

Hwai Chyuan Ong

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5617156/publications.pdf>

Version: 2024-02-01

510
papers

40,869
citations

1536

106
h-index

4548

171
g-index

513
all docs

513
docs citations

513
times ranked

23432
citing authors

#	ARTICLE	IF	CITATIONS
1	Non-edible vegetable oils: A critical evaluation of oil extraction, fatty acid compositions, biodiesel production, characteristics, engine performance and emissions production. Renewable and Sustainable Energy Reviews, 2013, 18, 211-245.	16.4	953
2	Microalgae biorefinery: High value products perspectives. Bioresource Technology, 2017, 229, 53-62.	9.6	947
3	A state-of-the-art review of biomass torrefaction, densification and applications. Renewable and Sustainable Energy Reviews, 2015, 44, 847-866.	16.4	887
4	A review on conventional and novel materials towards heavy metal adsorption in wastewater treatment application. Journal of Cleaner Production, 2021, 296, 126589.	9.3	628
5	A study on torrefaction of various biomass materials and its impact on lignocellulosic structure simulated by a thermogravimetry. Energy, 2010, 35, 2580-2586.	8.8	465
6	Microalgae biofuels as an alternative to fossil fuel for power generation. Renewable and Sustainable Energy Reviews, 2016, 58, 180-197.	16.4	454
7	Thermochemical conversion of microalgal biomass into biofuels: A review. Bioresource Technology, 2015, 184, 314-327.	9.6	451
8	Torrefaction and co-torrefaction characterization of hemicellulose, cellulose and lignin as well as torrefaction of some basic constituents in biomass. Energy, 2011, 36, 803-811.	8.8	442
9	Progress in biomass torrefaction: Principles, applications and challenges. Progress in Energy and Combustion Science, 2021, 82, 100887.	31.2	429
10	Biosequestration of atmospheric CO ₂ and flue gas-containing CO ₂ by microalgae. Bioresource Technology, 2015, 184, 190-201.	9.6	417
11	Impact of COVID-19 on the social, economic, environmental and energy domains: Lessons learnt from a global pandemic. Sustainable Production and Consumption, 2021, 26, 343-359.	11.0	370
12	Comparison of palm oil, Jatropha curcas and Calophyllum inophyllum for biodiesel: A review. Renewable and Sustainable Energy Reviews, 2011, 15, 3501-3515.	16.4	353
13	A review on latest developments and future prospects of heterogeneous catalyst in biodiesel production from non-edible oils. Renewable and Sustainable Energy Reviews, 2017, 67, 1225-1236.	16.4	334
14	Recent developments in physical, biological, chemical, and hybrid treatment techniques for removing emerging contaminants from wastewater. Journal of Hazardous Materials, 2021, 416, 125912.	12.4	300
15	Patent landscape review on biodiesel production: Technology updates. Renewable and Sustainable Energy Reviews, 2020, 118, 109526.	16.4	298
16	Catalytic thermochemical conversion of biomass for biofuel production: A comprehensive review. Renewable and Sustainable Energy Reviews, 2019, 113, 109266.	16.4	289
17	Sustainability of direct biodiesel synthesis from microalgae biomass: A critical review. Renewable and Sustainable Energy Reviews, 2019, 107, 59-74.	16.4	283
18	Optimization of biodiesel production process for mixed Jatropha curcas and Ceiba pentandra biodiesel using response surface methodology. Energy Conversion and Management, 2016, 115, 178-190.	9.2	281

#	ARTICLE	IF	CITATIONS
19	Recent developments on algal biochar production and characterization. <i>Bioresource Technology</i> , 2017, 246, 2-11.	9.6	281
20	Overview properties of biodiesel diesel blends from edible and non-edible feedstock. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 22, 346-360.	16.4	276
21	Thermogravimetric analysis and kinetics of co-pyrolysis of raw/torrefied wood and coal blends. <i>Applied Energy</i> , 2013, 105, 57-65.	10.1	274
22	A review on energy scenario and sustainable energy in Malaysia. <i>Renewable and Sustainable Energy Reviews</i> , 2011, 15, 639-647.	16.4	272
23	State of art review on conventional and advanced pyrolysis of macroalgae and microalgae for biochar, bio-oil and bio-syngas production. <i>Energy Conversion and Management</i> , 2020, 210, 112707.	9.2	272
24	Production and comparative fuel properties of biodiesel from non-edible oils: <i>Jatropha curcas</i> , <i>Sterculia foetida</i> and <i>Ceiba pentandra</i> . <i>Energy Conversion and Management</i> , 2013, 73, 245-255.	9.2	271
25	Optimization of biodiesel production and engine performance from high free fatty acid <i>Calophyllum inophyllum</i> oil in CI diesel engine. <i>Energy Conversion and Management</i> , 2014, 81, 30-40.	9.2	267
26	Pyrolysis of high ash sewage sludge: Kinetics and thermodynamic analysis using Coats-Redfern method. <i>Renewable Energy</i> , 2019, 131, 854-860.	8.9	260
27	Impacts of COVID-19 pandemic on the global energy system and the shift progress to renewable energy: Opportunities, challenges, and policy implications. <i>Energy Policy</i> , 2021, 154, 112322.	8.8	260
28	Disruption of sugarcane bagasse lignocellulosic structure by means of dilute sulfuric acid pretreatment with microwave-assisted heating. <i>Applied Energy</i> , 2011, 88, 2726-2734.	10.1	258
29	Pyrolysis characteristics and kinetics of microalgae via thermogravimetric analysis (TGA): A state-of-the-art review. <i>Bioresource Technology</i> , 2017, 246, 88-100.	9.6	258
30	Progress on the lignocellulosic biomass pyrolysis for biofuel production toward environmental sustainability. <i>Fuel Processing Technology</i> , 2021, 223, 106997.	7.2	256
31	Engine performance and emissions using <i>Jatropha curcas</i> , <i>Ceiba pentandra</i> and <i>Calophyllum inophyllum</i> biodiesel in a CI diesel engine. <i>Energy</i> , 2014, 69, 427-445.	8.8	252
32	State of the art and prospective of lipase-catalyzed transesterification reaction for biodiesel production. <i>Energy Conversion and Management</i> , 2017, 141, 339-353.	9.2	246
33	A critical review on various remediation approaches for heavy metal contaminants removal from contaminated soils. <i>Chemosphere</i> , 2022, 287, 132369.	8.2	246
34	Sustainable approaches for algae utilisation in bioenergy production. <i>Renewable Energy</i> , 2018, 129, 838-852.	8.9	241
35	A state-of-the-art review on thermochemical conversion of biomass for biofuel production: A TG-FTIR approach. <i>Energy Conversion and Management</i> , 2020, 209, 112634.	9.2	238
36	Isothermal torrefaction kinetics of hemicellulose, cellulose, lignin and xylan using thermogravimetric analysis. <i>Energy</i> , 2011, 36, 6451-6460.	8.8	236

#	ARTICLE	IF	CITATIONS
37	Water gas shift reaction for hydrogen production and carbon dioxide capture: A review. Applied Energy, 2020, 258, 114078.	10.1	231
38	Multifaceted roles of microalgae in the application of wastewater biotreatment: A review. Environmental Pollution, 2021, 269, 116236.	7.5	231
39	Investigation on the ignition and burnout temperatures of bamboo and sugarcane bagasse by thermogravimetric analysis. Applied Energy, 2015, 160, 49-57.	10.1	228
40	An evaluation on improvement of pulverized biomass property for solid fuel through torrefaction. Applied Energy, 2011, 88, 3636-3644.	10.1	224
41	Potential utilization of bioproducts from microalgae for the quality enhancement of natural products. Bioresource Technology, 2020, 304, 122997.	9.6	224
42	Optimization of biodiesel production by microwave irradiation-assisted transesterification for waste cooking oil-Calophyllum inophyllum oil via response surface methodology. Energy Conversion and Management, 2018, 158, 400-415.	9.2	222
43	Thermal pretreatment of wood (Lauan) block by torrefaction and its influence on the properties of the biomass. Energy, 2011, 36, 3012-3021.	8.8	218
44	Technologies for Biogas Upgrading to Biomethane: A Review. Bioengineering, 2019, 6, 92.	3.5	218
45	Evaluation of the engine performance and exhaust emissions of biodiesel-bioethanol-diesel blends using kernel-based extreme learning machine. Energy, 2018, 159, 1075-1087.	8.8	217
46	A review of thermochemical conversion of microalgal biomass for biofuels: chemistry and processes. Green Chemistry, 2017, 19, 44-67.	9.0	216
47	Pyrolysis characteristics and kinetic studies of horse manure using thermogravimetric analysis. Energy Conversion and Management, 2019, 180, 1260-1267.	9.2	214
48	State of the Art of Catalysts for Biodiesel Production. Frontiers in Energy Research, 2020, 8, .	2.3	214
49	State of the art review on development of ultrasound-assisted catalytic transesterification process for biodiesel production. Fuel, 2019, 235, 886-907.	6.4	208
50	An experimental analysis on property and structure variations of agricultural wastes undergoing torrefaction. Applied Energy, 2012, 100, 318-325.	10.1	206
51	Torrefaction, pyrolysis and two-stage thermodegradation of hemicellulose, cellulose and lignin. Fuel, 2019, 258, 116168.	6.4	201
52	Synthesis of biomass as heterogeneous catalyst for application in biodiesel production: State of the art and fundamental review. Renewable and Sustainable Energy Reviews, 2018, 92, 235-253.	16.4	200
53	Phase Change Materials (PCM) for Solar Energy Usages and Storage: An Overview. Energies, 2019, 12, 3167.	3.1	197
54	Hydrothermal carbonization of sugarcane bagasse via wet torrefaction in association with microwave heating. Bioresource Technology, 2012, 118, 195-203.	9.6	196

#	ARTICLE	IF	CITATIONS
55	Recent advances in the pretreatment of microalgal and lignocellulosic biomass: A comprehensive review. <i>Bioresource Technology</i> , 2020, 298, 122476.	9.6	195
56	Sustainable biofuel and bioenergy production from biomass waste residues using microwave-assisted heating: A comprehensive review. <i>Chemical Engineering Journal</i> , 2021, 403, 126233.	12.7	192
57	Torrefaction and low temperature carbonization of oil palm fiber and eucalyptus in nitrogen and air atmospheres. <i>Bioresource Technology</i> , 2012, 123, 98-105.	9.6	190
58	Microalgae biomass as a sustainable source for biofuel, biochemical and biobased value-added products: An integrated biorefinery concept. <i>Fuel</i> , 2022, 307, 121782.	6.4	190
59	Biodiesel synthesis from Ceiba pentandra oil by microwave irradiation-assisted transesterification: ELM modeling and optimization. <i>Renewable Energy</i> , 2020, 146, 1278-1291.	8.9	187
60	Hydrolysis characteristics of sugarcane bagasse pretreated by dilute acid solution in a microwave irradiation environment. <i>Applied Energy</i> , 2012, 93, 237-244.	10.1	179
61	A comparison of gasification phenomena among raw biomass, torrefied biomass and coal in an entrained-flow reactor. <i>Applied Energy</i> , 2013, 112, 421-430.	10.1	176
62	Waste biorefinery towards a sustainable circular bioeconomy: a solution to global issues. <i>Biotechnology for Biofuels</i> , 2021, 14, 87.	6.2	176
63	Synthesis and thermal conductivity characteristic of hybrid nanofluids “A review. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 75, 868-878.	16.4	175
64	Torrefaction performance and energy usage of biomass wastes and their correlations with torrefaction severity index. <i>Applied Energy</i> , 2018, 220, 598-604.	10.1	175
65	Effects of water culture medium, cultivation systems and growth modes for microalgae cultivation: A review. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2018, 91, 332-344.	5.3	174
66	Biodiesel production from Calophyllum inophyllum-Ceiba pentandra oil mixture: Optimization and characterization. <i>Journal of Cleaner Production</i> , 2019, 219, 183-198.	9.3	174
67	Catalytic effects of potassium on biomass pyrolysis, combustion and torrefaction. <i>Applied Energy</i> , 2019, 235, 346-355.	10.1	170
68	Research progress on iron oxide-based magnetic materials: Synthesis techniques and photocatalytic applications. <i>Ceramics International</i> , 2016, 42, 9-34.	4.8	168
69	Adsorptive removal of cationic methylene blue and anionic Congo red dyes using wet-torrefied microalgal biochar: Equilibrium, kinetic and mechanism modeling. <i>Environmental Pollution</i> , 2021, 272, 115986.	7.5	165
70	A critical review on the recent progress of synthesizing techniques and fabrication of TiO ₂ -based nanotubes photocatalysts. <i>Applied Catalysis A: General</i> , 2014, 481, 127-142.	4.3	162
71	Gasification performances of raw and torrefied biomass in a downdraft fixed bed gasifier using thermodynamic analysis. <i>Fuel</i> , 2014, 117, 1231-1241.	6.4	161
72	An experimental investigation on performance analysis of air type photovoltaic thermal collector system integrated with cooling fins design. <i>Energy and Buildings</i> , 2016, 130, 272-285.	6.7	159

#	ARTICLE	IF	CITATIONS
73	Investigation of carbon-based solid acid catalyst from <i>Jatropha curcas</i> biomass in biodiesel production. <i>Energy Conversion and Management</i> , 2017, 144, 10-17.	9.2	158
74	A review on energy pattern and policy for transportation sector in Malaysia. <i>Renewable and Sustainable Energy Reviews</i> , 2012, 16, 532-542.	16.4	153
75	Greenhouse gases utilization: A review. <i>Fuel</i> , 2021, 301, 121017.	6.4	153
76	Impact of torrefaction on the composition, structure and reactivity of a microalga residue. <i>Applied Energy</i> , 2016, 181, 110-119.	10.1	149
77	Thermal performance enhancement of an evacuated tube solar collector using graphene nanoplatelets nanofluid. <i>Journal of Cleaner Production</i> , 2017, 162, 121-129.	9.3	149
78	Progress and challenges of contaminate removal from wastewater using microalgae biomass. <i>Chemosphere</i> , 2022, 286, 131656.	8.2	147
79	Non-oxidative and oxidative torrefaction characterization and SEM observations of fibrous and ligneous biomass. <i>Applied Energy</i> , 2014, 114, 104-113.	10.1	145
80	Microalgae from wastewater treatment to biochar “ Feedstock preparation and conversion technologies. <i>Energy Conversion and Management</i> , 2017, 150, 1-13.	9.2	144
81	Experimental study on performance and exhaust emissions of a diesel engine fuelled with <i>Ceiba pentandra</i> biodiesel blends. <i>Energy Conversion and Management</i> , 2013, 76, 828-836.	9.2	139
82	Pretreatment of biomass by torrefaction and carbonization for coal blend used in pulverized coal injection. <i>Bioresource Technology</i> , 2014, 161, 333-339.	9.6	139
83	Experimental study on thermoelectric modules for power generation at various operating conditions. <i>Energy</i> , 2012, 45, 874-881.	8.8	137
84	Recent advances of titanium dioxide (TiO ₂) for green organic synthesis. <i>RSC Advances</i> , 2016, 6, 108741-108754.	3.6	137
85	Progress in utilisation of waste cooking oil for sustainable biodiesel and biojet fuel production. <i>Energy Conversion and Management</i> , 2020, 223, 113296.	9.2	137
86	A review on the engine performance and exhaust emission characteristics of diesel engines fueled with biodiesel blends. <i>Environmental Science and Pollution Research</i> , 2018, 25, 15307-15325.	5.3	136
87	Comparative study of nanoparticles and alcoholic fuel additives-biodiesel-diesel blend for performance and emission improvements. <i>Fuel</i> , 2020, 279, 118434.	6.4	136
88	Modern developmental aspects in the field of economical harvesting and biodiesel production from microalgae biomass. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 135, 110209.	16.4	136
89	Thermal decomposition dynamics and severity of microalgae residues in torrefaction. <i>Bioresource Technology</i> , 2014, 169, 258-264.	9.6	135
90	Overview: Comparison of pretreatment technologies and fermentation processes of bioethanol from microalgae. <i>Energy Conversion and Management</i> , 2018, 173, 81-94.	9.2	134

#	ARTICLE	IF	CITATIONS
91	Green approaches in synthesising nanomaterials for environmental nanobioremediation: Technological advancements, applications, benefits and challenges. <i>Environmental Research</i> , 2022, 204, 111967.	7.5	132
92	Enzymatic transesterification for biodiesel production: a comprehensive review. <i>RSC Advances</i> , 2016, 6, 60034-60055.	3.6	131
93	An overview on current application of nanofluids in solar thermal collector and its challenges. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 53, 1092-1105.	16.4	131
94	Torrefied biomasses in a drop tube furnace to evaluate their utility in blast furnaces. <i>Bioresource Technology</i> , 2012, 111, 433-438.	9.6	130
95	Rice bran oil based biodiesel production using calcium oxide catalyst derived from <i>Chicoreus brunneus</i> shell. <i>Energy</i> , 2018, 144, 10-19.	8.8	130
96	Insight into the recent advances of microwave pretreatment technologies for the conversion of lignocellulosic biomass into sustainable biofuel. <i>Chemosphere</i> , 2021, 281, 130878.	8.2	129
97	Torrefaction of microalgal biochar as potential coal fuel and application as bio-adsorbent. <i>Energy Conversion and Management</i> , 2018, 165, 152-162.	9.2	125
98	Bioflocculation formation of microalgae-bacteria in enhancing microalgae harvesting and nutrient removal from wastewater effluent. <i>Bioresource Technology</i> , 2019, 272, 34-39.	9.6	124
99	Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities. <i>Bioresource Technology</i> , 2013, 146, 152-160.	9.6	119
100	Life cycle cost and sensitivity analysis of palm biodiesel production. <i>Fuel</i> , 2012, 98, 131-139.	6.4	117
101	Genetic engineering of microalgae for enhanced biorefinery capabilities. <i>Biotechnology Advances</i> , 2020, 43, 107554.	11.7	117
102	A comprehensive study on pyrolysis kinetics of microalgal biomass. <i>Energy Conversion and Management</i> , 2017, 131, 109-116.	9.2	116
103	Power output analysis and optimization of two straight-bladed vertical-axis wind turbines. <i>Applied Energy</i> , 2017, 185, 223-232.	10.1	115
104	Cultivation of <i>Chlorella vulgaris</i> using nutrients source from domestic wastewater for biodiesel production: Growth condition and kinetic studies. <i>Renewable Energy</i> , 2017, 103, 197-207.	8.9	115
105	Fermentation of blueberry and blackberry juices using <i>Lactobacillus plantarum</i> , <i>Streptococcus thermophilus</i> and <i>Bifidobacterium bifidum</i> : Growth of probiotics, metabolism of phenolics, antioxidant capacity in vitro and sensory evaluation. <i>Food Chemistry</i> , 2021, 348, 129083.	8.2	115
106	Recent advances in biodiesel production from agricultural products and microalgae using ionic liquids: Opportunities and challenges. <i>Energy Conversion and Management</i> , 2021, 228, 113647.	9.2	114
107	A comprehensive review of life cycle assessment (LCA) of microalgal and lignocellulosic bioenergy products from thermochemical processes. <i>Bioresource Technology</i> , 2019, 291, 121837.	9.6	113
108	Hygroscopic transformation of woody biomass torrefaction for carbon storage. <i>Applied Energy</i> , 2018, 231, 768-776.	10.1	111

#	ARTICLE	IF	CITATIONS
109	Characteristics of hydrogen production from steam gasification of plant-originated lignocellulosic biomass and its prospects in Vietnam. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 4394-4425.	7.1	110
110	Isothermal and non-isothermal torrefaction characteristics and kinetics of microalga <i>Scenedesmus obliquus</i> CNW-N. <i>Bioresource Technology</i> , 2014, 155, 245-251.	9.6	109
111	Energy-related approach for reduction of CO2 emissions: A critical strategy on the port-to-ship pathway. <i>Journal of Cleaner Production</i> , 2022, 355, 131772.	9.3	109
112	Enhanced microalgal protein extraction and purification using sustainable microwave-assisted multiphase partitioning technique. <i>Chemical Engineering Journal</i> , 2019, 367, 1-8.	12.7	105
113	Experimental study and prediction of the performance and exhaust emissions of mixed <i>Jatropha curcas</i> - <i>Ceiba pentandra</i> biodiesel blends in diesel engine using artificial neural networks. <i>Journal of Cleaner Production</i> , 2017, 164, 618-633.	9.3	104
114	Wet torrefaction of microalga <i>Chlorella vulgaris</i> ESP-31 with microwave-assisted heating. <i>Energy Conversion and Management</i> , 2017, 141, 163-170.	9.2	103
115	Liquid hot water as sustainable biomass pretreatment technique for bioenergy production: A review. <i>Bioresource Technology</i> , 2022, 344, 126207.	9.6	103
116	Pulverized coal burnout in blast furnace simulated by a drop tube furnace. <i>Energy</i> , 2010, 35, 576-581.	8.8	101
117	Torrefaction operation and optimization of microalga residue for energy densification and utilization. <i>Applied Energy</i> , 2015, 154, 622-630.	10.1	101
118	Product characteristics from the torrefaction of oil palm fiber pellets in inert and oxidative atmospheres. <i>Bioresource Technology</i> , 2016, 199, 367-374.	9.6	101
119	Thermal degradation of carbohydrates, proteins and lipids in microalgae analyzed by evolutionary computation. <i>Energy Conversion and Management</i> , 2018, 160, 209-219.	9.2	101
120	Characterization of solid and liquid products from bamboo torrefaction. <i>Applied Energy</i> , 2015, 160, 829-835.	10.1	100
121	An overview of engine durability and compatibility using biodieselâ€bioethanolâ€diesel blends in compression-ignition engines. <i>Energy Conversion and Management</i> , 2016, 128, 66-81.	9.2	99
122	Pyrolysis of microalgae residues â€ A kinetic study. <i>Bioresource Technology</i> , 2016, 199, 362-366.	9.6	99
123	Micro (nano) plastic pollution: The ecological influence on soil-plant system and human health. <i>Science of the Total Environment</i> , 2021, 788, 147815.	8.0	99
124	Predictions of biochar yield and elemental composition during torrefaction of forest residues. <i>Bioresource Technology</i> , 2016, 215, 239-246.	9.6	98
125	Biodiesel production by lipase-catalyzed transesterification of <i>Ocimum basilicum</i> L. (sweet basil) seed oil. <i>Energy Conversion and Management</i> , 2017, 132, 82-90.	9.2	98
126	Renewable aviation fuel by advanced hydroprocessing of biomass: Challenges and perspective. <i>Energy Conversion and Management</i> , 2019, 199, 112015.	9.2	98

#	ARTICLE	IF	CITATIONS
127	Nanomaterials Utilization in Biomass for Biofuel and Bioenergy Production. <i>Energies</i> , 2020, 13, 892.	3.1	97
128	Critical review on third generation micro algae biodiesel production and its feasibility as future bioenergy for IC engine applications. <i>Energy Conversion and Management</i> , 2021, 228, 113655.	9.2	96
129	Impact of dilute acid pretreatment on the structure of bagasse for bioethanol production. <i>International Journal of Energy Research</i> , 2010, 34, 265-274.	4.5	95
130	Comparative assessment of hexanol and decanol as oxygenated additives with calophyllum inophyllum biodiesel. <i>Energy</i> , 2019, 173, 494-510.	8.8	95
131	A review on application of artificial neural network (ANN) for performance and emission characteristics of diesel engine fueled with biodiesel-based fuels. <i>Sustainable Energy Technologies and Assessments</i> , 2021, 47, 101416.	2.7	94
132	Oxidative torrefaction of biomass nutshells: Evaluations of energy efficiency as well as biochar transportation and storage. <i>Applied Energy</i> , 2019, 235, 428-441.	10.1	93
133	Ultrasound-assisted process optimization and tribological characteristics of biodiesel from palm-sesame oil via response surface methodology and extreme learning machine - Cuckoo search. <i>Renewable Energy</i> , 2020, 158, 202-214.	8.9	93
134	Heavy metal toxicity, sources, and remediation techniques for contaminated water and soil. <i>Environmental Technology and Innovation</i> , 2022, 25, 102114.	6.1	93
135	Novel approaches of producing bioenergies from microalgae: A recent review. <i>Biotechnology Advances</i> , 2015, 33, 1219-1227.	11.7	92
136	A comprehensive analysis of food waste derived liquefaction bio-oil properties for industrial application. <i>Applied Energy</i> , 2019, 237, 283-291.	10.1	92
137	Effect of torrefaction pretreatment on the pyrolysis of rubber wood sawdust analyzed by Py-GC/MS. <i>Bioresource Technology</i> , 2018, 259, 469-473.	9.6	91
138	Emulsification analysis of bio-oil and diesel under various combinations of emulsifiers. <i>Applied Energy</i> , 2016, 178, 746-757.	10.1	90
139	Characterization and production of Ceiba pentandra biodiesel and its blends. <i>Fuel</i> , 2013, 108, 855-858.	6.4	89
140	Optimization of transesterification process for Ceiba pentandra oil: A comparative study between kernel-based extreme learning machine and artificial neural networks. <i>Energy</i> , 2017, 134, 24-34.	8.8	89
141	Food waste compost as an organic nutrient source for the cultivation of <i>Chlorella vulgaris</i> . <i>Bioresource Technology</i> , 2018, 267, 356-362.	9.6	89
142	Green technology for the industrial production of biofuels and bioproducts from microalgae: a review. <i>Environmental Chemistry Letters</i> , 2020, 18, 1967-1985.	16.2	89
143	Advances in production of bioplastics by microalgae using food waste hydrolysate and wastewater: A review. <i>Bioresource Technology</i> , 2021, 342, 125947.	9.6	89
144	A review on emissions and mitigation strategies for road transport in Malaysia. <i>Renewable and Sustainable Energy Reviews</i> , 2011, 15, 3516-3522.	16.4	87

#	ARTICLE	IF	CITATIONS
145	Analysis of Economic and Environmental Aspects of Microalgae Biorefinery for Biofuels Production: A Review. <i>Biotechnology Journal</i> , 2018, 13, 1700618.	3.5	87
146	Effect of nanocatalysts on the transesterification reaction of first, second and third generation biodiesel sources- A mini-review. <i>Chemosphere</i> , 2021, 270, 128642.	8.2	87
147	Engine performance and emission characteristics of palm biodiesel blends with graphene oxide nanoplatelets and dimethyl carbonate additives. <i>Journal of Environmental Management</i> , 2021, 282, 111917.	7.8	86
148	Microalgae and ammonia: A review on inter-relationship. <i>Fuel</i> , 2021, 303, 121303.	6.4	86
149	Variation of lignocellulosic biomass structure from torrefaction: A critical review. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 152, 111698.	16.4	86
150	Microalgal-based biochar in wastewater remediation: Its synthesis, characterization and applications. <i>Environmental Research</i> , 2022, 204, 111966.	7.5	86
151	Biomass-derived biochar: From production to application in removing heavy metal-contaminated water. <i>Chemical Engineering Research and Design</i> , 2022, 160, 704-733.	5.6	86
152	Synthesis and optimization of <i>Hevea brasiliensis</i> and <i>Ricinus communis</i> as feedstock for biodiesel production: A comparative study. <i>Industrial Crops and Products</i> , 2016, 85, 274-286.	5.2	84
153	A comprehensive review on state-of-the-art photo-, sono-, and sonophotocatalytic treatments to degrade emerging contaminants. <i>International Journal of Environmental Science and Technology</i> , 2019, 16, 601-628.	3.5	83
154	Effects of acids pre-treatment on the microbial fermentation process for bioethanol production from microalgae. <i>Biotechnology for Biofuels</i> , 2019, 12, 191.	6.2	83
155	A critical review on the principles, applications, and challenges of waste-to-hydrogen technologies. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 134, 110365.	16.4	83
156	Prospects and development of algal-bacterial biotechnology in environmental management and protection. <i>Biotechnology Advances</i> , 2021, 47, 107684.	11.7	83
157	Microalgae Cultivation in Palm Oil Mill Effluent (POME) Treatment and Biofuel Production. <i>Sustainability</i> , 2021, 13, 3247.	3.2	83
158	Enhancing biomass and lipid productions of microalgae in palm oil mill effluent using carbon and nutrient supplementation. <i>Energy Conversion and Management</i> , 2018, 164, 188-197.	9.2	82
159	Impact of various microalgal-bacterial populations on municipal wastewater bioremediation and its energy feasibility for lipid-based biofuel production. <i>Journal of Environmental Management</i> , 2019, 249, 109384.	7.8	82
160	Acid-based lignocellulosic biomass biorefinery for bioenergy production: Advantages, application constraints, and perspectives. <i>Journal of Environmental Management</i> , 2021, 296, 113194.	7.8	82
161	A global comparative review of biodiesel production from <i>Jatropha curcas</i> using different homogeneous acid and alkaline catalysts: Study of physical and chemical properties. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 24, 514-533.	16.4	81
162	Prospect of biobased antiviral face mask to limit the coronavirus outbreak. <i>Environmental Research</i> , 2021, 192, 110294.	7.5	80

#	ARTICLE	IF	CITATIONS
163	Source, distribution and emerging threat of micro- and nanoplastics to marine organism and human health: Socio-economic impact and management strategies. <i>Environmental Research</i> , 2021, 195, 110857.	7.5	79
164	Comparison between airborne ultrasound and contact ultrasound to intensify air drying of blackberry: Heat and mass transfer simulation, energy consumption and quality evaluation. <i>Ultrasonics Sonochemistry</i> , 2021, 72, 105410.	8.2	79
165	Performances of pulverized coal injection in blowpipe and tuyere at various operational conditions. <i>Energy Conversion and Management</i> , 2007, 48, 2069-2076.	9.2	78
166	Numerical investigation on performance of coal gasification under various injection patterns in an entrained flow gasifier. <i>Applied Energy</i> , 2012, 100, 218-228.	10.1	77
167	Independent parallel pyrolysis kinetics of cellulose, hemicelluloses and lignin at various heating rates analyzed by evolutionary computation. <i>Energy Conversion and Management</i> , 2020, 221, 113165.	9.2	77
168	Valorisation of medical waste through pyrolysis for a cleaner environment: Progress and challenges. <i>Environmental Pollution</i> , 2021, 279, 116934.	7.5	77
169	An energy analysis of torrefaction for upgrading microalga residue as a solid fuel. <i>Bioresource Technology</i> , 2015, 185, 285-293.	9.6	76
170	The effect of stress environment towards lipid accumulation in microalgae after harvesting. <i>Renewable Energy</i> , 2020, 154, 1083-1091.	8.9	76
171	Characterization of biomass waste torrefaction under conventional and microwave heating. <i>Bioresource Technology</i> , 2018, 264, 7-16.	9.6	75
172	Overview on catalytic deoxygenation for biofuel synthesis using metal oxide supported catalysts. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 112, 834-852.	16.4	75
173	Sustainable utilization of biowaste compost for renewable energy and soil amendments. <i>Environmental Pollution</i> , 2020, 267, 115662.	7.5	75
174	Critical review on sesame seed oil and its methyl ester on cold flow and oxidation stability. <i>Energy Reports</i> , 2020, 6, 40-54.	5.1	74
175	Modified mesoporous HMS supported Ni for deoxygenation of triolein into hydrocarbon-biofuel production. <i>Energy Conversion and Management</i> , 2018, 165, 495-508.	9.2	73
176	Microalgae cultivation in palm oil mill effluent (POME) for lipid production and pollutants removal. <i>Energy Conversion and Management</i> , 2018, 174, 430-438.	9.2	73
177	A comparative study of biodiesel production methods for <i>Reutealis trisperma</i> biodiesel. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2017, 39, 2006-2014.	2.3	71
178	In vitro gastrointestinal digestion and fecal fermentation reveal the effect of different encapsulation materials on the release, degradation and modulation of gut microbiota of blueberry anthocyanin extract. <i>Food Research International</i> , 2020, 132, 109098.	6.2	71
179	A review on potential enzymatic reaction for biofuel production from algae. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 39, 24-34.	16.4	70
180	A perspective on bioethanol production from biomass as alternative fuel for spark ignition engine. <i>RSC Advances</i> , 2016, 6, 14964-14992.	3.6	70

#	ARTICLE	IF	CITATIONS
181	Biochar production from microalgae cultivation through pyrolysis as a sustainable carbon sequestration and biorefinery approach. <i>Clean Technologies and Environmental Policy</i> , 2018, 20, 2047-2055.	4.1	69
182	Thermal conductivity of an ethylene glycol/water-based nanofluid with copper-titanium dioxide nanoparticles: An experimental approach. <i>International Communications in Heat and Mass Transfer</i> , 2018, 90, 23-28.	5.6	69
183	Recent advances in algae biodiesel production: From upstream cultivation to downstream processing. <i>Bioresource Technology Reports</i> , 2019, 7, 100227.	2.7	69
184	Investigation of potential hybrid renewable energy at various rural areas in Malaysia. <i>Journal of Cleaner Production</i> , 2016, 139, 61-73.	9.3	67
185	Optimization of bioethanol production from sorghum grains using artificial neural networks integrated with ant colony. <i>Industrial Crops and Products</i> , 2017, 97, 146-155.	5.2	67
186	Thermal conductivity optimization and entropy generation analysis of titanium dioxide nanofluid in evacuated tube solar collector. <i>Applied Thermal Engineering</i> , 2018, 145, 155-164.	6.0	66
187	A multidisciplinary review of <i>Tetrademus obliquus</i> : a microalga suitable for large-scale biomass production and emerging environmental applications. <i>Reviews in Aquaculture</i> , 2021, 13, 1594-1618.	9.0	66
188	Sustainability of Palm Biodiesel in Transportation: a Review on Biofuel Standard, Policy and International Collaboration Between Malaysia and Colombia. <i>Bioenergy Research</i> , 2021, 14, 43-60.	3.9	65
189	Pretreatment, modification and applications of sewage sludge-derived biochar for resource recovery- A review. <i>Chemosphere</i> , 2022, 287, 131969.	8.2	65
190	Biodiesel Conversion from High FFA Crude <i>Jatropha Curcas</i> , <i>Calophyllum Inophyllum</i> and <i>Ceiba Pentandra</i> Oil. <i>Energy Procedia</i> , 2014, 61, 480-483.	1.8	64
191	Resource assessment of the renewable energy potential for a remote area: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 62, 908-923.	16.4	64
192	Biodiesel production from <i>Calophyllum inophyllum</i> palm mixed oil. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2017, 39, 1283-1289.	2.3	64
193	Extraction of natural astaxanthin from <i>Haematococcus pluvialis</i> using liquid biphasic flotation system. <i>Bioresource Technology</i> , 2019, 290, 121794.	9.6	64
194	Bioformulation of biochar as a potential inoculant carrier for sustainable agriculture. <i>Environmental Technology and Innovation</i> , 2020, 20, 101168.	6.1	64
195	Effect of Additivized Biodiesel Blends on Diesel Engine Performance, Emission, Tribological Characteristics, and Lubricant Tribology. <i>Energies</i> , 2020, 13, 3375.	3.1	64
196	Prospects of Bioenergy Production From Organic Waste Using Anaerobic Digestion Technology: A Mini Review. <i>Frontiers in Energy Research</i> , 2021, 9, .	2.3	64
197	Evaluation of viscosity and thermal conductivity of graphene nanoplatelets nanofluids through a combined experimental-statistical approach using respond surface methodology method. <i>International Communications in Heat and Mass Transfer</i> , 2016, 79, 74-80.	5.6	63
198	Physicochemical property enhancement of biodiesel synthesis from hybrid feedstocks of waste cooking vegetable oil and Beauty leaf oil through optimized alkaline-catalysed transesterification. <i>Waste Management</i> , 2018, 80, 435-449.	7.4	63

#	ARTICLE	IF	CITATIONS
199	Liquid biphasic flotation for the purification of C-phycocyanin from <i>Spirulina platensis</i> microalga. <i>Bioresource Technology</i> , 2019, 288, 121519.	9.6	63
200	Utilisation of biomass wastes based activated carbon supported heterogeneous acid catalyst for biodiesel production. <i>Renewable Energy</i> , 2020, 158, 91-102.	8.9	63
201	Synthesis of renewable heterogeneous acid catalyst from oil palm empty fruit bunch for glycerol-free biodiesel production. <i>Science of the Total Environment</i> , 2020, 727, 138534.	8.0	63
202	Characteristics of products from the pyrolysis of oil palm fiber and its pellets in nitrogen and carbon dioxide atmospheres. <i>Energy</i> , 2016, 94, 569-578.	8.8	62
203	Production of biodiesel from <i>Sterculia foetida</i> and its process optimization. <i>Fuel</i> , 2013, 111, 478-484.	6.4	61
204	<i>Schleichera oleosa</i> L oil as feedstock for biodiesel production. <i>Fuel</i> , 2015, 156, 63-70.	6.4	61
205	Cultivation of Oily Microalgae for the Production of Third-Generation Biofuels. <i>Sustainability</i> , 2019, 11, 5424.	3.2	61
206	Comparison and characterization of property variation of microalgal biomass with non-oxidative and oxidative torrefaction. <i>Fuel</i> , 2019, 246, 375-385.	6.4	61
207	Enhancing microalga <i>Chlorella sorokiniana</i> CY-1 biomass and lipid production in palm oil mill effluent (POME) using novel-designed photobioreactor. <i>Bioengineered</i> , 2020, 11, 61-69.	3.2	61
208	Techniques of lipid extraction from microalgae for biofuel production: a review. <i>Environmental Chemistry Letters</i> , 2021, 19, 231-251.	16.2	61
209	Burning characteristics of pulverized coal within blast furnace raceway at various injection operations and ways of oxygen enrichment. <i>Fuel</i> , 2015, 143, 98-106.	6.4	60
210	Simultaneous reduction of NO _x and smoke emissions with low viscous biofuel in low heat rejection engine using selective catalytic reduction technique. <i>Fuel</i> , 2019, 255, 115854.	6.4	60
211	Advances and challenges in grid tied photovoltaic systems. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 49, 121-131.	16.4	59
212	Production of microalgal biochar and reducing sugar using wet torrefaction with microwave-assisted heating and acid hydrolysis pretreatment. <i>Renewable Energy</i> , 2020, 156, 349-360.	8.9	59
213	Optimization of ultrasound-assisted oil extraction from <i>Canarium odontophyllum</i> kernel as a novel biodiesel feedstock. <i>Journal of Cleaner Production</i> , 2021, 288, 125563.	9.3	59
214	Pilot-scale production and the physicochemical properties of palm and <i>Calophyllum inophyllum</i> biodiesels and their blends. <i>Journal of Cleaner Production</i> , 2016, 126, 654-666.	9.3	58
215	Proteins recovery from wet microalgae using liquid biphasic flotation (LBF). <i>Bioresource Technology</i> , 2017, 244, 1329-1336.	9.6	58
216	Flocculation of <i>Chlorella vulgaris</i> by shell waste-derived bioflocculants for biodiesel production: Process optimization, characterization and kinetic studies. <i>Science of the Total Environment</i> , 2020, 702, 134995.	8.0	58

#	ARTICLE	IF	CITATIONS
217	Incorporating biowaste into circular bioeconomy: A critical review of current trend and scaling up feasibility. <i>Environmental Technology and Innovation</i> , 2020, 19, 101034.	6.1	58
218	Utilization of microalgae for bio-jet fuel production in the aviation sector: Challenges and perspective. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 149, 111396.	16.4	58
219	Thermal characteristic reliability of fatty acid binary mixtures as phase change materials (PCMs) for thermal energy storage applications. <i>Applied Thermal Engineering</i> , 2015, 80, 127-131.	6.0	57
220	Torrefaction performance prediction approached by torrefaction severity factor. <i>Fuel</i> , 2019, 251, 126-135.	6.4	57
221	Microalgal Torrefaction for Solid Biofuel Production. <i>Trends in Biotechnology</i> , 2020, 38, 1023-1033.	9.3	57
222	Fourth generation biofuel from genetically modified algal biomass: Challenges and future directions. <i>Chemosphere</i> , 2021, 285, 131535.	8.2	57
223	Taguchi approach for co-gasification optimization of torrefied biomass and coal. <i>Bioresource Technology</i> , 2013, 144, 615-622.	9.6	56
224	Catalyst-Based Synthesis of 2,5-Dimethylfuran from Carbohydrates as a Sustainable Biofuel Production Route. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 3079-3115.	6.7	56
225	Bioethanol production from acid pretreated microalgal hydrolysate using microwave-assisted heating wet torrefaction. <i>Fuel</i> , 2020, 279, 118435.	6.4	55
226	Progress in the torrefaction technology for upgrading oil palm wastes to energy-dense biochar: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 151, 111645.	16.4	55
227	Biofuel production from microalgae: challenges and chances. <i>Phytochemistry Reviews</i> , 2023, 22, 1089-1126.	6.5	55
228	Microwave-assisted wet torrefaction of microalgae under various acids for coproduction of biochar and sugar. <i>Journal of Cleaner Production</i> , 2020, 253, 119944.	9.3	54
229	Co-pyrolysis of microalgae and other biomass wastes for the production of high-quality bio-oil: Progress and prospective. <i>Bioresource Technology</i> , 2022, 344, 126096.	9.6	53
230	Ultrasonic assisted oil extraction and biodiesel synthesis of Spent Coffee Ground. <i>Fuel</i> , 2020, 261, 116121.	6.4	52
231	Microwave pyrolysis for valorisation of horse manure biowaste. <i>Energy Conversion and Management</i> , 2020, 220, 113074.	9.2	52
232	Organic Carbonate Production Utilizing Crude Glycerol Derived as By-Product of Biodiesel Production: A Review. <i>Energies</i> , 2020, 13, 1483.	3.1	52
233	Liquid Biphasic System: A Recent Bioseparation Technology. <i>Processes</i> , 2020, 8, 149.	2.8	52
234	Recent advancements in catalytic conversion pathways for synthetic jet fuel produced from bioresources. <i>Energy Conversion and Management</i> , 2022, 251, 114974.	9.2	52

#	ARTICLE	IF	CITATIONS
235	A comparative study of ultrasound and infrared transesterification of <i>Sterculia foetida</i> oil for biodiesel production. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2017, 39, 1339-1346.	2.3	51
236	Thermal degradation and compositional changes of wood treated in a semi-industrial scale reactor in vacuum. <i>Journal of Analytical and Applied Pyrolysis</i> , 2018, 130, 8-18.	5.5	51
237	Appraisal of the support vector machine to forecast residential heating demand for the District Heating System based on the monthly overall natural gas consumption. <i>Energy</i> , 2015, 93, 1558-1567.	8.8	50
238	Dilute sulfuric acid hydrolysis of red macroalgae <i>Eucheuma denticulatum</i> with microwave-assisted heating for biochar production and sugar recovery. <i>Bioresource Technology</i> , 2017, 246, 20-27.	9.6	50
239	A Comprehensive Review on the Recent Development of Ammonia as a Renewable Energy Carrier. <i>Energies</i> , 2021, 14, 3732.	3.1	50
240	Biochar production with amelioration of microwave-assisted pyrolysis: Current scenario, drawbacks and perspectives. <i>Bioresource Technology</i> , 2022, 355, 127303.	9.6	50
241	Biogas from food waste through anaerobic digestion: optimization with response surface methodology. <i>Biomass Conversion and Biorefinery</i> , 2021, 11, 227-239.	4.6	49
242	Thermal characterization of oil palm fiber and eucalyptus in torrefaction. <i>Energy</i> , 2014, 71, 40-48.	8.8	48
243	Microalgal Protein Extraction From <i>Chlorella vulgaris</i> FSP-E Using Triphasic Partitioning Technique With Sonication. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 396.	4.1	48
244	Applying microwave vacuum pyrolysis to design moisture retention and pH neutralizing palm kernel shell biochar for mushroom production. <i>Bioresource Technology</i> , 2020, 312, 123572.	9.6	48
245	Cultivation of microalgae <i>Chlorella</i> sp. in municipal sewage for biofuel production and utilization of biochar derived from residue for the conversion of hematite iron ore (Fe ₂ O ₃) to iron (Fe) –“Integrated algal biorefinery. <i>Energy</i> , 2019, 189, 116128.	8.8	47
246	Iron oxide reduction by graphite and torrefied biomass analyzed by TG-FTIR for mitigating CO ₂ emissions. <i>Energy</i> , 2019, 180, 968-977.	8.8	47
247	Characterization of a novel type I L-asparaginase from <i>Acinetobacter soli</i> and its ability to inhibit acrylamide formation in potato chips. <i>Journal of Bioscience and Bioengineering</i> , 2020, 129, 672-678.	2.2	47
248	High biodiesel yield from wet microalgae paste via in-situ transesterification: Effect of reaction parameters towards the selectivity of fatty acid esters. <i>Fuel</i> , 2020, 272, 117718.	6.4	47
249	Catalytic hydrodeoxygenation of biomass-derived pyrolysis oil over alloyed bimetallic Ni ₃ Fe nanocatalyst for high-grade biofuel production. <i>Energy Conversion and Management</i> , 2020, 213, 112859.	9.2	47
250	Recovery of human interferon alpha-2b from recombinant <i>Escherichia coli</i> using alcohol/salt-based aqueous two-phase systems. <i>Separation and Purification Technology</i> , 2013, 120, 362-366.	7.9	46
251	Torrefaction of de-oiled <i>Jatropha</i> seed kernel biomass for solid fuel production. <i>Energy</i> , 2019, 170, 367-374.	8.8	46
252	Two-step thermodegradation kinetics of cellulose, hemicelluloses, and lignin under isothermal torrefaction analyzed by particle swarm optimization. <i>Energy Conversion and Management</i> , 2021, 238, 114116.	9.2	46

#	ARTICLE	IF	CITATIONS
253	Integrating Taguchi method and artificial neural network for predicting and maximizing biofuel production via torrefaction and pyrolysis. <i>Bioresource Technology</i> , 2022, 343, 126140.	9.6	46
254	Integration of reactive extraction with supercritical fluids for process intensification of biodiesel production: Prospects and recent advances. <i>Progress in Energy and Combustion Science</i> , 2014, 45, 54-78.	31.2	45
255	Environment-Friendly Heterogeneous Alkaline-Based Mixed Metal Oxide Catalysts for Biodiesel Production. <i>Energies</i> , 2016, 9, 611.	3.1	45
256	Analysis of the performance, emission and combustion characteristics of a turbocharged diesel engine fuelled with <i>Jatropha curcas</i> biodiesel-diesel blends using kernel-based extreme learning machine. <i>Environmental Science and Pollution Research</i> , 2017, 24, 25383-25405.	5.3	45
257	Novel bufferless photosynthetic microbial fuel cell (PMFCs) for enhanced electrochemical performance. <i>Bioresource Technology</i> , 2018, 255, 83-87.	9.6	45
258	Optimization of food waste hydrothermal liquefaction by a two-step process in association with a double analysis. <i>Energy</i> , 2020, 199, 117438.	8.8	45
259	Microalgae cultivation in wastewater and potential processing strategies using solvent and membrane separation technologies. <i>Journal of Water Process Engineering</i> , 2021, 39, 101701.	5.6	45
260	Theoretical calculation of biogas production and greenhouse gas emission reduction potential of livestock, poultry and slaughterhouse waste in Bangladesh. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105204.	6.7	45
261	Product Yields and Characteristics of Corncob Waste under Various Torrefaction Atmospheres. <i>Energies</i> , 2014, 7, 13-27.	3.1	44
262	Enhanced recovery of lipase derived from <i>Burkholderia cepacia</i> from fermentation broth using recyclable ionic liquid/polymer-based aqueous two-phase systems. <i>Separation and Purification Technology</i> , 2017, 179, 152-160.	7.9	44
263	Cultivation of <i>Chlorella vulgaris</i> using sequential-flow bubble column photobioreactor: A stress-inducing strategy for lipid accumulation and carbon dioxide fixation. <i>Journal of CO2 Utilization</i> , 2020, 41, 101226.	6.8	44
264	An Overview of Biodiesel Production via Calcium Oxide Based Catalysts: Current State and Perspective. <i>Energies</i> , 2021, 14, 3950.	3.1	44
265	Fast hydrolysis of biomass Conversion: A comparative review. <i>Bioresource Technology</i> , 2021, 342, 126067.	9.6	44
266	Synthesis, characteristics and sonocatalytic activities of calcined $\gamma\text{-Fe}_2\text{O}_3$ and TiO_2 nanotubes/ $\gamma\text{-Fe}_2\text{O}_3$ magnetic catalysts in the degradation of Orange G. <i>Ultrasonics Sonochemistry</i> , 2016, 29, 317-327.	8.2	43
267	Effects of process, operational and environmental variables on biohydrogen production using palm oil mill effluent (POME). <i>International Journal of Hydrogen Energy</i> , 2018, 43, 10637-10644.	7.1	43
268	Techniques to improve the stability of biodiesel: a review. <i>Environmental Chemistry Letters</i> , 2021, 19, 2209-2236.	16.2	43
269	Performance evaluation and improvement of thermoelectric generators (TEG): Fin installation and compromise optimization. <i>Energy Conversion and Management</i> , 2021, 250, 114858.	9.2	43
270	Microalgae Oil: Algae Cultivation and Harvest, Algae Residue Torrefaction and Diesel Engine Emissions Tests. <i>Aerosol and Air Quality Research</i> , 2015, 15, 81-98.	2.1	42

#	ARTICLE	IF	CITATIONS
271	Promoting deoxygenation of triglycerides via Co-Ca loaded SiO ₂ -Al ₂ O ₃ catalyst. Applied Catalysis A: General, 2018, 552, 38-48.	4.3	42
272	Effective utilization of tobacco (Nicotiana Tabaccum) for biodiesel production and its application on diesel engine using response surface methodology approach. Fuel, 2020, 273, 117793.	6.4	42
273	Hydrogen production from water gas shift reaction in a high gravity (Higee) environment using a rotating packed bed. International Journal of Hydrogen Energy, 2010, 35, 10179-10189.	7.1	41
274	Performance of a thermoelectric generator intensified by temperature oscillation. Energy, 2017, 133, 257-269.	8.8	41
275	Improving "Lipid Productivity"™ in Microalgae by Bilateral Enhancement of Biomass and Lipid Contents: A Review. Sustainability, 2020, 12, 9083.	3.2	41
276	The effects of green tea on lipid metabolism and its potential applications for obesity and related metabolic disorders - An existing update. Diabetes and Metabolic Syndrome: Clinical Research and Reviews, 2019, 13, 1667-1673.	3.6	40
277	The experimental study on the wind turbine's guide-vanes and diffuser of an exhaust air energy recovery system integrated with the cooling tower. Energy Conversion and Management, 2014, 87, 145-155.	9.2	39
278	Application of support vector machine for prediction of electrical and thermal performance in PV/T system. Energy and Buildings, 2016, 111, 267-277.	6.7	39
279	Biomass torrefaction: An overview of process and technology assessment based on global readiness level. Fuel, 2022, 324, 124663.	6.4	39
280	Sustainable valorization of algae biomass via thermochemical processing route: An overview. Bioresource Technology, 2022, 344, 126399.	9.6	38
281	Optimization of a vertical axis wind turbine with a deflector under unsteady wind conditions via Taguchi and neural network applications. Energy Conversion and Management, 2022, 254, 115209.	9.2	38
282	Pyrolysis of marine algae for biochar production for adsorption of Ciprofloxacin from aqueous solutions. Bioresource Technology, 2022, 351, 127043.	9.6	38
283	A comprehensive review of thermogravimetric analysis in lignocellulosic and algal biomass gasification. Chemical Engineering Journal, 2022, 445, 136730.	12.7	38
284	Intelligent forecasting of residential heating demand for the District Heating System based on the monthly overall natural gas consumption. Energy and Buildings, 2015, 104, 208-214.	6.7	37
285	Optimization of extraction of lipid from <i>Isochrysis galbana</i> microalgae species for biodiesel synthesis. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2017, 39, 1167-1175.	2.3	37
286	Predictions of biochar production and torrefaction performance from sugarcane bagasse using interpolation and regression analysis. Bioresource Technology, 2017, 246, 12-19.	9.6	37
287	Performance and Emission Parameters of Homogeneous Charge Compression Ignition (HCCI) Engine: A Review. Energies, 2019, 12, 3557.	3.1	37
288	Effects of organosolv pretreatment and acid hydrolysis on palm empty fruit bunch (PEFB) as bioethanol feedstock. Biomass and Bioenergy, 2016, 95, 78-83.	5.7	36

#	ARTICLE	IF	CITATIONS
289	Optimization study of SiO ₂ -Al ₂ O ₃ supported bifunctional acid–base NiO-CaO for renewable fuel production using response surface methodology. <i>Energy Conversion and Management</i> , 2017, 141, 325-338.	9.2	36
290	Efficient deoxygenation of triglycerides to hydrocarbon-biofuel over mesoporous Al ₂ O ₃ -TiO ₂ catalyst. <i>Fuel Processing Technology</i> , 2019, 194, 106120.	7.2	36
291	Hysteresis and reaction characterization of methane catalytic partial oxidation on rhodium catalyst. <i>Journal of Power Sources</i> , 2009, 194, 467-477.	7.8	35
292	Optimization of Reducing Sugar Production from Manihot glaziovii Starch Using Response Surface Methodology. <i>Energies</i> , 2017, 10, 35.	3.1	35
293	Multi-functional fuel additive as a combustion catalyst for diesel and biodiesel in CI engine characteristics. <i>Fuel</i> , 2020, 278, 118250.	6.4	35
294	Pyrolysis of waste oils for the production of biofuels: A critical review. <i>Journal of Hazardous Materials</i> , 2022, 424, 127396.	12.4	35
295	Cost-Benefit Analysis and Emission Reduction of Energy Efficient Lighting at the Universiti Tenaga Nasional. <i>Scientific World Journal</i> , The, 2014, 2014, 1-11.	2.1	34
296	Effects of dry and wet torrefaction pretreatment on microalgae pyrolysis analyzed by TG-FTIR and double-shot Py-GC/MS. <i>Energy</i> , 2020, 210, 118579.	8.8	34
297	Synthesis pathway and combustion mechanism of a sustainable biofuel 2,5-Dimethylfuran: Progress and prospective. <i>Fuel</i> , 2021, 286, 119337.	6.4	34
298	Solid biofuel production from spent coffee ground wastes: Process optimisation, characterisation and kinetic studies. <i>Fuel</i> , 2021, 292, 120309.	6.4	34
299	Improving protein production of indigenous microalga <i>Chlorella vulgaris</i> FSP by photobioreactor design and cultivation strategies. <i>Biotechnology Journal</i> , 2015, 10, 905-914.	3.5	33
300	Catalytic level identification of ZSM-5 on biomass pyrolysis and aromatic hydrocarbon formation. <i>Chemosphere</i> , 2021, 271, 129510.	8.2	33
301	Evaluating the application of antibiotic treatment using algae-activated sludge system. <i>Chemosphere</i> , 2021, 282, 130966.	8.2	33
302	A critical review on second- and third-generation bioethanol production using microwaved-assisted heating (MAH) pretreatment. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 152, 111679.	16.4	33
303	Algae as potential feedstock for various bioenergy production. <i>Chemosphere</i> , 2022, 287, 131944.	8.2	33
304	Power generation of thermoelectric generator with plate fins for recovering low-temperature waste heat. <i>Applied Energy</i> , 2022, 306, 118012.	10.1	33
305	Co-liquefaction of mixed biomass feedstocks for bio-oil production: A critical review. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 154, 111814.	16.4	33
306	Valorization of animal manure via pyrolysis for bioenergy: A review. <i>Journal of Cleaner Production</i> , 2022, 343, 130965.	9.3	33

#	ARTICLE	IF	CITATIONS
307	Identification of optimum Calophyllum inophyllum bio-fuel blend in diesel engine using advanced vibration analysis technique. Renewable Energy, 2017, 109, 295-304.	8.9	32
308	Impact of addition of two ether additives with high speed diesel- Calophyllum Inophyllum biodiesel blends on NOx reduction in CI engine. Energy, 2019, 185, 39-54.	8.8	32
309	Application of ultrasonication at different microbial growth stages during apple juice fermentation by Lactobacillus plantarum: Investigation on the metabolic response. Ultrasonics Sonochemistry, 2021, 73, 105486.	8.2	32
310	Pathways of lignocellulosic biomass deconstruction for biofuel and value-added products production. Fuel, 2022, 318, 123618.	6.4	32
311	CO2 conversion for syngas production in methane catalytic partial oxidation. Journal of CO2 Utilization, 2014, 5, 1-9.	6.8	31
312	The intelligent forecasting of the performances in PV/T collectors based on soft computing method. Renewable and Sustainable Energy Reviews, 2017, 72, 1366-1378.	16.4	31
313	Recent progress in catalytic conversion of microalgae oil to green hydrocarbon: A review. Journal of the Taiwan Institute of Chemical Engineers, 2017, 79, 116-124.	5.3	31
314	Effect of wet torrefaction on pyrolysis kinetics and conversion of microalgae carbohydrates, proteins, and lipids. Energy Conversion and Management, 2021, 227, 113609.	9.2	31
315	Development of empirical correlations for density and viscosity estimation of ternary biodiesel blends. Renewable Energy, 2021, 179, 1447-1457.	8.9	31
316	Biohydrogen production from wastewater-based microalgae: Progresses and challenges. International Journal of Hydrogen Energy, 2022, 47, 37321-37342.	7.1	31
317	Enhancement effect of heat recovery on hydrogen production from catalytic partial oxidation of methane. International Journal of Hydrogen Energy, 2010, 35, 7427-7440.	7.1	30
318	Recovery of laccase from processed Hericium erinaceus (Bull.:Fr) Pers. fruiting bodies in aqueous two-phase system. Journal of Bioscience and Bioengineering, 2016, 122, 301-306.	2.2	30
319	Lipid Extraction Maximization and Enzymatic Synthesis of Biodiesel from Microalgae. Applied Sciences (Switzerland), 2020, 10, 6103.	2.5	30
320	Gasification kinetics of raw and wet-torrefied microalgae Chlorella vulgaris ESP-31 in carbon dioxide. Bioresource Technology, 2017, 244, 1393-1399.	9.6	29
321	Energy-Related CO2 Emissions Growth in ASEAN Countries: Trends, Drivers and Policy Implications. Energies, 2019, 12, 4650.	3.1	29
322	Simulation studies on microwave-assisted pyrolysis of biomass for bioenergy production with special attention on waveguide number and location. Energy, 2020, 190, 116474.	8.8	29
323	Optimization and analysis of syngas production from methane and CO2 via Taguchi approach, response surface methodology (RSM) and analysis of variance (ANOVA). Fuel, 2021, 296, 120642.	6.4	29
324	Reaction phenomena of catalytic partial oxidation of methane under the impact of carbon dioxide addition and heat recirculation. Energy, 2015, 82, 206-217.	8.8	28

#	ARTICLE	IF	CITATIONS
325	Improving the stability of diesel emulsions with high pyrolysis bio-oil content by alcohol co-surfactants and high shear mixing strategies. <i>Energy</i> , 2017, 141, 1416-1428.	8.8	28
326	Heat treatment kinetics using three-stage approach for sustainable wood material production. <i>Industrial Crops and Products</i> , 2018, 124, 563-571.	5.2	28
327	Integration Process for Protein Extraction from Microalgae Using Liquid Biphasic Electric Flotation (LBEF) System. <i>Molecular Biotechnology</i> , 2018, 60, 749-761.	2.4	28
328	Iron oxide reduction by torrefied microalgae for CO ₂ capture and abatement in chemical-looping combustion. <i>Energy</i> , 2019, 186, 115903.	8.8	28
329	Pyrolysis characteristics and non-isothermal torrefaction kinetics of industrial solid wastes. <i>Fuel</i> , 2019, 251, 118-125.	6.4	28
330	Isolation of protein from <i>Chlorella sorokiniana</i> CY1 using liquid biphasic flotation assisted with sonication through sugaring-out effect. <i>Journal of Oceanology and Limnology</i> , 2019, 37, 898-908.	1.3	28
331	Parametric and phenomenological studies about ultrasound-enhanced biosorption of phenolics from fruit pomace extract by waste yeast. <i>Ultrasonics Sonochemistry</i> , 2019, 52, 193-204.	8.2	28
332	Multivariate optimisation study and life cycle assessment of microwave-induced pyrolysis of horse manure for waste valorisation and management. <i>Energy</i> , 2021, 216, 119194.	8.8	28
333	Independent parallel pyrolysis kinetics of extracted proteins and lipids as well as model carbohydrates in microalgae. <i>Applied Energy</i> , 2021, 300, 117372.	10.1	28
334	COVID-19 and industrial waste mitigation via thermochemical technologies towards a circular economy: A state-of-the-art review. <i>Journal of Hazardous Materials</i> , 2022, 423, 127215.	12.4	28
335	Generating alternative fuel and bioplastics from medical plastic waste and waste frying oil using microwave co-pyrolysis combined with microbial fermentation. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 153, 111790.	16.4	28
336	An experimental approach to investigate thermal performance of paraffin wax and 1-hexadecanol based heat sinks for cooling of electronic system. <i>International Communications in Heat and Mass Transfer</i> , 2019, 109, 104365.	5.6	27
337	Organic Rankine Cycle (ORC) System Applications for Solar Energy: Recent Technological Advances. <i>Energies</i> , 2019, 12, 2930.	3.1	27
338	Oxidative reaction interaction and synergistic index of emulsified pyrolysis bio-oil/diesel fuels. <i>Renewable Energy</i> , 2019, 136, 223-234.	8.9	27
339	Physicochemical Properties of Biodiesel Synthesised from Grape Seed, Philippine Tung, Kesambi, and Palm Oils. <i>Energies</i> , 2020, 13, 1319.	3.1	27
340	Microwave-assisted gasification of biomass for sustainable and energy-efficient biohydrogen and biosyngas production: A state-of-the-art review. <i>Chemosphere</i> , 2022, 287, 132014.	8.2	27
341	Engineered macroalgal and microalgal adsorbents: Synthesis routes and adsorptive performance on hazardous water contaminants. <i>Journal of Hazardous Materials</i> , 2022, 423, 126921.	12.4	27
342	Effect of torrefaction on the structure and reactivity of rice straw as well as life cycle assessment of torrefaction process. <i>Energy</i> , 2022, 240, 122470.	8.8	27

#	ARTICLE	IF	CITATIONS
343	Life cycle assessment of microalgal biorefinery: A state-of-the-art review. <i>Bioresource Technology</i> , 2022, 360, 127615.	9.6	27
344	Prediction of engine performance and emissions with <i>Manihot glaziovii</i> bioethanol and Gasoline blended using extreme learning machine. <i>Fuel</i> , 2017, 210, 914-921.	6.4	26
345	Life Cycle Cost and Sensitivity Analysis of <i>Reutealis trisperma</i> as Non-Edible Feedstock for Future Biodiesel Production. <i>Energies</i> , 2017, 10, 877.	3.1	26
346	Modeling and prediction of devolatilization and elemental composition of wood during mild pyrolysis in a pilot-scale reactor. <i>Industrial Crops and Products</i> , 2019, 131, 357-370.	5.2	26
347	Evaluating in-use vehicle emissions using air quality monitoring stations and on-road remote sensing systems. <i>Science of the Total Environment</i> , 2020, 740, 139868.	8.0	26
348	Current application of electrical pre-treatment for enhanced microalgal biomolecules extraction. <i>Bioresource Technology</i> , 2020, 302, 122874.	9.6	26
349	Single-step catalytic deoxygenation of palm feedstocks for the production of sustainable bio-jet fuel. <i>Energy</i> , 2022, 239, 122017.	8.8	26
350	Highly active iron-promoted hexagonal mesoporous silica (HMS) for deoxygenation of triglycerides to green hydrocarbon-like biofuel. <i>Fuel</i> , 2022, 308, 121860.	6.4	26
351	State-of-the-art of the pyrolysis and co-pyrolysis of food waste: Progress and challenges. <i>Science of the Total Environment</i> , 2022, 809, 151170.	8.0	26
352	A Comprehensive Review on the Emerging Roles of Nanofillers and Plasticizers towards Sustainable Starch-Based Bioplastic Fabrication. <i>Polymers</i> , 2022, 14, 664.	4.5	26
353	Review on aqueous graphene nanoplatelet Nanofluids: Preparation, Stability, thermophysical Properties, and applications in heat exchangers and solar thermal collectors. <i>Applied Thermal Engineering</i> , 2022, 210, 118342.	6.0	26
354	Preparation and thermal characteristics of eutectic fatty acids/ <i>Shorea javanica</i> composite for thermal energy storage. <i>Applied Thermal Engineering</i> , 2016, 100, 62-67.	6.0	25
355	Effect of microwave and air-borne ultrasound-assisted air drying on drying kinetics and phytochemical properties of broccoli floret. <i>Drying Technology</i> , 2020, 38, 1733-1748.	3.1	25
356	Bio-Derived Catalysts: A Current Trend of Catalysts Used in Biodiesel Production. <i>Catalysts</i> , 2021, 11, 812.	3.5	25
357	Thermodegradation characterization of hardwoods and softwoods in torrefaction and transition zone between torrefaction and pyrolysis. <i>Fuel</i> , 2022, 310, 122281.	6.4	25
358	Cocoa pod husk: A new source of CLEA-lipase for preparation of low-cost biodiesel: An optimized process. <i>Journal of Biotechnology</i> , 2016, 231, 95-105.	3.8	24
359	Reduction of particulate matter and volatile organic compounds in biorefineries: A state-of-the-art review. <i>Journal of Hazardous Materials</i> , 2021, 403, 123955.	12.4	24
360	Entropy generation analysis of nanofluids flow in various shapes of cross section ducts. <i>International Communications in Heat and Mass Transfer</i> , 2014, 57, 72-78.	5.6	23

#	ARTICLE	IF	CITATIONS
361	Investigation on Stability and Optical Properties of Titanium Dioxide and Aluminum Oxide Water-Based Nanofluids. <i>International Journal of Thermophysics</i> , 2017, 38, 1.	2.1	23
362	A study of hygroscopic property of biomass pretreated by torrefaction. <i>Energy Procedia</i> , 2019, 158, 32-36.	1.8	23
363	Outlook on biorefinery potential of palm oil mill effluent for resource recovery. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104519.	6.7	23
364	Aging and emulsification analyses of hydrothermal liquefaction bio-oil derived from sewage sludge and swine leather residue. <i>Journal of Cleaner Production</i> , 2020, 266, 122050.	9.3	23
365	Review on design factors of microbial fuel cells using Buckingham's Pi Theorem. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 130, 109878.	16.4	23
366	Experimental Investigation, Techno-Economic Analysis and Environmental Impact of Bioethanol Production from Banana Stem. <i>Energies</i> , 2019, 12, 3947.	3.1	22
367	Two-step catalytic reactive extraction and transesterification process via ultrasonic irradiation for biodiesel production from solid <i>Jatropha</i> oil seeds. <i>Chemical Engineering and Processing: Process Intensification</i> , 2019, 146, 107687.	3.6	22
368	Optimization of <i>Cerbera manghas</i> Biodiesel Production Using Artificial Neural Networks Integrated with Ant Colony Optimization. <i>Energies</i> , 2019, 12, 3811.	3.1	22
369	Optimal integration of a biomass-based polygeneration system in an iron production plant for negative carbon emissions. <i>International Journal of Energy Research</i> , 2020, 44, 9350-9366.	4.5	22
370	Catalyst combination strategy for hydrogen production from methanol partial oxidation. <i>Energy</i> , 2020, 206, 118180.	8.8	22
371	Progress on Modified Calcium Oxide Derived Waste-Shell Catalysts for Biodiesel Production. <i>Catalysts</i> , 2021, 11, 194.	3.5	22
372	Characterization and Parametric Study on Mechanical Properties Enhancement in Biodegradable Chitosan-Reinforced Starch-Based Bioplastic Film. <i>Polymers</i> , 2022, 14, 278.	4.5	22
373	Pyrolysis of oil palm wastes for bioenergy in Malaysia: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 164, 112554.	16.4	22
374	Recovery of <i>Bacillus cereus</i> cyclodextrin glycosyltransferase using ionic liquid-based aqueous two-phase system. <i>Separation and Purification Technology</i> , 2014, 138, 28-33.	7.9	21
375	School education and childhood obesity: A systemic review. <i>Diabetes and Metabolic Syndrome: Clinical Research and Reviews</i> , 2019, 13, 2495-2501.	3.6	21
376	Physicochemical and tribological properties of microalgae oil as biolubricant for hydrogen-powered engine. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 22364-22381.	7.1	21
377	Pore volume upgrade of biochar from spent coffee grounds by sodium bicarbonate during torrefaction. <i>Chemosphere</i> , 2021, 275, 129999.	8.2	21
378	Progress and challenges in sustainable pyrolysis technology: Reactors, feedstocks and products. <i>Fuel</i> , 2022, 324, 124777.	6.4	21

#	ARTICLE	IF	CITATIONS
379	Bioenergy production and metallic iron (Fe) conversion from <i>Botryococcus</i> sp. cultivated in domestic wastewater: Algal biorefinery concept. <i>Energy Conversion and Management</i> , 2019, 196, 1326-1334.	9.2	20
380	Techno-Economic Analysis and Physicochemical Properties of <i>Ceiba pentandra</i> as Second-Generation Biodiesel Based on ASTM D6751 and EN 14214. <i>Processes</i> , 2019, 7, 636.	2.8	20
381	Comparative indexes, fuel characterization and thermogravimetric- Fourier transform infrared spectrometer-mass spectrogram (TG-FTIR-MS) analysis of microalga <i>Nannochloropsis Oceanica</i> under oxidative and inert torrefaction. <i>Energy</i> , 2021, 230, 120824.	8.8	20
382	Catalytic microwave-assisted torrefaction of sugarcane bagasse with calcium oxide optimized via Taguchi approach: Product characterization and energy analysis. <i>Fuel</i> , 2021, 305, 121543.	6.4	20
383	Progress in thermochemical conversion of aquatic weeds in shellfish aquaculture for biofuel generation: Technical and economic perspectives. <i>Bioresource Technology</i> , 2022, 344, 126202.	9.6	20
384	Cloud-point extraction of green-polymers from <i>Cupriavidus necator</i> lysate using a thermoseparating-based aqueous two-phase extraction. <i>Journal of Bioscience and Bioengineering</i> , 2017, 123, 370-375.	2.2	19
385	Hybrid liquid biphasic system for cell disruption and simultaneous lipid extraction from microalgae <i>Chlorella sorokiniana</i> CY-1 for biofuel production. <i>Biotechnology for Biofuels</i> , 2019, 12, 252.	6.2	19
386	Simultaneous implementation of sludge dewatering and solid biofuel production by microwave torrefaction. <i>Environmental Research</i> , 2021, 195, 110775.	7.5	19
387	Process intensification of biodiesel synthesis via ultrasound-assisted <i>in situ</i> esterification of <i>Jatropha</i> oil seeds. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 1362-1373.	3.2	18
388	Development of <i>Aurantiochytrium limacinum</i> SR21 cultivation using salt-rich waste feedstock for docosahexaenoic acid production and application of natural colourant in food product. <i>Bioresource Technology</i> , 2019, 271, 30-36.	9.6	18
389	Effect of torrefaction and fractional condensation on the quality of bio-oil from biomass pyrolysis for fuel applications. <i>Fuel</i> , 2022, 312, 122959.	6.4	18
390	A review of intensification technologies for biodiesel production. , 2022, , 87-116.		18
391	Thermal Analysis of Nigerian Oil Palm Biomass with Sachet-Water Plastic Wastes for Sustainable Production of Biofuel. <i>Processes</i> , 2019, 7, 475.	2.8	17
392	Experimental and numerical studies on the premixed syngas swirl flames in a model combustor. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 24126-24139.	7.1	17
393	The Performance and Exhaust Emissions of a Diesel Engine Fuelled with <i>Calophyllum inophyllum</i> Palm Biodiesel. <i>Processes</i> , 2019, 7, 597.	2.8	17
394	Evolutionary computation for maximizing CO ₂ and H ₂ separation in multiple-tube palladium-membrane systems. <i>Applied Energy</i> , 2019, 235, 299-310.	10.1	17
395	Impact of post-torrefaction process on biochar formation from wood pellets and self-heating phenomena for production safety. <i>Energy</i> , 2020, 207, 118324.	8.8	17
396	Thermal-Fenton mechanism with sonoprocessing for rapid non-catalytic transesterification of microalgal to biofuel production. <i>Chemical Engineering Journal</i> , 2021, 408, 127264.	12.7	17

#	ARTICLE	IF	CITATIONS
397	State-of-the-Art of Strategies to Reduce Exhaust Emissions from Diesel Engine Vehicles. <i>Energies</i> , 2021, 14, 1766.	3.1	17
398	State-of-the-Art of Establishing Test Procedures for Real Driving Gaseous Emissions from Light- and Heavy-Duty Vehicles. <i>Energies</i> , 2021, 14, 4195.	3.1	17
399	Strategies for fuel property enhancement for second-generation multi-feedstock biodiesel. <i>Fuel</i> , 2022, 315, 123178.	6.4	17
400	Impacts of the harvesting process on microalgae fatty acid profiles and lipid yields: Implications for biodiesel production. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 161, 112410.	16.4	17
401	Thermal properties evaluation of paraffin wax enhanced with carbon nanotubes as latent heat thermal energy storage. <i>Journal of Energy Storage</i> , 2022, 52, 105027.	8.1	17
402	Energy-saving drying strategy of spent coffee grounds for co-firing fuel by adding biochar for carbon sequestration to approach net zero. <i>Fuel</i> , 2022, 326, 124984.	6.4	17
403	Investigation of Biodiesel Production from <i>Cerbera manghas</i> Biofuel Sources. <i>Energy Procedia</i> , 2014, 61, 436-439.	1.8	16
404	Separation of single-walled carbon nanotubes using aqueous two-phase system. <i>Separation and Purification Technology</i> , 2014, 125, 136-141.	7.9	16
405	Production of β -cyclodextrin by <i>Bacillus cereus</i> cyclodextrin glycosyltransferase using extractive bioconversion in polymer-salt aqueous two-phase system. <i>Journal of Bioscience and Bioengineering</i> , 2016, 121, 692-696.	2.2	16
406	Optimization and kinetic study of non-catalytic transesterification of palm oil under subcritical condition using microwave technology. <i>Energy Conversion and Management</i> , 2019, 196, 1126-1137.	9.2	16
407	Performance analysis of the deflector integrated cross axis wind turbine. <i>Renewable Energy</i> , 2019, 138, 675-690.	8.9	16
408	Synthesis of glycerol-free fatty acid methyl ester using interesterification reaction based on solid acid carbon catalyst derived from low-cost biomass wastes. <i>International Journal of Energy Research</i> , 2022, 46, 147-162.	4.5	16
409	Effect of eggshell- and homo-type Ni/Al ₂ O ₃ catalysts on the pyrolysis of food waste under CO ₂ atmosphere. <i>Journal of Environmental Management</i> , 2021, 294, 112959.	7.8	16
410	Biogas partial oxidation in a heat recirculation reactor for syngas production and CO ₂ utilization. <i>Applied Energy</i> , 2018, 217, 113-125.	10.1	15
411	Product Characteristics of Torrefied Wood Sawdust in Normal and Vacuum Environments. <i>Energies</i> , 2019, 12, 3844.	3.1	15
412	Life cycle assessment of torrefied microalgal biomass using torrefaction severity index with the consideration of up-scaling production. <i>Renewable Energy</i> , 2020, 162, 1113-1124.	8.9	15
413	Continuous Phenol Removal Using a Liquid-Solid Circulating Fluidized Bed. <i>Energies</i> , 2020, 13, 3839.	3.1	15
414	Kinetic and thermodynamic analysis of iron oxide reduction by graphite for CO ₂ mitigation in chemical-looping combustion. <i>International Journal of Energy Research</i> , 2020, 44, 3865-3882.	4.5	15

#	ARTICLE	IF	CITATIONS
415	Optimisation of biodiesel production from mixed <i>Sterculia foetida</i> and rice bran oil. International Journal of Ambient Energy, 2022, 43, 4380-4390.	2.5	15
416	Bioenergy recovery potential through the treatment of the meat processing industry waste in Australia. Journal of Environmental Chemical Engineering, 2021, 9, 105657.	6.7	15
417	Valorization of sorghum distillery residue to produce bioethanol for pollution mitigation and circular economy. Environmental Pollution, 2021, 285, 117196.	7.5	15
418	Mitigation of CO ₂ emissions by transforming to biofuels: Optimization of biofuels production processes. Renewable and Sustainable Energy Reviews, 2021, 150, 111487.	16.4	15
419	Treatment of Hospital wastewater with submerged aerobic fixed film reactor coupled with tube-settler. Chemosphere, 2022, 286, 131838.	8.2	15
420	State of art of valorising of diverse potential feedstocks for the production of alcohols and ethers: Current changes and perspectives. Chemosphere, 2022, 286, 131587.	8.2	15
421	Recovery of lignin peroxidase from submerged liquid fermentation of <i>Amauroderma rugosum</i> (Blume) Tj ETQq1 1 0.784314 rgBT /Overd and Bioengineering, 2017, 124, 91-98.	2.2	14
422	Production Process and Optimization of Solid Bioethanol from Empty Fruit Bunches of Palm Oil Using Response Surface Methodology. Processes, 2019, 7, 715.	2.8	14
423	Novel Renewable Double-Energy System for Activated Biochar Production and Thermoelectric Generation from Waste Heat. Energy & Fuels, 2020, 34, 3383-3393.	5.1	14
424	Combustion performance and emissions from torrefied and water washed biomass using a kg-scale burner. Journal of Hazardous Materials, 2021, 402, 123468.	12.4	14
425	Production of sustainable two-stroke engine biolubricant ester base oil from palm fatty acid distillate. Industrial Crops and Products, 2022, 175, 114224.	5.2	14
426	Pilot-scale study on downdraft gasification of municipal solid waste with mass and energy balance analysis. Fuel, 2022, 315, 123287.	6.4	14
427	Progress and Recent Trends in the Application of Nanoparticles as Low Carbon Fuel Additives—A State of the Art Review. Nanomaterials, 2022, 12, 1515.	4.1	14
428	Influence of bio-solution pretreatment on the structure, reactivity and torrefaction of bamboo. Energy Conversion and Management, 2017, 141, 244-253.	9.2	13
429	Green technology of liquid biphasic flotation for enzyme recovery utilizing recycling surfactant and sorbitol. Clean Technologies and Environmental Policy, 2018, 20, 2001-2012.	4.1	13
430	Liquid Biphasic Systems for Oil-Rich Algae Bioproducts Processing. Sustainability, 2019, 11, 4682.	3.2	13
431	Green additive to upgrade biochar from spent coffee grounds by torrefaction for pollution mitigation. Environmental Pollution, 2021, 285, 117244.	7.5	13
432	Enhancement of photocatalytic degradation of organic dyes using ZnO decorated on reduced graphene oxide (rGO)., 0, 108, 311-321.		13

#	ARTICLE	IF	CITATIONS
433	Current advances in recovery and biorefinery of fucoxanthin from <i>Phaeodactylum tricornutum</i> . <i>Algal Research</i> , 2022, 65, 102735.	4.6	13
434	Permeation characteristics of hydrogen through palladium membranes in binary and ternary gas mixtures. <i>International Journal of Energy Research</i> , 2017, 41, 1579-1595.	4.5	12
435	Sustainable approach in phlorotannin recovery from macroalgae. <i>Journal of Bioscience and Bioengineering</i> , 2018, 126, 220-225.	2.2	12
436	The Effect of Multi-Walled Carbon Nanotubes-Additive in Physicochemical Property of Rice Brand Methyl Ester: Optimization Analysis. <i>Energies</i> , 2019, 12, 3291.	3.1	12
437	Biofuel and Bioenergy Technology. <i>Energies</i> , 2019, 12, 290.	3.1	12
438	Conversion of bio-jet fuel from palm kernel oil and its blending effect with jet A-1 fuel. <i>Energy Conversion and Management</i> , 2021, 243, 114311.	9.2	12
439	Oxidative torrefaction of microalga <i>Nannochloropsis Oceanica</i> activated by potassium carbonate for solid biofuel production. <i>Environmental Research</i> , 2022, 212, 113389.	7.5	12
440	Transient reaction and exergy analysis of catalytic partial oxidation of methane in a Swiss-roll reactor for hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 6608-6619.	7.1	11
441	Fuel Property Variation of Biomass Undergoing Torrefaction. <i>Energy Procedia</i> , 2017, 105, 108-112.	1.8	11
442	Basilar artery thrombectomy: assessment of outcome and identification of prognostic factors. <i>Acta Neurologica Belgica</i> , 2020, 120, 99-105.	1.1	11
443	An evaluation of thermal characteristics of bacterium <i>Actinobacillus succinogenes</i> for energy use and circular bioeconomy. <i>Bioresource Technology</i> , 2020, 301, 122774.	9.6	11
444	Flow field simulation and pressure drop modeling by a porous medium in <scp>PEM</scp> fuel cells. <i>International Journal of Energy Research</i> , 2022, 46, 163-177.	4.5	11
445	Effect of Wet Torrefaction on Thermal Decomposition Behavior of Microalga <i>Chlorella vulgaris</i> ESP-31. <i>Energy Procedia</i> , 2017, 105, 206-211.	1.8	10
446	Simultaneous Extraction and Emulsification of Food Waste Liquefaction Bio-Oil. <i>Energies</i> , 2018, 11, 3031.	3.1	10
447	Zoonotic diseases from birds to humans in Vietnam: possible diseases and their associated risk factors. <i>European Journal of Clinical Microbiology and Infectious Diseases</i> , 2019, 38, 1047-1058.	2.9	10
448	Recent advancement in deoxygenation of fatty acids via homogeneous catalysis for biofuel production. <i>Molecular Catalysis</i> , 2022, 523, 111207.	2.0	10
449	Synergistic interaction and biochar improvement over co-torrefaction of intermediate waste epoxy resins and fir. <i>Environmental Technology and Innovation</i> , 2021, 21, 101218.	6.1	10
450	Integration of Biomass Torrefaction and Gasification based on Biomass Classification: A Review. <i>Energy Technology</i> , 2021, 9, 2001108.	3.8	10

#	ARTICLE	IF	CITATIONS
451	Optimization of Fuel Injection Parameters of <i>Moringa oleifera</i> Biodiesel-Diesel Blend for Engine-Out-Responses Improvements. <i>Symmetry</i> , 2021, 13, 982.	2.2	10
452	Oxidative torrefaction performance of microalga <i>Nannochloropsis Oceanica</i> towards an upgraded microalgal solid biofuel. <i>Journal of Biotechnology</i> , 2021, 338, 81-90.	3.8	10
453	Redox degrees of iron-based oxygen carriers in cyclic chemical looping combustion using thermodynamic analysis. <i>Chemical Engineering Journal</i> , 2021, 426, 130834.	12.7	10
454	An empirical analysis on photovoltaic thermal system with fin design by forced air circulation. <i>Journal of Mechanical Science and Technology</i> , 2017, 31, 2549-2557.	1.5	9
455	Effects of methanol and enzyme pretreatment to <i>Ceiba pentandra</i> biodiesel production. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2017, 39, 1548-1555.	2.3	9
456	Developments of metallic anodes with various compositions and surfaces for the microbial fuel cells. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 22235-22242.	7.1	9
457	Microwave-mediated noncatalytic synthesis of ethyl levulinate: A green process for fuel additive production. <i>International Journal of Energy Research</i> , 2020, 44, 1698-1708.	4.5	9
458	Microwave-Assisted Noncatalytic Esterification of Fatty Acid for Biodiesel Production: A Kinetic Study. <i>Energies</i> , 2020, 13, 2167.	3.1	9
459	Torrefaction Thermogravimetric Analysis and Kinetics of Sorghum Distilled Residue for Sustainable Fuel Production. <i>Sustainability</i> , 2021, 13, 4246.	3.2	9
460	A biorefinery approach for high value-added bioproduct (astaxanthin) from alga <i>Haematococcus</i> sp. and residue pyrolysis for biochar synthesis and metallic iron production from hematite (Fe_2O_3). <i>Fuel</i> , 2021, 304, 121150.	6.4	9
461	Hydrogen recovery and CO_2 enrichment in single and dual Pd membrane tube systems. <i>Fuel</i> , 2018, 219, 182-195.	6.4	8
462	Ultrasound-Enhanced Hot Air Drying of Germinated Highland Barley Seeds: Drying Characteristics, Microstructure, and Bioactive Profile. <i>AgriEngineering</i> , 2019, 1, 496-510.	3.2	8
463	Pyrolysis kinetics of potassium-impregnated rubberwood analyzed by evolutionary computation. <i>Bioresource Technology</i> , 2021, 319, 124145.	9.6	8
464	Second law based thermodynamic analysis of crushed gravel sand and biomass evaporator assisted solar still. <i>Sustainable Energy Technologies and Assessments</i> , 2022, 52, 102160.	2.7	8
465	Biodiesel quality assessment of microalgae cultivated mixotrophically on sugarcane bagasse. <i>Sustainable Energy Technologies and Assessments</i> , 2022, 53, 102359.	2.7	8
466	Zika virus in Vietnam, Laos, and Cambodia: are there health risks for travelers?. <i>European Journal of Clinical Microbiology and Infectious Diseases</i> , 2019, 38, 1585-1590.	2.9	7
467	Effects of torrefaction and water washing on the properties and combustion reactivity of various wastes. <i>International Journal of Energy Research</i> , 2021, 45, 8125-8139.	4.5	7
468	Production of bio-fuel from alcoholthermal liquefaction of rice straw over sulfated-graphene oxide. <i>Energy Reports</i> , 2021, 7, 744-752.	5.1	7

#	ARTICLE	IF	CITATIONS
469	Catalytic microwave torrefaction of microalga <i>Chlorella vulgaris</i> FSP-E with magnesium oxide optimized via taguchi approach: A thermo-energetic analysis. <i>Chemosphere</i> , 2022, 290, 133374.	8.2	7
470	Entropy generation from hydrogen production of catalytic partial oxidation of methane with excess enthalpy recovery. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 14167-14177.	7.1	6
471	Enhancement of heat recirculation on the hysteresis effect of catalytic partial oxidation of methane. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 10394-10406.	7.1	6
472	Performance Analysis of a Printed Circuit Heat Exchanger with a Novel Mirror-Symmetric Channel Design. <i>Energies</i> , 2021, 14, 4252.	3.1	6
473	Using Graphene Nanoplatelets Nanofluid in a Closed-Loop Evacuated Tube Solar Collector Energy and Exergy Analysis. <i>Journal of Composites Science</i> , 2021, 5, 277.	3.0	6
474	Single-Atom Catalysts: A Review of Synthesis Strategies and Their Potential for Biofuel Production. <i>Catalysts</i> , 2021, 11, 1470.	3.5	6
475	<i>Porphyra yezoensis</i> Sauces Fermented With Lactic Acid Bacteria: Fermentation Properties, Flavor Profile, and Evaluation of Antioxidant Capacity in vitro. <i>Frontiers in Nutrition</i> , 2021, 8, 810460.	3.7	6
476	Influences of feedstock and plasma spraying parameters on the fabrication of tubular solid oxide fuel cell anodes. <i>Ceramics International</i> , 2018, 44, 7824-7830.	4.8	5
477	Sol-gel synthesized lithium orthosilicate as a reusable solid catalyst for biodiesel production. <i>International Journal of Energy Research</i> , 2021, 45, 6239-6249.	4.5	5
478	Enhanced production of non-edible <i>Xanthium spinosum</i> -based biodiesel using waste biomass under dynamic conditions. <i>Biomass Conversion and Biorefinery</i> , 0, , 1.	4.6	5
479	Energy balance of torrefied microalgal biomass with production upscale approached by life cycle assessment. <i>Journal of Environmental Management</i> , 2021, 294, 112992.	7.8	5
480	Rapid Ultrasound-Assisted Starch Extraction from Sago Pith Waste (SPW) for the Fabrication of Sustainable Bioplastic Film. <i>Polymers</i> , 2021, 13, 4398.	4.5	5
481	A review of atmospheric fine particulate matters: chemical composition, source identification and their variations in Beijing. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2022, 44, 4783-4807.	2.3	5
482	Bamboo Torrefaction in a High Gravity (Higee) Environment Using a Rotating Packed Bed. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 7052-7062.	6.7	4
483	In situ reactive extraction of <i>Jatropha curcas</i> L. seeds assisted by ultrasound: Preliminary studies. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2018, 40, 1772-1779.	2.3	4
484	Application of the bin weather data for building energy analysis in the tropics. <i>Energy Efficiency</i> , 2020, 13, 935-953.	2.8	4
485	The optimal blendings of diesel, biodiesel and gasoline with various exhaust gas recirculations for reducing NOx and smoke emissions from a diesel engine. <i>International Journal of Environmental Science and Technology</i> , 2020, 17, 4623-4654.	3.5	4
486	Enhancement of Adsorption-Photocatalysis of Malachite Green Using Oil Palm Biomass-Derived Activated Carbon/ Titanium Dioxide Composite. <i>Current Analytical Chemistry</i> , 2021, 17, 603-617.	1.2	4

#	ARTICLE	IF	CITATIONS
487	Elemental loss, enrichment, transformation and life cycle assessment of torrefied corncob. <i>Energy</i> , 2022, 242, 123019.	8.8	4
488	Adapting microalgae-based strategies for sustainable green cities. <i>Biotechnology Journal</i> , 2022, 17, e2100586.	3.5	4
489	Design and feasibility study of novel swirler incorporated microbial fuel cell for enhancing power generation and domestic wastewater treatment. <i>Journal of Cleaner Production</i> , 2022, 337, 130382.	9.3	4
490	Reactor design of methanol steam reforming by evolutionary computation and hydrogen production maximization by machine learning. <i>International Journal of Energy Research</i> , 2022, 46, 20685-20703.	4.5	4
491	Thermochemical conversion of microalgal biomass. , 2019, , 345-382.		3
492	Simulation of Mixing Intensity Profile for Bioethanol Production via Two-Step Fermentation in an Unbaffled Agitator Reactor. <i>Energies</i> , 2020, 13, 5457.	3.1	3
493	Thematic issue: Bioenergy and biorefinery approaches for environmental sustainability. <i>Biomass Conversion and Biorefinery</i> , 2022, 12, 1433-1433.	4.6	3
494	Green Energy Technology. <i>Energies</i> , 2021, 14, 6842.	3.1	3
495	Uniform mesoporous hierarchical nanosized zeolite Y for production of Hydrocarbon-like biofuel under H ₂ -Free deoxygenation. <i>Fuel</i> , 2022, 322, 124208.	6.4	3
496	Friction and wear characteristics of rice bran oil based biodiesel using calcium oxide catalyst derived from <i>Chicoreus Brunneus</i> shell. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2023, 45, 11015-11023.	2.3	2
497	Evaluation of dental arch dimensions in 12 year-old Vietnamese children - A cross-sectional study of 4565 subjects. <i>Scientific Reports</i> , 2019, 9, 3101.	3.3	2
498	Editorial: "Torrefaction Pretreatment for Biomass Upgrading: Fundamentals and Technologies" <i>Frontiers in Energy Research</i> , 2021, 9, .	2.3	2
499	Scaling-up heterotrophic cultures of <i>C. Pyrenoidosa</i> microalgae for sustainable synthesis of low-density biodiesel mixtures and predict CI engine behavior at optimal proportions. <i>Environment, Development and Sustainability</i> , 2023, 25, 400-422.	5.0	2
500	Environment-friendly deoxygenation of non-edible Ceiba oil to liquid hydrocarbon biofuel: process parameters and optimization study. <i>Environmental Science and Pollution Research</i> , 2022, 29, 51143-51152.	5.3	2
501	Optimization of hydrogen enrichment via palladium membrane in vacuum environments using Taguchi method and normalized regression analysis. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 42280-42292.	7.1	2
502	Indigenous Materials as Catalyst Supports for Renewable Diesel Production in Malaysia. <i>Energies</i> , 2022, 15, 2835.	3.1	2
503	Correlation between rate of deposition and temperature of asphaltene particles. <i>Materials Today: Proceedings</i> , 2018, 5, 22128-22136.	1.8	1
504	Investigation of Thermal Characteristic of Eutectic Fatty Acid/Damar Gum as a Composite Phase Change Material (CPCM). <i>Green Energy and Technology</i> , 2018, , 607-616.	0.6	1

#	ARTICLE	IF	CITATIONS
505	Special Issue “Green Technologies: Bridging Conventional Practices and Industry 4.0” Processes, 2020, 8, 552.	2.8	1
506	Behavior of wood during the thermal transition between torrefaction and pyrolysis: chemical and physical modifications.. Wood Material Science and Engineering, 2023, 18, 244-253.	2.3	1
507	Synthesis of seaweed based carbon acid catalyst by thermal decomposition of ammonium sulfate for biodiesel production. AIP Conference Proceedings, 2017, , .	0.4	0
508	Thermal characteristic investigation of eutectic composite fatty acid as heat storage material for solar heating and cooling application. IOP Conference Series: Materials Science and Engineering, 2018, 334, 012017.	0.6	0
509	Evaluation on the Presence of Nano Silver Particle in Improving a Conventional Water-based Drilling Fluid. IOP Conference Series: Materials Science and Engineering, 2018, 358, 012060.	0.6	0
510	The Environmental Performance of Torrefied Microalgae Biomass using Torrefaction Severity Factor. , 2019, , .		0