Technical and economic working domains of industrial heat pumps: Part 1 – Single stage vapour compression heat pumps. International Journal of Refrigeration, 2015, 55, 168-182.	1.8	60
53	Climate effect of an integrated wheat production and bioenergy system with Low Temperature Circulating Fluidized Bed gasifier. Applied Energy, 2015, 160, 511-520.	5.1	13
54	Formulation and validation of a two-dimensional steady-state model of desiccant wheels. Science and Technology for the Built Environment, 2015, 21, 300-311.	0.8	2

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55	Thermodynamic analysis of an upstream petroleum plant operated on a mature field. <i>Energy</i> , 2014, 68, 454-469.	4.5	46
56	Comparison of linear, mixed integer and non-linear programming methods in energy system dispatch modelling. <i>Energy</i> , 2014, 74, 109-118.	4.5	85
57	Exergy destruction and losses on four North Sea offshore platforms: A comparative study of the oil and gas processing plants. <i>Energy</i> , 2014, 74, 45-58.	4.5	44
58	Life performance of oil and gas platforms: Site integration and thermodynamic evaluation. <i>Energy</i> , 2014, 73, 282-301.	4.5	34
59	Heat pumps in combined heat and power systems. <i>Energy</i> , 2014, 76, 989-1000.	4.5	66
60	Oil and gas platforms with steam bottoming cycles: System integration and thermoenviromonic evaluation. <i>Applied Energy</i> , 2014, 131, 222-237.	5.1	24
61	On the definition of exergy efficiencies for petroleum systems: Application to offshore oil and gas processing. <i>Energy</i> , 2014, 73, 264-281.	4.5	43
62	Thermodynamic Performance Indicators for Offshore Oil and Gas Processing: Application to Four North Sea Facilities. <i>Oil and Gas Facilities</i> , 2014, 3, 051-063.	0.4	5
63	Exergetic assessment of energy systems on North Sea oil and gas platforms. <i>Energy</i> , 2013, 62, 23-36.	4.5	60
64	Comparison of fin-and-tube interlaced and face split evaporators with flow maldistribution and compensation. <i>International Journal of Refrigeration</i> , 2013, 36, 203-214.	1.8	13
65	Decentralized combined heat and power production by two-stage biomass gasification and solid oxide fuel cells. <i>Energy</i> , 2013, 58, 527-537.	4.5	69
66	Multi-objective optimization of organic Rankine cycles for waste heat recovery: Application in an offshore platform. <i>Energy</i> , 2013, 58, 538-549.	4.5	170
67	Numerical model for thermoeconomic diagnosis in commercial transcritical/subcritical booster refrigeration systems. <i>Energy Conversion and Management</i> , 2012, 60, 161-169.	4.4	18
68	Exergy analysis and optimization of a biomass gasification, solid oxide fuel cell and micro gas turbine hybrid system. <i>Energy</i> , 2011, 36, 4740-4752.	4.5	134
69	Thermodynamic analysis of small-scale dimethyl ether (DME) and methanol plants based on the efficient two-stage gasifier. <i>Energy</i> , 2011, 36, 5805-5814.	4.5	65
70	Performance of residential air-conditioning systems with flow maldistribution in fin-and-tube evaporators. <i>International Journal of Refrigeration</i> , 2011, 34, 696-706.	1.8	46
71	Analysis of single blow effectiveness in non-uniform parallel plate regenerators. <i>International Journal of Heat and Mass Transfer</i> , 2011, 54, 4746-4751.	2.5	7
72	Compensation of flow maldistribution in fin-and-tube evaporators for residential air-conditioning. <i>International Journal of Refrigeration</i> , 2011, 34, 1230-1237.	1.8	22

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73	Technoeconomic analysis of a methanol plant based on gasification of biomass and electrolysis of water. <i>Energy</i> , 2010, 35, 2338-2347.	4.5	132
74	Modeling of parallel-plate regenerators with non-uniform plate distributions. <i>International Journal of Heat and Mass Transfer</i> , 2010, 53, 5065-5072.	2.5	16
75	Modelling distribution of evaporating CO ₂ in parallel minichannels. <i>International Journal of Refrigeration</i> , 2010, 33, 1086-1094.	1.8	31
76	Technoeconomic analysis of a low CO ₂ emission dimethyl ether (DME) plant based on gasification of torrefied biomass. <i>Energy</i> , 2010, 35, 4831-4842.	4.5	101
77	Thermodynamic simulation analysis of a multifuel CHP plant basing on the technological diagram of AvedÅre unit 2. <i>Archives of Thermodynamics</i> , 2010, 31, 79-93.	1.0	8
78	Optimal operation strategies of compressed air energy storage (CAES) on electricity spot markets with fluctuating prices. <i>Applied Thermal Engineering</i> , 2009, 29, 799-806.	3.0	223
79	Modelling refrigerant distribution in microchannel evaporators. <i>International Journal of Refrigeration</i> , 2009, 32, 1736-1743.	1.8	43
80	Methodologies for predicting the part-load performance of aero-derivative gas turbines. <i>Energy</i> , 2009, 34, 1484-1492.	4.5	68
81	Comparison between a 1D and a 2D numerical model of an active magnetic regenerative refrigerator. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 105002.	1.3	44
82	Cogeneration from poultry industry wastes: Indirectly fired gas turbine application. <i>Energy</i> , 2006, 31, 1417-1436.	4.5	21
83	Regenerative Gas Turbines With Divided Expansion. , 2004, , .		2
84	Analysis of Indirectly Fired Gas Turbine for Wet Biomass Fuels Based on Commercial Micro Gas Turbine Data. , 2002, , .		6