Jiri Jaromir Klemes

List of Publications by Year in descending order

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	9786	22166
20,556	73	113
citations	h-index	g-index
523	523	13996
docs citations	times ranked	citing authors
	citations 523	20,556 73 citations h-index 523 523

#	Article	IF	CITATIONS
1	A Review of Footprint analysis tools for monitoring impacts on sustainability. Journal of Cleaner Production, 2012, 34, 9-20.	9.3	682
2	Minimising the present and future plastic waste, energy and environmental footprints related to COVID-19. Renewable and Sustainable Energy Reviews, 2020, 127, 109883.	16.4	634
3	Impacts of COVID-19 on energy demand and consumption: Challenges, lessons and emerging opportunities. Applied Energy, 2021, 285, 116441.	10.1	339
4	Forty years of Heat Integration: Pinch Analysis (PA) and Mathematical Programming (MP). Current Opinion in Chemical Engineering, 2013, 2, 461-474.	7.8	317
5	Integrating waste and renewable energy to reduce the carbon footprint of locally integrated energy sectors. Energy, 2008, 33, 1489-1497.	8.8	298
6	The Environmental Performance Strategy Map: an integrated LCA approach to support the strategic decision-making process. Journal of Cleaner Production, 2009, 17, 900-906.	9.3	287
7	Cleaner energy for sustainable future. Journal of Cleaner Production, 2009, 17, 889-895.	9.3	281
8	A review on air emissions assessment: Transportation. Journal of Cleaner Production, 2018, 194, 673-684.	9.3	266
9	Reducing greenhouse gasses emissions by fostering the deployment of alternative raw materials and energy sources in the cleaner cement manufacturing process. Journal of Cleaner Production, 2016, 136, 119-132.	9.3	257
10	New directions in the implementation of Pinch Methodology (PM). Renewable and Sustainable Energy Reviews, 2018, 98, 439-468.	16.4	222
11	Cost estimation and energy price forecasts for economic evaluation of retrofit projects. Applied Thermal Engineering, 2003, 23, 1819-1835.	6.0	215
12	The energy and environmental footprints of COVID-19 fighting measures – PPE, disinfection, supply chains. Energy, 2020, 211, 118701.	8.8	194
13	A review of cleaner intensification technologies in biodiesel production. Journal of Cleaner Production, 2017, 146, 181-193.	9.3	193
14	The characterisation and treatment of food waste for improvement of biogas production during anaerobic digestion – A review. Journal of Cleaner Production, 2018, 172, 1545-1558.	9.3	184
15	Recent developments in Process Integration. Chemical Engineering Research and Design, 2013, 91, 2037-2053.	5.6	180
16	Total footprints-based multi-criteria optimisation of regional biomass energy supply chains. Energy, 2012, 44, 135-145.	8.8	179
17	Mechanisms and kinetics of CO 2 hydrogenation to value-added products: A detailed review on current status and future trends. Renewable and Sustainable Energy Reviews, 2017, 80, 1292-1311.	16.4	175
18	Integrating sustainability reporting into enterprise risk management and its relationship with business performance: A conceptual framework. Journal of Cleaner Production, 2019, 208, 415-425.	9.3	169

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19	Cleaner energy for cleaner production: modelling, simulation, optimisation and waste management. Journal of Cleaner Production, 2016, 111, 1-16.	9.3	162
20	An update of COVID-19 influence on waste management. Science of the Total Environment, 2021, 754, 142014.	8.0	153
21	A review of cleaner production methods for the manufacture ofÂmethanol. Journal of Cleaner Production, 2013, 57, 19-37.	9.3	151
22	Sustaining the low-carbon emission development in Asia and beyond: Sustainable energy, water, transportation and low-carbon emission technology. Journal of Cleaner Production, 2017, 146, 1-13.	9.3	151
23	Air pollution terrain nexus: A review considering energy generation and consumption. Renewable and Sustainable Energy Reviews, 2019, 105, 71-85.	16.4	146
24	Recent cleaner production advances in process monitoring and optimisation. Journal of Cleaner Production, 2012, 34, 1-8.	9.3	141
25	Uncovering energy use, carbon emissions and environmental burdens of pulp and paper industry: A systematic review and meta-analysis. Renewable and Sustainable Energy Reviews, 2018, 92, 823-833.	16.4	139
26	Optimisation of regional energy supply chains utilising renewables: P-graph approach. Computers and Chemical Engineering, 2010, 34, 782-792.	3.8	127
27	A process integration targeting method for hybrid power systems. Energy, 2012, 44, 6-10.	8.8	125
28	Optimal hybrid renewable energy design in autonomous system using Modified Electric System Cascade Analysis and Homer software. Energy Conversion and Management, 2016, 126, 909-922.	9.2	124
29	Photocatalytic degradation of xanthate in flotation plant tailings by TiO2/graphene nanocomposites. Chemical Engineering Journal, 2022, 431, 134104.	12.7	124
30	Integration of energy, water and environmental systems for a sustainable development. Journal of Cleaner Production, 2019, 215, 1424-1436.	9.3	122
31	A review on the global warming potential of cleaner composting and mitigation strategies. Journal of Cleaner Production, 2017, 146, 149-157.	9.3	119
32	MicroCHP: Overview of selected technologies, products and field test results. Applied Thermal Engineering, 2008, 28, 2039-2048.	6.0	118
33	Water-Energy-Carbon Emissions nexus analysis of China: An environmental input-output model-based approach. Applied Energy, 2020, 261, 114431.	10.1	116
34	Performance and emission of diesel engine fuelled by waste cooking oil methyl ester derived from palm olein using hydrodynamic cavitation. Clean Technologies and Environmental Policy, 2015, 17, 2229-2241.	4.1	115
35	Waste-to-Energy (WTE) network synthesis for Municipal Solid Waste (MSW). Energy Conversion and Management, 2014, 85, 866-874.	9.2	114
36	Selected Papers from the PRES 2003 Conference. Heat Transfer Engineering, 2005, 26, 1-3.	1.9	109

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37	Industrial water recycle/reuse. Current Opinion in Chemical Engineering, 2012, 1, 238-245.	7.8	109
38	A review on hydrogen production from hydrogen sulphide by chemical and photochemical methods. Journal of Cleaner Production, 2016, 136, 72-80.	9.3	106
39	Perspective review on Municipal Solid Waste-to-energy route: Characteristics, management strategy, and role in circular economy. Journal of Cleaner Production, 2022, 359, 131897.	9.3	103
40	Energy demand of liquefaction and regasification of natural gas and the potential of LNG for operative thermal energy storage. Renewable and Sustainable Energy Reviews, 2019, 99, 1-15.	16.4	100
41	Anatomy of sustainable business model innovation. Journal of Cleaner Production, 2020, 261, 121201.	9.3	100
42	Integration and management of renewables into Total Sites with variable supply and demand. Computers and Chemical Engineering, 2011, 35, 1815-1826.	3.8	98
43	A review of progress in renewable energy implementation in the Gulf Cooperation Council countries. Journal of Cleaner Production, 2014, 71, 168-180.	9.3	95
44	Intensification of biodiesel synthesis from waste cooking oil (Palm Olein) in a Hydrodynamic Cavitation Reactor: Effect of operating parameters on methyl ester conversion. Chemical Engineering and Processing: Process Intensification, 2015, 95, 235-240.	3.6	95
45	Circular Integration of processes, industries, and economies. Renewable and Sustainable Energy Reviews, 2019, 107, 507-515.	16.4	95
46	Conservation and improvements in water resource management: a global challenge. Journal of Cleaner Production, 2014, 77, 1-9.	9.3	93
47	Evaluation of Effective Microorganisms on home scale organic waste composting. Journal of Environmental Management, 2018, 216, 41-48.	7.8	93
48	Hydrogen production: Perspectives, separation with special emphasis on kinetics of WGS reaction: A state-of-the-art review. Journal of Industrial and Engineering Chemistry, 2017, 49, 1-25.	5.8	92
49	Advances in Process Integration research for CO2 emission reduction–ÂA review. Journal of Cleaner Production, 2017, 167, 1-13.	9.3	92
50	Time series forecasting of new cases and new deaths rate for COVID-19 using deep learning methods. Results in Physics, 2021, 27, 104495.	4.1	92
51	Neural network predictive control of a heat exchanger. Applied Thermal Engineering, 2011, 31, 2094-2100.	6.0	91
52	Waste as alternative fuel – Minimising emissions and effluents by advanced design. Chemical Engineering Research and Design, 2012, 90, 263-284.	5.6	91
53	Influence of fatty acids content in non-edible oil for biodiesel properties. Clean Technologies and Environmental Policy, 2016, 18, 473-482.	4.1	90
54	Sustainability evaluation based on the Three-dimensional Ecological Footprint and Human Development Index: A case study on the four island regions in China. Journal of Environmental Management, 2020, 265, 110509.	7.8	90

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55	Plastics: friends or foes? The circularity and plastic waste footprint. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2021, 43, 1549-1565.	2.3	90
56	Techno-economic modelling and cost functions of CO2 capture processes. Computers and Chemical Engineering, 2007, 31, 445-455.	3.8	89
57	Cross-disciplinary approaches towards smart, resilient and sustainable circular economy. Journal of Cleaner Production, 2019, 232, 1482-1491.	9.3	89
58	New hybrid meta-heuristic algorithm for reliable and cost-effective designing of photovoltaic/wind/fuel cell energy system considering load interruption probability. Journal of Cleaner Production, 2021, 278, 123406.	9.3	89
59	Total Site targeting with process specific minimum temperature difference (ΔTmin). Energy, 2012, 44, 20-28.	8.8	87
60	Anaerobic digestion of municipal solid waste: Energy and carbon emission footprint. Journal of Environmental Management, 2018, 223, 888-897.	7.8	86
61	Torrefied biomass fuels as a renewable alternative to coal in co-firing for power generation. Energy, 2020, 209, 118444.	8.8	86
62	Spatial-temporal potential exposure risk analytics and urban sustainability impacts related to COVID-19 mitigation: A perspective from car mobility behaviour. Journal of Cleaner Production, 2021, 279, 123673.	9.3	85
63	Sustainable enterprise resource planning: imperatives and research directions. Journal of Cleaner Production, 2014, 71, 139-147.	9.3	84
64	Total Site Heat Integration planning and design for industrial, urban and renewable systems. Renewable and Sustainable Energy Reviews, 2017, 68, 964-985.	16.4	84
65	Virtual carbon and water flows embodied in international trade: aÂreview on consumption-based analysis. Journal of Cleaner Production, 2017, 146, 20-28.	9.3	84
66	Optimisation on pretreatment of rubber seed (Hevea brasiliensis) oil via esterification reaction in a hydrodynamic cavitation reactor. Bioresource Technology, 2016, 199, 414-422.	9.6	83
67	Industrial implementation issues of Total Site Heat Integration. Applied Thermal Engineering, 2013, 61, 17-25.	6.0	82
68	Kinetic studies on waste cooking oil into biodiesel via hydrodynamic cavitation. Journal of Cleaner Production, 2017, 146, 47-56.	9.3	82
69	Review of recent progress of emission trading policy in China. Journal of Cleaner Production, 2022, 349, 131480.	9.3	81
70	Regional renewable energy and resource planning. Applied Energy, 2011, 88, 545-550.	10.1	80
71	Water hyacinth as a biomass: A review. Journal of Cleaner Production, 2020, 277, 122214.	9.3	80
72	Cleaner production of rubber seed oil methyl ester using a hydrodynamic cavitation: optimisation and parametric study. Journal of Cleaner Production, 2016, 136, 31-41.	9.3	79

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73	Heat transfer enhancement, intensification and optimisation in heat exchanger network retrofit and operation. Renewable and Sustainable Energy Reviews, 2020, 120, 109644.	16.4	78
74	A numerical technique for Total Site sensitivity analysis. Applied Thermal Engineering, 2012, 40, 397-408.	6.0	76
75	Process integration of hybrid power systems with energy losses considerations. Energy, 2013, 55, 38-45.	8.8	76
76	Environmental-social-economic footprints of consumption and trade in the Asia-Pacific region. Nature Communications, 2020, 11, 4490.	12.8	76
77	Advances in nanocellulose-based materials as adsorbents of heavy metals and dyes. Carbohydrate Polymers, 2021, 272, 118471.	10.2	76
78	Extended water-energy nexus contribution to environmentally-related sustainable development goals. Renewable and Sustainable Energy Reviews, 2021, 150, 111485.	16.4	75
79	Minimising emissions and energy wastage by improved industrial processes and integration of renewable energy. Journal of Cleaner Production, 2010, 18, 843-847.	9.3	74
80	Significance of environmental footprints for evaluating sustainability and security of development. Clean Technologies and Environmental Policy, 2015, 17, 2125-2141.	4.1	74
81	Heat integration retrofit analysis of a heat exchanger network of a fluid catalytic cracking plant. Applied Thermal Engineering, 2001, 21, 1449-1487.	6.0	73
82	Overview of the environmental problems in beet sugar processing: possible solutions. Journal of Cleaner Production, 2005, 13, 499-507.	9.3	73
83	Synthesis of biodiesel from non-edible (Brachychiton populneus) oil in the presence of nickel oxide nanocatalyst: Parametric and optimisation studies. Chemosphere, 2021, 278, 130469.	8.2	71
84	Valorisation of nuts biowaste: Prospects in sustainable bio(nano)catalysts and environmental applications. Journal of Cleaner Production, 2022, 347, 131220.	9.3	71
85	Synthesis of industrial utility systems: cost-effective de-carbonisation. Applied Thermal Engineering, 2005, 25, 985-1001.	6.0	70
86	Perovskite and related oxide based electrodes for water splitting. Journal of Cleaner Production, 2021, 318, 128544.	9.3	70
87	Renewable energy systems for building heating, cooling and electricity production with thermal energy storage. Renewable and Sustainable Energy Reviews, 2022, 165, 112560.	16.4	70
88	Carbon and nitrogen trade-offs in biomass energy production. Clean Technologies and Environmental Policy, 2012, 14, 389-397.	4.1	68
89	Optimal sizing of hybrid power systems using power pinch analysis. Journal of Cleaner Production, 2014, 71, 158-167.	9.3	68
90	Comparative evaluation of hybrid photovoltaic, wind, tidal and fuel cell clean system design for different regions with remote application considering cost. Journal of Cleaner Production, 2021, 283, 124207.	9.3	68

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91	Robust models for the synthesis of flexible palm oil-based regional bioenergy supply chain. Energy, 2013, 55, 68-73.	8.8	67
92	Process Integration techniques for optimal design of hybrid power systems. Applied Thermal Engineering, 2013, 61, 26-35.	6.0	67
93	Implementing Circular Economy in municipal solid waste treatment system using P-graph. Science of the Total Environment, 2020, 701, 134652.	8.0	66
94	Shifting from fossil-based economy to bio-based economy: Status quo, challenges, and prospects. Energy, 2021, 228, 120533.	8.8	66
95	Roadmap to carbon emissions neutral industrial parks: Energy, economic and environmental analysis. Energy, 2022, 238, 121732.	8.8	66
96	Enabling low-carbon emissions for sustainable development in Asia and beyond. Journal of Cleaner Production, 2018, 176, 726-735.	9.3	65
97	COVID-19 pandemics Stage II – Energy and environmental impacts of vaccination. Renewable and Sustainable Energy Reviews, 2021, 150, 111400.	16.4	65
98	Analyzing the Energy Consumption, GHG Emission, and Cost of Seawater Desalination in China. Energies, 2019, 12, 463.	3.1	63
99	<scp>COVID</scp> â€19 pandemic facilitating energy transition opportunities. International Journal of Energy Research, 2021, 45, 3457-3463.	4.5	62
100	Rules for paths construction for HENs debottlenecking. Applied Thermal Engineering, 2000, 20, 1409-1420.	6.0	61
101	Model-size reduction techniques for large-scale biomass production and supply networks. Energy, 2011, 36, 4599-4608.	8.8	61
102	Air pollution prediction using semi-experimental regression model and Adaptive Neuro-Fuzzy Inference System. Journal of Cleaner Production, 2020, 261, 121218.	9.3	60
103	Sustainable business model: A review and framework development. Clean Technologies and Environmental Policy, 2021, 23, 889-897.	4.1	59
104	An extended graphical targeting technique for direct reuse/recycle in concentration and property-based resource conservation networks. Clean Technologies and Environmental Policy, 2011, 13, 347-357.	4.1	58
105	New graphical tools for process changes via load shifting for hybrid power systems based on Power Pinch Analysis. Clean Technologies and Environmental Policy, 2013, 15, 459-472.	4.1	58
106	Process Intensification and Integration: an assessment. Clean Technologies and Environmental Policy, 2013, 15, 417-422.	4.1	58
107	Sustaining high energy efficiency in existing processes with advanced process integration technology. Applied Energy, 2013, 101, 26-32.	10.1	58
108	Utilization of microalgae for bio-jet fuel production in the aviation sector: Challenges and perspective. Renewable and Sustainable Energy Reviews, 2021, 149, 111396.	16.4	58

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109	Modelling the higher heating value of municipal solid waste for assessment of waste-to-energy potential: A sustainable case study. Journal of Cleaner Production, 2021, 287, 125575.	9.3	57
110	Post COVID-19 ENERGY sustainability and carbon emissions neutrality. Energy, 2022, 241, 122801.	8.8	57
111	Trend towards virtual and hybrid conferences may be an effective climate change mitigation strategy. Nature Communications, 2021, 12, 7324.	12.8	57
112	Methodology for maximising the use of renewables with variable availability. Energy, 2012, 44, 29-37.	8.8	56
113	A retrofit framework for Total Site heat recovery systems. Applied Energy, 2014, 135, 778-790.	10.1	55
114	Development of guidelines for the implementation of sustainable enterprise resource planning systems. Journal of Cleaner Production, 2020, 244, 118655.	9.3	55
115	Forecasting plastic waste generation and interventions for environmental hazard mitigation. Journal of Hazardous Materials, 2022, 424, 127330.	12.4	55
116	Nano- from nature to nurture: A comprehensive review on facets, trends, perspectives and sustainability of nanotechnology in the food sector. Energy, 2022, 240, 122732.	8.8	55
117	Reliability, availability and maintenance optimisation of heat exchanger networks. Applied Thermal Engineering, 2010, 30, 63-69.	6.0	53
118	Total Sites Integrating Renewables With Extended Heat Transfer and Recovery. Heat Transfer Engineering, 2010, 31, 733-741.	1.9	53
119	Centralised utility system planning for a Total Site Heat Integration network. Computers and Chemical Engineering, 2013, 57, 104-111.	3.8	53
120	Nanofluid enhanced oil recovery using induced ZnO nanocrystals by electromagnetic energy: Viscosity increment. Fuel, 2018, 233, 632-643.	6.4	53
121	Data-driven analytical framework for waste-dumping behaviour analysis to facilitate policy regulations. Waste Management, 2020, 103, 285-295.	7.4	52
122	Life cycle analysis of a solar thermal system with thermochemical storage process. Renewable Energy, 2006, 31, 537-548.	8.9	51
123	Approaches for retrofitting heat exchanger networks within processes and Total Sites. Journal of Cleaner Production, 2019, 211, 884-894.	9.3	51
124	Regional Water Resources Assessment using Water Scarcity Pinch Analysis. Resources, Conservation and Recycling, 2020, 157, 104749.	10.8	51
125	Heat exchanger network retrofit supported by extended Grid Diagram and heat path development. Applied Thermal Engineering, 2015, 89, 1033-1045.	6.0	50
126	Sustainable enterprise resource planning systems implementation: A framework development. Journal of Cleaner Production, 2018, 198, 1345-1354.	9.3	50

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127	Lead and cadmium removal from wastewater using eco-friendly biochar adsorbent derived from rice husk, wheat straw, and corncob. Cleaner Engineering and Technology, 2020, 1, 100006.	4.0	50
128	Sustainable development of energy, water and environment systems. Applied Energy, 2013, 101, 3-5.	10.1	49
129	Algorithmic targeting for Total Site Heat Integration with variable energy supply/demand. Applied Thermal Engineering, 2014, 70, 1073-1083.	6.0	49
130	Salt hydrate–based gas-solid thermochemical energy storage: Current progress, challenges, and perspectives. Renewable and Sustainable Energy Reviews, 2022, 154, 111846.	16.4	49
131	Process modifications to maximise energy savings in total site heat integration. Applied Thermal Engineering, 2015, 78, 731-739.	6.0	48
132	Impacts of urban land morphology on PM2.5 concentration in the urban agglomerations of China. Journal of Environmental Management, 2021, 283, 112000.	7.8	48
133	Effective use of recycled waste PET in cementitious grouts for developing sustainable semi-flexible pavement surfacing using artificial neural network (ANN). Journal of Cleaner Production, 2022, 340, 130840.	9.3	48
134	Influence of green catalyst on transesterification process using ultrasonic-assisted. Journal of Cleaner Production, 2016, 136, 14-22.	9.3	47
135	Methyl ester synthesis of Pistacia khinjuk seed oil by ultrasonic-assisted cavitation system. Industrial Crops and Products, 2017, 108, 336-347.	5.2	47
136	An integrated Pinch Analysis framework for low CO2 emissions industrial site planning. Journal of Cleaner Production, 2017, 146, 125-138.	9.3	47
137	A state-of-the-art review of greenhouse gas emissions from Indian hydropower reservoirs. Journal of Cleaner Production, 2021, 320, 128806.	9.3	47
138	Integrating district cooling systems in Locally Integrated Energy Sectors through Total Site Heat Integration. Applied Energy, 2016, 184, 1350-1363.	10.1	46
139	A review on plant-microbial interactions, functions, mechanisms and emerging trends in bioretention system to improve multi-contaminated stormwater treatment. Journal of Environmental Management, 2021, 294, 113108.	7.8	46
140	A review on CO2 capture via nitrogen-doped porous polymers and catalytic conversion as a feedstock for fuels. Journal of Cleaner Production, 2020, 277, 123999.	9.3	45
141	Data analytics of social media publicity to enhance household waste management. Resources, Conservation and Recycling, 2021, 164, 105146.	10.8	45
142	Sustainable design, integration, and operation for energy high-performance process systems. Energy, 2021, 224, 120158.	8.8	45
143	Phyllosilicate derived catalysts for efficient conversion of lignocellulosic derived biomass to biodiesel: A review. Bioresource Technology, 2022, 343, 126068.	9.6	45
144	Blockchain technology for agricultural supply chains during the COVID-19 pandemic: Benefits and cleaner solutions. Journal of Cleaner Production, 2022, 347, 131268.	9.3	45

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145	Integrated regional waste management to minimise the environmental footprints in circular economy transition. Resources, Conservation and Recycling, 2021, 168, 105292.	10.8	44
146	Designing a Total Site for an entire lifetime under fluctuating utility prices. Computers and Chemical Engineering, 2015, 72, 159-182.	3.8	43
147	Sustainability through combined development of energy, water and environment systems. Journal of Cleaner Production, 2020, 251, 119727.	9.3	43
148	An overview of mercury emissions in the energy industry - A step to mercury footprint assessment. Journal of Cleaner Production, 2020, 267, 122087.	9.3	43
149	Development and characteristics analysis of salt-hydrate based composite sorbent for low-grade thermochemical energy storage. Renewable Energy, 2020, 157, 920-940.	8.9	43
150	Urban and industrial symbiosis for circular economy: Total EcoSite Integration. Journal of Environmental Management, 2021, 279, 111829.	7.8	43
151	Objective dimensionality reduction method within multi-objective optimisation considering total footprints. Journal of Cleaner Production, 2014, 71, 75-86.	9.3	42
152	SAHPPA: a novel power pinch analysis approach for the design of off-grid hybrid energy systems. Clean Technologies and Environmental Policy, 2014, 16, 957-970.	4.1	42
153	Pilot scale intensification of rubber seed (Hevea brasiliensis) oil via chemical interesterification using hydrodynamic cavitation technology. Bioresource Technology, 2017, 242, 272-282.	9.6	42
154	Optimisation and process design tools for cleaner production. Journal of Cleaner Production, 2020, 247, 119181.	9.3	42
155	Heat exchanger network retrofit by a shifted retrofit thermodynamic grid diagram-based model and a two-stage approach. Energy, 2020, 198, 117338.	8.8	42
156	Energy transition and the role of system integration of the energy, water and environmental systems. Journal of Cleaner Production, 2021, 292, 126027.	9.3	42
157	Overview of environmental footprints. , 2015, , 131-193.		41
158	A master plan for the implementation of sustainable enterprise resource planning systems (part I): concept and methodology. Journal of Cleaner Production, 2016, 136, 176-182.	9.3	41
159	Covid-19 shock: Development of strategic management framework for global energy. Renewable and Sustainable Energy Reviews, 2021, 139, 110643.	16.4	41
160	Economic use of renewable resources, LCA, cleaner batch processes and minimising emissions and wastewater. Journal of Cleaner Production, 2008, 16, 159-163.	9.3	40
161	Software tools overview: process integration, modelling and optimisation for energy saving and pollution reduction. Asia-Pacific Journal of Chemical Engineering, 2011, 6, 696-712.	1.5	40
162	Optimising entire lifetime economy of heat exchanger networks. Energy, 2013, 57, 222-235.	8.8	40

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163	Heat exchanger network retrofit with heat exchanger and material type selection: A review and a novel method. Renewable and Sustainable Energy Reviews, 2021, 138, 110479.	16.4	40
164	A review of self-cleaning technology to reduce dust and ice accumulation in photovoltaic power generation using superhydrophobic coating. Renewable Energy, 2022, 185, 1034-1061.	8.9	40
165	Sustainability assessment of the Locally Integrated Energy Sectors for a Slovenian municipality. Journal of Cleaner Production, 2015, 88, 83-89.	9.3	39
166	Optimisation and Kinetic Studies of Acid Esterification of High Free Fatty Acid Rubber Seed Oil. Arabian Journal for Science and Engineering, 2016, 41, 2515-2526.	1.1	39
167	Energy and water interactions: implications for industry. Current Opinion in Chemical Engineering, 2014, 5, 15-21.	7.8	38
168	Investigating Students' Sustainability Awareness and the Curriculum of Technology Education in Pakistan. Sustainability, 2019, 11, 2651.	3.2	38
169	Thermo-kinetic study to elucidate the bioenergy potential of Maple Leaf Waste (MLW) by pyrolysis, TGA and kinetic modelling. Fuel, 2021, 293, 120349.	6.4	38
170	An algebraic approach to identifying bottlenecks in linear process models of multifunctional energy systems. Theoretical Foundations of Chemical Engineering, 2012, 46, 642-650.	0.7	37
171	Strategic alignment between sustainability and information systems: A case analysis in Malaysian public Higher Education Institutions. Journal of Cleaner Production, 2017, 168, 263-270.	9.3	37
172	Energy-saving design and control strategy towards modern sustainable greenhouse: A review. Renewable and Sustainable Energy Reviews, 2022, 164, 112602.	16.4	37
173	Heat Integration retrofit analysis—an oil refinery case study by Retrofit Tracing Grid Diagram. Frontiers of Chemical Science and Engineering, 2015, 9, 163-182.	4.4	36
174	The imperative and research directions of sustainable project management. Journal of Cleaner Production, 2019, 238, 117810.	9.3	36
175	Oil refinery and water pollution in the context of sustainable development: Developing and developed countries. Journal of Cleaner Production, 2021, 302, 126987.	9.3	36
176	Advanced multimedia engineering education in energy, process integration and optimisation. Applied Energy, 2013, 101, 33-40.	10.1	35
177	Total Site Heat Integration incorporating the water sensible heat. Journal of Cleaner Production, 2014, 77, 94-104.	9.3	35
178	Influence of fatty acids in waste cooking oil for cleaner biodiesel. Clean Technologies and Environmental Policy, 2017, 19, 859-868.	4.1	35
179	Towards Efficient and Clean Process Integration: Utilisation of Renewable Resources and Energy-Saving Technologies. Energies, 2019, 12, 4092.	3.1	35
180	Utility systems operation: Optimisation-based decision making. Applied Thermal Engineering, 2011, 31, 3196-3205.	6.0	34

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181	Minimisation of a heat exchanger networks' cost over its lifetime. Energy, 2012, 45, 264-276.	8.8	34
182	Peak-off-peak load shifting for hybrid power systems based on Power Pinch Analysis. Energy, 2015, 90, 128-136.	8.8	34
183	Cleaner energy planning, management and technologies: Perspectives of supply-demand side and end-of-pipe management. Journal of Cleaner Production, 2016, 136, 1-13.	9.3	34
184	Multi-objective optimisation of steam methane reforming considering stoichiometric ratio indicator for methanol production. Journal of Cleaner Production, 2018, 180, 655-665.	9.3	34
185	Two-step MILP/MINLP approach for the synthesis of large-scale HENs. Chemical Engineering Science, 2019, 197, 432-448.	3.8	34
186	Recent advances in green energy and product productions, environmentally friendly, healthier and safer technologies and processes, CO2 capturing, storage and recycling, and sustainability assessment in decision-making. Clean Technologies and Environmental Policy, 2015, 17, 1119-1126.	4.1	33
187	Optimisation on pretreatment of kapok seed (Ceiba pentandra) oil via esterification reaction in an ultrasonic cavitation reactor. Biomass Conversion and Biorefinery, 2017, 7, 91-99.	4.6	33
188	Anaerobic digestion of lignocellulosic waste: Environmental impact and economic assessment. Journal of Environmental Management, 2019, 231, 352-363.	7.8	33
189	Profiling Malaysian ship registration and seafarers for streamlining future Malaysian shipping governance. Australian Journal of Maritime and Ocean Affairs, 2021, 13, 225-261.	2.0	33
190	Combined design and load shifting for distributed energy system. Clean Technologies and Environmental Policy, 2013, 15, 433-444.	4.1	32
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