Mortaza Aghbashlo

List of Publications by Year
in descending order

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223 papers	14,060 citations	16451 64 h-index	28297 105 g-index
228 all docs	228 docs citations	228 times ranked	8948 citing authors

#	Article	IF	Citations
1	Valorization of biomass waste to engineered activated biochar by microwave pyrolysis: Progress, challenges, and future directions. Chemical Engineering Journal, 2020, 389, 124401.	12.7	484
2	A review on the prospects of sustainable biodiesel production: A global scenario with an emphasis on waste-oil biodiesel utilization. Renewable and Sustainable Energy Reviews, 2017, 72, 445-464.	16.4	399
3	Reactor technologies for biodiesel production and processing: A review. Progress in Energy and Combustion Science, 2019, 74, 239-303.	31.2	330
4	Impacts of additives on performance and emission characteristics of diesel engines during steady state operation. Progress in Energy and Combustion Science, 2017, 59, 32-78.	31.2	305
5	Influence of drying conditions on the effective moisture diffusivity, energy of activation and energy consumption during the thin-layer drying of berberis fruit (Berberidaceae). Energy Conversion and Management, 2008, 49, 2865-2871.	9.2	266
6	Three pillars of sustainability in the wake of COVID-19: A systematic review and future research agenda for sustainable development. Journal of Cleaner Production, 2021, 297, 126660.	9.3	259
7	A comprehensive review on the environmental impacts of diesel/biodiesel additives. Energy Conversion and Management, 2018, 174, 579-614.	9.2	257
8	Machine learning technology in biodiesel research: A review. Progress in Energy and Combustion Science, 2021, 85, 100904.	31.2	231
9	A critical review of the effects of pretreatment methods on the exergetic aspects of lignocellulosic biofuels. Energy Conversion and Management, 2020, 212, 112792.	9.2	230
10	A comprehensive review of engineered biochar: Production, characteristics, and environmental applications. Journal of Cleaner Production, 2020, 270, 122462.	9.3	207
11	Progress in microwave pyrolysis conversion of agricultural waste to value-added biofuels: A batch to continuous approach. Renewable and Sustainable Energy Reviews, 2021, 135, 110148.	16.4	206
12	Electricity generation and GHG emission reduction potentials through different municipal solid waste management technologies: A comparative review. Renewable and Sustainable Energy Reviews, 2017, 79, 414-439.	16.4	205
13	A review on exergy analysis of drying processes and systems. Renewable and Sustainable Energy Reviews, 2013, 22, 1-22.	16.4	188
14	A comprehensive review on recent biological innovations to improve biogas production, Part 1: Upstream strategies. Renewable Energy, 2020, 146, 1204-1220.	8.9	185
15	Rice bran oil-based biodiesel as a promising renewable fuel alternative to petrodiesel: A review. Renewable and Sustainable Energy Reviews, 2021, 135, 110204.	16.4	176
16	A critical review on livestock manure biorefinery technologies: Sustainability, challenges, and future perspectives. Renewable and Sustainable Energy Reviews, 2021, 135, 110033.	16.4	176
17	Exergoenvironmental analysis of bioenergy systems: A comprehensive review. Renewable and Sustainable Energy Reviews, 2021, 149, 111399.	16.4	174
18	Microencapsulation of walnut oil by spray drying: Effects of wall material and drying conditions on physicochemical properties of microcapsules. Innovative Food Science and Emerging Technologies, 2017, 39, 101-112.	5.6	169

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19	Exergy analysis of a lignocellulosic-based biorefinery annexed to a sugarcane mill for simultaneous lactic acid and electricity production. Energy, 2018, 149, 623-638.	8.8	158
20	Application of Artificial Neural Networks (ANNs) in Drying Technology: A Comprehensive Review. Drying Technology, 2015, 33, 1397-1462.	3.1	156
21	Exergoeconomic analysis of a DI diesel engine fueled with diesel/biodiesel (B5) emulsions containing aqueous nano cerium oxide. Energy, 2018, 149, 967-978.	8.8	152
22	Influence of Wall Material and Inlet Drying Air Temperature on the Microencapsulation of Fish Oil by Spray Drying. Food and Bioprocess Technology, 2013, 6, 1561-1569.	4.7	149
23	A comprehensive review on recent biological innovations to improve biogas production, Part 2: Mainstream and downstream strategies. Renewable Energy, 2020, 146, 1392-1407.	8.9	144
24	Engineered biochar via microwave CO2 and steam pyrolysis to treat carcinogenic Congo red dye. Journal of Hazardous Materials, 2020, 395, 122636.	12.4	142
25	Neat diesel beats waste-oriented biodiesel from the exergoeconomic and exergoenvironmental point of views. Energy Conversion and Management, 2017, 148, 1-15.	9.2	136
26	Environmental life cycle assessment of different biorefinery platforms valorizing municipal solid waste to bioenergy, microbial protein, lactic and succinic acid. Renewable and Sustainable Energy Reviews, 2020, 117, 109493.	16.4	136
27	Energy and exergy analyses of the spray drying process of fish oil microencapsulation. Biosystems Engineering, 2012, 111, 229-241.	4.3	131
28	A novel emulsion fuel containing aqueous nano cerium oxide additive in dieselâ€“biodiesel blends to improve diesel engines performance and reduce exhaust emissions: Part I â€“ Experimental analysis. Fuel, 2017, 207, 741-750.	6.4	128
29	Comprehensive exergoeconomic analysis of a municipal solid waste digestion plant equipped with a biogas genset. Waste Management, 2019, 87, 485-498.	7.4	128
30	Pretreatment of lignocelluloses for enhanced biogas production: A review on influencing mechanisms and the importance of microbial diversity. Renewable and Sustainable Energy Reviews, 2021, 135, 110173.	16.4	128
31	On the exergoeconomic and exergoenvironmental evaluation and optimization of biodiesel synthesis from waste cooking oil (WCO) using a low power, high frequency ultrasonic reactor. Energy Conversion and Management, 2018, 164, 385-398.	9.2	127
32	Improving exergetic and sustainability parameters of a DI diesel engine using polymer waste dissolved in biodiesel as a novel diesel additive. Energy Conversion and Management, 2015, 105, 328-337.	9.2	123
33	Comprehensive exergy analysis of a gas engine-equipped anaerobic digestion plant producing electricity and biofertilizer from organic fraction of municipal solid waste. Energy Conversion and Management, 2017, 151, 753-763.	9.2	123
34	A novel emulsion fuel containing aqueous nano cerium oxide additive in dieselâ€“biodiesel blends to improve diesel engines performance and reduce exhaust emissions: Part II â€“ Exergetic analysis. Fuel, 2017, 205, 262-271.	6.4	118
35	Biogas production from food wastes: A review on recent developments and future perspectives. Bioresource Technology Reports, 2019, 7, 100202.	2.7	110
36	A review on beet sugar industry with a focus on implementation of waste-to-energy strategy for power supply. Renewable and Sustainable Energy Reviews, 2019, 103, 423-442.	16.4	109

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37	Multi-objective exergetic and technical optimization of a piezoelectric ultrasonic reactor applied to synthesize biodiesel from waste cooking oil (WCO) using soft computing techniques. Fuel, 2019, 235, 100-112.	6.4	108
38	Biopower and biofertilizer production from organic municipal solid waste: An exergoenvironmental analysis. Renewable Energy, 2019, 143, 64-76.	8.9	107
39	Two decades of research on waste management in the circular economy: Insights from bibliometric, text mining, and content analyses. Journal of Cleaner Production, 2021, 314, 128009.	9.3	107
40	Effect of an emission-reducing soluble hybrid nanocatalyst in diesel/biodiesel blends on exergetic performance of a DI diesel engine. Renewable Energy, 2016, 93, 353-368.	8.9	99
41	A state-of-the-art review on the application of nanomaterials for enhancing biogas production. Journal of Environmental Management, 2019, 251, 109597.	7.8	99
42	Thermodynamic analysis of fluidized bed drying of carrot cubes. Energy, 2010, 35, 4679-4684.	8.8	98
43	Effects of aqueous carbon nanoparticles as a novel nanoadditive in water-emulsified diesel/biodiesel blends on performance and emissions parameters of a diesel engine. Energy Conversion and Management, 2019, 196, 1153-1166.	9.2	96
44	Conversion of residues from agro-food industry into bioethanol in Iran: An under-valued biofuel additive to phase out MTBE in gasoline. Renewable Energy, 2020, 145, 699-710.	8.9	94
45	The correlation of wall material composition with flow characteristics and encapsulation behavior of fish oil emulsion. Food Research International, 2012, 49, 379-388.	6.2	92
46	Energy and Exergy Analyses of Thin-Layer Drying of Potato Slices in a Semi-Industrial Continuous Band Dryer. Drying Technology, 2008, 26, 1501-1508.	3.1	91
47	Continuous real-time monitoring and neural network modeling of apple slices color changes during hot air drying. Food and Bioproducts Processing, 2015, 94, 263-274.	3.6	91
48	Fuzzy modeling and optimization of the synthesis of biodiesel from waste cooking oil (WCO) by a low power, high frequency piezo-ultrasonic reactor. Energy, 2017, 132, 65-78.	8.8	91
49	Valorization of municipal wastes using co-pyrolysis for green energy production, energy security, and environmental sustainability: A review. Chemical Engineering Journal, 2021, 421, 129749.	12.7	90
50	A comprehensive review on electricity generation and GHG emission reduction potentials through anaerobic digestion of agricultural and livestock/slaughterhouse wastes in Iran. Renewable and Sustainable Energy Reviews, 2019, 111, 571-594.	16.4	89
51	Exergoeconoenvironmental analysis as a new concept for developing thermodynamically, economically, and environmentally sound energy conversion systems. Journal of Cleaner Production, 2018, 187, 190-204.	9.3	88
52	Exact estimation of biodiesel cetane number (CN) from its fatty acid methyl esters (FAMEs) profile using partial least square (PLS) adapted by artificial neural network (ANN). Energy Conversion and Management, 2016, 124, 389-398.	9.2	86
53	Optimization of an artificial neural network topology using coupled response surface methodology and genetic algorithm for fluidized bed drying. Computers and Electronics in Agriculture, 2011, 75, 84-91.	7.7	85
54	Prognostication of lignocellulosic biomass pyrolysis behavior using ANFIS model tuned by PSO algorithm. Fuel, 2019, 253, 189-198.	6.4	85

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55	Consolidating exergoeconomic and exergoenvironmental analyses using the emergy concept for better understanding energy conversion systems. Journal of Cleaner Production, 2018, 172, 696-708.	9.3	84
56	Application of computer vision technique for on-line monitoring of shrimp color changes during drying. Journal of Food Engineering, 2013, 115, 99-114.	5.2	81
57	Performance assessment of a wind power plant using standard exergy and extended exergy accounting (EEA) approaches. Journal of Cleaner Production, 2018, 171, 127-136.	9.3	81
58	Modeling of thin-layer drying of potato slices in length of continuous band dryer. Energy Conversion and Management, 2009, 50, 1348-1355.	9.2	79
59	Optimization of emulsification procedure for mutual maximizing the encapsulation and exergy efficiencies of fish oil microencapsulation. Powder Technology, 2012, 225, 107-117.	4.2	78
60	Exergetic, exergoeconomic, and exergoenvironmental aspects of an industrial-scale molasses-based ethanol production plant. Energy Conversion and Management, 2021, 227, 113637.	9.2	78
61	Environmental life cycle assessment of biodiesel production from waste cooking oil: A systematic review. Renewable and Sustainable Energy Reviews, 2022, 161, 112411.	16.4	73
62	Machine learning predicts and optimizes hydrothermal liquefaction of biomass. Chemical Engineering Journal, 2022, 445, 136579.	12.7	73
63	Exergoeconomic and exergoenvironmental co-optimization of continuous fuel additives (acetins) synthesis from glycerol esterification with acetic acid using Amberlyst 36 catalyst. Energy Conversion and Management, 2018, 165, 183-194.	9.2	72
64	Exergetic sustainability analysis of municipal solid waste treatment systems: A systematic critical review. Renewable and Sustainable Energy Reviews, 2022, 156, 111975.	16.4	69
65	Mapping healthcare waste management research: Past evolution, current challenges, and future perspectives towards a circular economy transition. Journal of Hazardous Materials, 2022, 422, 126724.	12.4	68
66	Exergetic performance assessment of plug flow fluidised bed drying process of rough rice. International Journal of Exergy, 2013, 13, 387.	0.4	66
67	The use of artificial neural network to predict exergetic performance of spray drying process: A preliminary study. Computers and Electronics in Agriculture, 2012, 88, 32-43.	7.7	65
68	Design of an integrated process for simultaneous chemical looping hydrogen production and electricity generation with CO 2 capture. International Journal of Hydrogen Energy, 2017, 42, 8486-8496.	7.1	64
69	Exergy-based sustainability analysis of acetins synthesis through continuous esterification of glycerol in acetic acid using AmberlystÂ®36 as catalyst. Journal of Cleaner Production, 2018, 183, 1265-1275.	9.3	64
70	Emerging challenges of air pollution and particulate matter in China, India, and Pakistan and mitigating solutions. Journal of Hazardous Materials, 2021, 416, 125851.	12.4	64
71	Improving exergetic performance parameters of a rotating-tray air dryer via a simple heat exchanger. Applied Thermal Engineering, 2016, 94, 13-23.	6.0	63
72	Advancement in valorization technologies to improve utilization of bio-based waste in bioeconomy context. Renewable and Sustainable Energy Reviews, 2020, 131, 109965.	16.4	63

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73	Performance analysis of drying of carrot slices in a semi-industrial continuous band dryer. Journal of Food Engineering, 2009, 91, 99-108.	5.2	62
74	Sustainable management of municipal solid waste through waste-to-energy technologies. Bioresource Technology, 2022, 355, 127247.	9.6	60
75	Techno-economic aspects of a safflower-based biorefinery plant co-producing bioethanol and biodiesel. Energy Conversion and Management, 2019, 201, 112184.	9.2	59
76	Fish oil microencapsulation as influenced by spray dryer operational variables. International Journal of Food Science and Technology, 2013, 48, 1707-1713.	2.7	58
77	Exergy-based sustainability analysis of a low power, high frequency piezo-based ultrasound reactor for rapid biodiesel production. Energy Conversion and Management, 2017, 148, 759-769.	9.2	58
78	Environmental impact assessment of the mechanical shaft work produced in a diesel engine running on diesel/biodiesel blends containing glycerol-derived triacetin. Journal of Cleaner Production, 2019, 223, 466-486.	9.3	58
79	A review of the effect of biodiesel on the corrosion behavior of metals/alloys in diesel engines. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, 42, 2923-2943.	2.3	58
80	Bioethanol production from food wastes rich in carbohydrates. Current Opinion in Food Science, 2022, 43, 71-81.	8.0	57
81	Comprehensive exergy analysis of an industrial-scale yogurt production plant. Energy, 2015, 93, 1832-1851.	8.8	56
82	The use of ELM-WT (extreme learning machine with wavelet transform algorithm) to predict exergetic performance of a DI diesel engine running on diesel/biodiesel blends containing polymer waste. Energy, 2016, 94, 443-456.	8.8	56
83	Soft computing-based modeling and emission control/reduction of a diesel engine fueled with carbon nanoparticle-dosed water/diesel â€Žemulsion fuel. Journal of Hazardous Materials, 2021, 407, 124369.	12.4	56
84	Progress in the torrefaction technology for upgrading oil palm wastes to energy-dense biochar: A review. Renewable and Sustainable Energy Reviews, 2021, 151, 111645.	16.4	55
85	Support vector machine-based exergetic modelling of a DI diesel engine running on biodieselâ€“diesel blends containing expanded polystyrene. Applied Thermal Engineering, 2016, 94, 727-747.	6.0	54
86	Recent updates on the production and upgrading of bio-crude oil from microalgae. Bioresource Technology Reports, 2019, 7, 100216.	2.7	54
87	Managing the hazardous waste cooking oil by conversion into bioenergy through the application of waste-derived green catalysts: A review. Journal of Hazardous Materials, 2022, 424, 127636.	12.4	53
88	Computer vision technology for real-time food quality assurance during drying process. Trends in Food Science and Technology, 2014, 39, 76-84.	15.1	52
89	Electronic nose and electronic mucosa as innovative instruments for real-time monitoring of food dryers. Trends in Food Science and Technology, 2014, 38, 158-166.	15.1	51
90	Estimation of biomass higher heating value (HHV) based on the proximate analysis by using iterative neural network-adapted partialÂleast squares (INNPLS). Energy, 2017, 138, 473-479.	8.8	51

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91	Shifting fuel feedstock from oil wells to sea: Iran outlook and potential for biofuel production from brown macroalgae (ochrophyta; phaeophyceae). Renewable and Sustainable Energy Reviews, 2019, 112, 626-642.	16.4	50
92	Applications of Nanotechnology and Carbon Nanoparticles in Agriculture. , 2019, , 247-277.		50
93	Environmental life cycle assessment of different biorefinery platforms valorizing olive wastes to biofuel, phosphate salts, natural antioxidant, and an oxygenated fuel additive (triacetin). Journal of Cleaner Production, 2021, 278, 123916.	9.3	50
94	Biomass and organic waste potentials towards implementing circular bioeconomy platforms: A systematic bibliometric analysis. Fuel, 2022, 318, 123585.	6.4	50
95	Prediction of Energy and Exergy of Carrot Cubes in a Fluidized Bed Dryer by Artificial Neural Networks. Drying Technology, 2011, 29, 295-307.	3.1	49
96	Measurement Techniques to Monitor and Control Fluidization Quality in Fluidized Bed Dryers: A Review. Drying Technology, 2014, 32, 1005-1051.	3.1	49
97	Progress toward improving ethanol production through decreased glycerol generation in Saccharomyces cerevisiae by metabolic and genetic engineering approaches. Renewable and Sustainable Energy Reviews, 2019, 115, 109353.	16.4	48
98	Exergoeconomic analysis of lactic acid and power cogeneration from sugarcane residues through a biorefinery approach. Renewable Energy, 2019, 143, 872-889.	8.9	48
99	Biodiesel: hopes and dreads. Biofuel Research Journal, 2016, 3, 379-379.	13.3	47
100	Exergy-based sustainability assessment of continuous photobiological hydrogen production using anaerobic bacterium Rhodospirillum rubrum. Journal of Cleaner Production, 2016, 139, 157-166.	9.3	45
101	Exergetic performance analysis of an ice-cream manufacturing plant: A comprehensive survey. Energy, 2017, 123, 445-459.	8.8	44
102	Life cycle assessment analysis of an ultrasound-assisted system converting waste cooking oil into biodiesel. Renewable Energy, 2020, 151, 1352-1364.	8.9	44
103	Techno-economic comparison of three biodiesel production scenarios enhanced by glycerol supercritical water reforming process. International Journal of Hydrogen Energy, 2019, 44, 17845-17862.	7.1	43
104	Energy flow modeling and life cycle assessment of apple juice production: Recommendations for renewable energies implementation and climate change mitigation. Journal of Cleaner Production, 2020, 246, 118997.	9.3	43
105	A state-of-the-art review on producing engineered biochar from shellfish waste and its application in aquaculture wastewater treatment. Chemosphere, 2022, 288, 132559.	8.2	43
106	Optimization of an Artificial Neural Network Topology for Predicting Drying Kinetics of Carrot Cubes Using Combined Response Surface and Genetic Algorithm. Drying Technology, 2011, 29, 770-779.	3.1	42
107	Comprehensive exergy analysis of a commercial tomato paste plant with a double-effect evaporator. Energy, 2016, 111, 910-922.	8.8	42
108	Exergetic performance assessment of a long-life milk processing plant: a comprehensive survey. Journal of Cleaner Production, 2017, 140, 590-607.	9.3	42

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109	Describing biomass pyrolysis kinetics using a generic hybrid intelligent model: A critical stage in sustainable waste-oriented biorefineries. Renewable Energy, 2021, 170, 81-91.	8.9	42
110	Sustainability evaluation of pasteurized milk production with a life cycle assessment approach: An Iranian case study. Science of the Total Environment, 2016, 562, 614-627.	8.0	41
111	Pistachio (Pistachia vera) wastes valorization: Enhancement of biodiesel oxidation stability using hull extracts of different varieties. Journal of Cleaner Production, 2018, 185, 852-859.	9.3	41
112	Operational modifications of a full-scale experimental vertical flow constructed wetland with effluent recirculation to optimize total nitrogen removal. Journal of Cleaner Production, 2021, 296, 126558.	9.3	41
113	Influence of spray dryer parameters on exergetic performance of microencapsulation processs. International Journal of Exergy, 2012, 10, 267.	0.4	40
114	Safflower-based biorefinery producing a broad spectrum of biofuels and biochemicals: A life cycle assessment perspective. Science of the Total Environment, 2022, 802, 149842.	8.0	40
115	Biofuel supply chain management in the circular economy transition: An inclusive knowledge map of the field. Chemosphere, 2022, 296, 133968.	8.2	40
116	Exergy-based optimization of a continuous reactor applied to produce value-added chemicals from glycerol through esterification with acetic acid. Energy, 2018, 150, 351-362.	8.8	39
117	Potential of Acid-Activated Bentonite and SO3H-Functionalized MWCNTs for Biodiesel Production From Residual Olive Oil Under Biorefinery Scheme. Frontiers in Energy Research, 2018, 6, .	2.3	39
118	Anaerobic co-digestion of sewage sludge and slaughterhouse waste in existing wastewater digesters. Renewable Energy, 2020, 145, 2503-2509.	8.9	39
119	Effects of waste-derived ethylene glycol diacetate as a novel oxygenated additive on performance and emission characteristics of a diesel engine fueled with diesel/biodiesel blends. Energy Conversion and Management, 2020, 203, 112245.	9.2	39
120	Emissions from urban bus fleets running on biodiesel blends under real-world operating conditions: Implications for designing future case studies. Renewable and Sustainable Energy Reviews, 2019, 111, 276-292.	16.4	38
121	Enhanced power generation and desalination rate in a novel quadruple microbial desalination cell with a single desalination chamber. Renewable and Sustainable Energy Reviews, 2020, 127, 109855.	16.4	38
122	DRYING AND REHYDRATION CHARACTERISTICS OF SOUR CHERRY (PRUNUS CERASUS L.). Journal of Food Processing and Preservation, 2010, 34, 351-365.	2.0	37
123	Exergetic simulation of a combined infrared-convective drying process. Heat and Mass Transfer, 2016, 52, 829-844.	2.1	37
124	Biomass higher heating value (HHV) modeling on the basis of proximate analysis using iterative network-based fuzzy partial least squares coupled with principle component analysis (PCA-INFPLS). Fuel, 2018, 222, 1-10.	6.4	37
125	Modeling of a dual fueled diesel engine operated by a novel fuel containing glycerol triacetate additive and biodiesel using artificial neural network tuned by genetic algorithm to reduce engine emissions. Energy, 2019, 168, 1128-1137.	8.8	37
126	Unlocking the potential of walnut husk extract in the production of waste cooking oil-based biodiesel. Renewable and Sustainable Energy Reviews, 2020, 119, 109588.	16.4	37

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127	Exergy analysis of biohydrogen production from various carbon sources via anaerobic photosynthetic bacteria (Rhodospirillum rubrum). Energy, 2015, 93, 730-739.	8.8	36
128	Towards upscaling microbial desalination cell technology: A comprehensive review on current challenges and future prospects. Journal of Cleaner Production, 2021, 288, 125597.	9.3	36
129	Exergetic, economic, and environmental life cycle assessment analyses of a heavy-duty tractor diesel engine fueled with dieselâ€“biodiesel-bioethanol blends. Energy Conversion and Management, 2021, 241, 114300.	9.2	36
130	Recent advances in asphaltene transformation in heavy oil hydroprocessing: Progress, challenges, and future perspectives. Fuel Processing Technology, 2021, 213, 106681.	7.2	35
131	Exergy analysis of a whole-crop safflower biorefinery: A step towards reducing agricultural wastes in a sustainable manner. Journal of Environmental Management, 2021, 279, 111822.	7.8	35
132	Exergy-based sustainability assessment of ethanol production via Mucor indicus from fructose, glucose, sucrose, and molasses. Energy, 2016, 98, 240-252.	8.8	34
133	On the exergetic optimization of solketalacetin synthesis as a green fuel additive through ketalization of glycerol-derived monoacetin with acetone. Renewable Energy, 2018, 126, 242-253.	8.9	34
134	Exergy analysis for decision making on operational condition of a continuous photobioreactor for hydrogen production via WGS reaction. International Journal of Hydrogen Energy, 2016, 41, 2354-2366.	7.1	33
135	Enhancing the exergetic performance of a pilot-scale convective dryer by exhaust air recirculation. Drying Technology, 2020, 38, 518-533.	3.1	33
136	The effects of nanoadditives on the performance and emission characteristics of spark-ignition gasoline engines: A critical review with a focus on health impacts. Energy, 2021, 225, 120259.	8.8	32
137	To what extent do waste management strategies need adaptation to post-COVID-19?. Science of the Total Environment, 2022, 837, 155829.	8.0	32
138	Exergy intensity and environmental consequences of the medical face masks curtailing the COVID-19 pandemic: Malign bodyguard?. Journal of Cleaner Production, 2021, 313, 127880.	9.3	31
139	Biodiesel antioxidants and their impact on the behavior of diesel engines: A comprehensive review. Fuel Processing Technology, 2022, 232, 107264.	7.2	31
140	Exergy-based performance analysis of a continuous stirred bioreactor for ethanol and acetate fermentation from syngas via Woodâ€“Ljungdahl pathway. Chemical Engineering Science, 2016, 143, 36-46.	3.8	30
141	Multi-objective exergy-based optimization of continuous glycerol ketalization to synthesize solketal as a biodiesel additive in subcritical acetone. Energy Conversion and Management, 2018, 160, 251-261.	9.2	30
142	Consolidating emission indices of a diesel engine powered by carbon nanoparticle-doped diesel/biodiesel emulsion fuels using life cycle assessment framework. Fuel, 2020, 267, 117296.	6.4	30
143	Integrated optimization of fish oil microencapsulation process by spray drying. Journal of Microencapsulation, 2012, 29, 790-804.	2.8	29
144	Towards smart cities powered by nanogenerators: Bibliometric and machine learningâ€“based analysis. Nano Energy, 2021, 83, 105844.	16.0	29

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145	Multi-objective exergoeconomic and exergoenvironmental optimization of continuous synthesis of solketal through glycerol ketalization with acetone in the presence of ethanol as co-solvent. Renewable Energy, 2019, 130, 735-748.	8.9	28
146	Pilot-scale co-processing of lignocellulosic biomass, algae, shellfish waste via thermochemical approach: Recent progress and future directions. Bioresource Technology, 2022, 347, 126687.	9.6	28
147	Spatio-temporal solar exergoeconomic and exergoenvironmental maps for photovoltaic systems. Energy Conversion and Management, 2019, 195, 701-711.	9.2	27
148	Energy saving in a convective dryer by using novel real-time exergy-based control schemes adjusting exhaust air recirculation. Journal of Cleaner Production, 2020, 257, 120394.	9.3	27
149	Drying behavior and locking point of single droplets containing functional oil. Advanced Powder Technology, 2016, 27, 1750-1760.	4.1	26
150	On the exergetic optimization of continuous photobiological hydrogen production using hybrid ANFISâ€“NSGA-II (adaptive neuro-fuzzy inference systemâ€“non-dominated sorting genetic algorithm-II). Energy, 2016, 96, 507-520.	8.8	26
151	Improving sustainability and mitigating environmental impacts of agro-biowaste compost fertilizer by pelletizing-drying. Environmental Pollution, 2021, 285, 117412.	7.5	26
152	Prediction of carrot cubes drying kinetics during fluidized bed drying by artificial neural network. Journal of Food Science and Technology, 2011, 48, 542-550.	2.8	25
153	Exergy analysis of an industrial-scale ultrafiltrated (UF) cheese production plant: a detailed survey. Heat and Mass Transfer, 2017, 53, 407-424.	2.1	25
154	A novel image processing approach for in-line monitoring of visual texture during shrimp drying. Journal of Food Engineering, 2014, 143, 154-166.	5.2	24
155	Modeling and Simulation of Deep-Bed Solar Greenhouse Drying of Chamomile Flowers. Drying Technology, 2015, 33, 684-695.	3.1	24
156	Multi-objective exergy-based optimization of a continuous photobioreactor applied to produce hydrogen using a novel combination of soft computing techniques. International Journal of Hydrogen Energy, 2017, 42, 8518-8529.	7.1	24
157	Net-zero exergoeconomic and exergoenvironmental building as new concepts for developing sustainable built environments. Energy Conversion and Management, 2021, 244, 114418.	9.2	24
158	Engineered biochar produced through microwave pyrolysis as a fuel additive in biodiesel combustion. Fuel, 2022, 312, 122839.	6.4	24
159	Thermodynamic evaluation of a photobioreactor for hydrogen production from syngas via a locally isolated Rhodopseudomonas palustris PT. International Journal of Hydrogen Energy, 2015, 40, 14246-14256.	7.1	23
160	Multi-objective exergetic optimization of continuous photo-biohydrogen production process using a novel hybrid fuzzy clustering-ranking approach coupled with Radial Basis Function (RBF) neural network. International Journal of Hydrogen Energy, 2016, 41, 18418-18430.	7.1	23
161	Application of exergy analysis to the dairy industry: A case study of yogurt drink production plant. Food and Bioproducts Processing, 2017, 101, 118-131.	3.6	22
162	Modeling of a single cell micro proton exchange membrane fuel cell by a new hybrid neural network method. Thermal Science and Engineering Progress, 2018, 7, 8-19.	2.7	21

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