Hwai Chyuan Ong

List of Publications by Year
in descending order

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		1793	5244
510	40,869	106	171
papers	citations	h-index	g-index

513	513	513	26086
all docs	docs citations	times ranked	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.	8.2	953
2	Microalgae biorefinery: High value products perspectives. Bioresource Technology, 2017, 229, 53-62.	4.8	947
3	A state-of-the-art review of biomass torrefaction, densification and applications. Renewable and Sustainable Energy Reviews, 2015, 44, 847-866.	8.2	887
4	A review on conventional and novel materials towards heavy metal adsorption in wastewater treatment application. Journal of Cleaner Production, 2021, 296, 126589.	4.6	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.	4.5	465
6	Microalgae biofuels as an alternative to fossil fuel for power generation. Renewable and Sustainable Energy Reviews, 2016, 58, 180-197.	8.2	454
7	Thermochemical conversion of microalgal biomass into biofuels: A review. Bioresource Technology, 2015, 184, 314-327.	4.8	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.	4.5	442
9	Progress in biomass torrefaction: Principles, applications and challenges. Progress in Energy and Combustion Science, 2021, 82, 100887.	15.8	429
10	Biosequestration of atmospheric CO2 and flue gas-containing CO2 by microalgae. Bioresource Technology, 2015, 184, 190-201.	4.8	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.	5.7	370
12	Comparison of palm oil, Jatropha curcas and Calophyllum inophyllum for biodiesel: A review. Renewable and Sustainable Energy Reviews, 2011, 15, 3501-3515.	8.2	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.	8.2	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.	6.5	300
15	Patent landscape review on biodiesel production: Technology updates. Renewable and Sustainable Energy Reviews, 2020, 118, 109526.	8.2	298
16	Catalytic thermochemical conversion of biomass for biofuel production: A comprehensive review. Renewable and Sustainable Energy Reviews, 2019, 113, 109266.	8.2	289
17	Sustainability of direct biodiesel synthesis from microalgae biomass: A critical review. Renewable and Sustainable Energy Reviews, 2019, 107, 59-74.	8.2	283
18	Optimization of biodiesel production process for mixed Jatropha curcasâ€“Ceiba pentandra biodiesel using response surface methodology. Energy Conversion and Management, 2016, 115, 178-190.	4.4	281

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19	Recent developments on algal biochar production and characterization. Bioresource Technology, 2017, 246, 2-11.	4.8	281
20	Overview properties of biodiesel diesel blends from edible and non-edible feedstock. Renewable and Sustainable Energy Reviews, 2013, 22, 346-360.	8.2	276
21	Thermogravimetric analysis and kinetics of co-pyrolysis of raw/torrefied wood and coal blends. Applied Energy, 2013, 105, 57-65.	5.1	274
22	A review on energy scenario and sustainable energy in Malaysia. Renewable and Sustainable Energy Reviews, 2011, 15, 639-647.	8.2	272
23	State of art review on conventional and advanced pyrolysis of macroalgae and microalgae for biochar, bio-oil and bio-syngas production. Energy Conversion and Management, 2020, 210, 112707.	4.4	272
24	Production and comparative fuel properties of biodiesel from non-edible oils: Jatropha curcas, Sterculia foetida and Ceiba pentandra. Energy Conversion and Management, 2013, 73, 245-255.	4.4	271
25	Optimization of biodiesel production and engine performance from high free fatty acid Calophyllum inophyllum oil in CI diesel engine. Energy Conversion and Management, 2014, 81, 30-40.	4.4	267
26	Pyrolysis of high ash sewage sludge: Kinetics and thermodynamic analysis using Coats-Redfern method. Renewable Energy, 2019, 131, 854-860.	4.3	260
27	Impacts of COVID-19 pandemic on the global energy system and the shift progress to renewable energy: Opportunities, challenges, and policy implications. Energy Policy, 2021, 154, 112322.	4.2	260
28	Disruption of sugarcane bagasse lignocellulosic structure by means of dilute sulfuric acid pretreatment with microwave-assisted heating. Applied Energy, 2011, 88, 2726-2734.	5.1	258
29	Pyrolysis characteristics and kinetics of microalgae via thermogravimetric analysis (TGA): A state-of-the-art review. Bioresource Technology, 2017, 246, 88-100.	4.8	258
30	Progress on the lignocellulosic biomass pyrolysis for biofuel production toward environmental sustainability. Fuel Processing Technology, 2021, 223, 106997.	3.7	256
31	Engine performance and emissions using Jatropha curcas, Ceiba pentandra and Calophyllum inophyllum biodiesel in a CI diesel engine. Energy, 2014, 69, 427-445.	4.5	252
32	State of the art and prospective of lipase-catalyzed transesterification reaction for biodiesel production. Energy Conversion and Management, 2017, 141, 339-353.	4.4	246
33	A critical review on various remediation approaches for heavy metal contaminants removal from contaminated soils. Chemosphere, 2022, 287, 132369.	4.2	246
34	Sustainable approaches for algae utilisation in bioenergy production. Renewable Energy, 2018, 129, 838-852.	4.3	241
35	A state-of-the-art review on thermochemical conversion of biomass for biofuel production: A TG-FTIR approach. Energy Conversion and Management, 2020, 209, 112634.	4.4	238
36	Isothermal torrefaction kinetics of hemicellulose, cellulose, lignin and xylan using thermogravimetric analysis. Energy, 2011, 36, 6451-6460.	4.5	236

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37	Water gas shift reaction for hydrogen production and carbon dioxide capture: A review. Applied Energy, 2020, 258, 114078.	5.1	231
38	Multifaceted roles of microalgae in the application of wastewater biotreatment: A review. Environmental Pollution, 2021, 269, 116236.	3.7	231
39	Investigation on the ignition and burnout temperatures of bamboo and sugarcane bagasse by thermogravimetric analysis. Applied Energy, 2015, 160, 49-57.	5.1	228
40	An evaluation on improvement of pulverized biomass property for solid fuel through torrefaction. Applied Energy, 2011, 88, 3636-3644.	5.1	224
41	Potential utilization of bioproducts from microalgae for the quality enhancement of natural products. Bioresource Technology, 2020, 304, 122997.	4.8	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.	4.4	222
43	Thermal pretreatment of wood (Lauan) block by torrefaction and its influence on the properties of the biomass. Energy, 2011, 36, 3012-3021.	4.5	218
44	Technologies for Biogas Upgrading to Biomethane: A Review. Bioengineering, 2019, 6, 92.	1.6	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.	4.5	217
46	A review of thermochemical conversion of microalgal biomass for biofuels: chemistry and processes. Green Chemistry, 2017, 19, 44-67.	4.6	216
47	Pyrolysis characteristics and kinetic studies of horse manure using thermogravimetric analysis. Energy Conversion and Management, 2019, 180, 1260-1267.	4.4	214
48	State of the Art of Catalysts for Biodiesel Production. Frontiers in Energy Research, 2020, 8, .	1.2	214
49	State of the art review on development of ultrasound-assisted catalytic transesterification process for biodiesel production. Fuel, 2019, 235, 886-907.	3.4	208
50	An experimental analysis on property and structure variations of agricultural wastes undergoing torrefaction. Applied Energy, 2012, 100, 318-325.	5.1	206
51	Torrefaction, pyrolysis and two-stage thermodegradation of hemicellulose, cellulose and lignin. Fuel, 2019, 258, 116168.	3.4	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.	8.2	200
53	Phase Change Materials (PCM) for Solar Energy Usages and Storage: An Overview. Energies, 2019, 12, 3167.	1.6	197
54	Hydrothermal carbonization of sugarcane bagasse via wet torrefaction in association with microwave heating. Bioresource Technology, 2012, 118, 195-203.	4.8	196

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55	Recent advances in the pretreatment of microalgal and lignocellulosic biomass: A comprehensive review. Bioresource Technology, 2020, 298, 122476.	4.8	195
56	Sustainable biofuel and bioenergy production from biomass waste residues using microwave-assisted heating: A comprehensive review. Chemical Engineering Journal, 2021, 403, 126233.	6.6	192
57	Torrefaction and low temperature carbonization of oil palm fiber and eucalyptus in nitrogen and air atmospheres. Bioresource Technology, 2012, 123, 98-105.	4.8	190
58	Microalgae biomass as a sustainable source for biofuel, biochemical and biobased value-added products: An integrated biorefinery concept. Fuel, 2022, 307, 121782.	3.4	190
59	Biodiesel synthesis from Ceiba pentandra oil by microwave irradiation-assisted transesterification: ELM modeling and optimization. Renewable Energy, 2020, 146, 1278-1291.	4.3	187
60	Hydrolysis characteristics of sugarcane bagasse pretreated by dilute acid solution in a microwave irradiation environment. Applied Energy, 2012, 93, 237-244.	5.1	179
61	A comparison of gasification phenomena among raw biomass, torrefied biomass and coal in an entrained-flow reactor. Applied Energy, 2013, 112, 421-430.	5.1	176
62	Waste biorefinery towards a sustainable circular bioeconomy: a solution to global issues. Biotechnology for Biofuels, 2021, 14, 87.	6.2	176
63	Synthesis and thermal conductivity characteristic of hybrid nanofluids â€“ A review. Renewable and Sustainable Energy Reviews, 2017, 75, 868-878.	8.2	175
64	Torrefaction performance and energy usage of biomass wastes and their correlations with torrefaction severity index. Applied Energy, 2018, 220, 598-604.	5.1	175
65	Effects of water culture medium, cultivation systems and growth modes for microalgae cultivation: A review. Journal of the Taiwan Institute of Chemical Engineers, 2018, 91, 332-344.	2.7	174
66	Biodiesel production from Calophyllum inophyllum-Ceiba pentandra oil mixture: Optimization and characterization. Journal of Cleaner Production, 2019, 219, 183-198.	4.6	174
67	Catalytic effects of potassium on biomass pyrolysis, combustion and torrefaction. Applied Energy, 2019, 235, 346-355.	5.1	170
68	Research progress on iron oxide-based magnetic materials: Synthesis techniques and photocatalytic applications. Ceramics International, 2016, 42, 9-34.	2.3	168
69	Adsorptive removal of cationic methylene blue and anionic Congo red dyes using wet-torrefied microalgal biochar: Equilibrium, kinetic and mechanism modeling. Environmental Pollution, 2021, 272, 115986.	3.7	165
70	A critical review on the recent progress of synthesizing techniques and fabrication of TiO2-based nanotubes photocatalysts. Applied Catalysis A: General, 2014, 481, 127-142.	2.2	162
71	Gasification performances of raw and torrefied biomass in a downdraft fixed bed gasifier using thermodynamic analysis. Fuel, 2014, 117, 1231-1241.	3.4	161
72	An experimental investigation on performance analysis of air type photovoltaic thermal collector system integrated with cooling fins design. Energy and Buildings, 2016, 130, 272-285.	3.1	159

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73	Investigation of carbon-based solid acid catalyst from Jatropha curcas biomass in biodiesel production. Energy Conversion and Management, 2017, 144, 10-17.	4.4	158
74	A review on energy pattern and policy for transportation sector in Malaysia. Renewable and Sustainable Energy Reviews, 2012, 16, 532-542.	8.2	153
75	Greenhouse gases utilization: A review. Fuel, 2021, 301, 121017.	3.4	153
76	Impact of torrefaction on the composition, structure and reactivity of a microalga residue. Applied Energy, 2016, 181, 110-119.	5.1	149
77	Thermal performance enhancement of an evacuated tube solar collector using graphene nanoplatelets nanofluid. Journal of Cleaner Production, 2017, 162, 121-129.	4.6	149
78	Progress and challenges of contaminate removal from wastewater using microalgae biomass. Chemosphere, 2022, 286, 131656.	4.2	147
79	Non-oxidative and oxidative torrefaction characterization and SEM observations of fibrous and ligneous biomass. Applied Energy, 2014, 114, 104-113.	5.1	145
80	Microalgae from wastewater treatment to biochar â€“ Feedstock preparation and conversion technologies. Energy Conversion and Management, 2017, 150, 1-13.	4.4	144
81	Experimental study on performance and exhaust emissions of a diesel engine fuelled with Ceiba pentandra biodiesel blends. Energy Conversion and Management, 2013, 76, 828-836.	4.4	139
82	Pretreatment of biomass by torrefaction and carbonization for coal blend used in pulverized coal injection. Bioresource Technology, 2014, 161, 333-339.	4.8	139
83	Experimental study on thermoelectric modules for power generation at various operating conditions. Energy, 2012, 45, 874-881.	4.5	137
84	Recent advances of titanium dioxide (TiO₂) for green organic synthesis. RSC Advances, 2016, 6, 108741-108754.	1.7	137
85	Progress in utilisation of waste cooking oil for sustainable biodiesel and biojet fuel production. Energy Conversion and Management, 2020, 223, 113296.	4.4	137
86	A review on the engine performance and exhaust emission characteristics of diesel engines fueled with biodiesel blends. Environmental Science and Pollution Research, 2018, 25, 15307-15325.	2.7	136
87	Comparative study of nanoparticles and alcoholic fuel additives-biodiesel-diesel blend for performance and emission improvements. Fuel, 2020, 279, 118434.	3.4	136
88	Modern developmental aspects in the field of economical harvesting and biodiesel production from microalgae biomass. Renewable and Sustainable Energy Reviews, 2021, 135, 110209.	8.2	136
89	Thermal decomposition dynamics and severity of microalgae residues in torrefaction. Bioresource Technology, 2014, 169, 258-264.	4.8	135
90	Overview: Comparison of pretreatment technologies and fermentation processes of bioethanol from microalgae. Energy Conversion and Management, 2018, 173, 81-94.	4.4	134

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91	Green approaches in synthesising nanomaterials for environmental nanobioremediation: Technological advancements, applications, benefits and challenges. Environmental Research, 2022, 204, 111967.	3.7	132
92	Enzymatic transesterification for biodiesel production: a comprehensive review. RSC Advances, 2016, 6, 60034-60055.	1.7	131
93	An overview on current application of nanofluids in solar thermal collector and its challenges. Renewable and Sustainable Energy Reviews, 2016, 53, 1092-1105.	8.2	131
94	Torrefied biomasses in a drop tube furnace to evaluate their utility in blast furnaces. Bioresource Technology, 2012, 111, 433-438.	4.8	130
95	Rice bran oil based biodiesel production using calcium oxide catalyst derived from Chicoreus brunneus shell. Energy, 2018, 144, 10-19.	4.5	130
96	Insight into the recent advances of microwave pretreatment technologies for the conversion of lignocellulosic biomass into sustainable biofuel. Chemosphere, 2021, 281, 130878.	4.2	129
97	Torrefaction of microalgal biochar as potential coal fuel and application as bio-adsorbent. Energy Conversion and Management, 2018, 165, 152-162.	4.4	125
98	Bioflocculation formation of microalgae-bacteria in enhancing microalgae harvesting and nutrient removal from wastewater effluent. Bioresource Technology, 2019, 272, 34-39.	4.8	124
99	Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities. Bioresource Technology, 2013, 146, 152-160.	4.8	119
100	Life cycle cost and sensitivity analysis of palm biodiesel production. Fuel, 2012, 98, 131-139.	3.4	117
101	Genetic engineering of microalgae for enhanced biorefinery capabilities. Biotechnology Advances, 2020, 43, 107554.	6.0	117
102	A comprehensive study on pyrolysis kinetics of microalgal biomass. Energy Conversion and Management, 2017, 131, 109-116.	4.4	116
103	Power output analysis and optimization of two straight-bladed vertical-axis wind turbines. Applied Energy, 2017, 185, 223-232.	5.1	115
104	Cultivation of Chlorella vulgaris using nutrients source from domestic wastewater for biodiesel production: Growth condition and kinetic studies. Renewable Energy, 2017, 103, 197-207.	4.3	115
105	Fermentation of blueberry and blackberry juices using Lactobacillus plantarum, Streptococcus thermophilus and Bifidobacterium bifidum: Growth of probiotics, metabolism of phenolics, antioxidant capacity in vitro and sensory evaluation. Food Chemistry, 2021, 348, 129083.	4.2	115
106	Recent advances in biodiesel production from agricultural products and microalgae using ionic liquids: Opportunities and challenges. Energy Conversion and Management, 2021, 228, 113647.	4.4	114
107	A comprehensive review of life cycle assessment (LCA) of microalgal and lignocellulosic bioenergy products from thermochemical processes. Bioresource Technology, 2019, 291, 121837.	4.8	113
108	Hygroscopic transformation of woody biomass torrefaction for carbon storage. Applied Energy, 2018, 231, 768-776.	5.1	111

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109	Characteristics of hydrogen production from steam gasification of plant-originated lignocellulosic biomass and its prospects in Vietnam. International Journal of Hydrogen Energy, 2022, 47, 4394-4425.	3.8	110
110	Isothermal and non-isothermal torrefaction characteristics and kinetics of microalga Scenedesmus obliquus CNW-N. Bioresource Technology, 2014, 155, 245-251.	4.8	109
111	Energy-related approach for reduction of CO2 emissions: A critical strategy on the port-to-ship pathway. Journal of Cleaner Production, 2022, 355, 131772.	4.6	109
112	Enhanced microalgal protein extraction and purification using sustainable microwave-assisted multiphase partitioning technique. Chemical Engineering Journal, 2019, 367, 1-8.	6.6	105
113	Experimental study and prediction of the performance and exhaust emissions of mixed Jatropha curcas-Ceiba pentandra biodiesel blends in diesel engine using artificial neural networks. Journal of Cleaner Production, 2017, 164, 618-633.	4.6	104
114	Wet torrefaction of microalga Chlorella vulgaris ESP-31 with microwave-assisted heating. Energy Conversion and Management, 2017, 141, 163-170.	4.4	103
115	Liquid hot water as sustainable biomass pretreatment technique for bioenergy production: A review. Bioresource Technology, 2022, 344, 126207.	4.8	103
116	Pulverized coal burnout in blast furnace simulated by a drop tube furnace. Energy, 2010, 35, 576-581.	4.5	101
117	Torrefaction operation and optimization of microalga residue for energy densification and utilization. Applied Energy, 2015, 154, 622-630.	5.1	101
118	Product characteristics from the torrefaction of oil palm fiber pellets in inert and oxidative atmospheres. Bioresource Technology, 2016, 199, 367-374.	4.8	101
119	Thermal degradation of carbohydrates, proteins and lipids in microalgae analyzed by evolutionary computation. Energy Conversion and Management, 2018, 160, 209-219.	4.4	101
120	Characterization of solid and liquid products from bamboo torrefaction. Applied Energy, 2015, 160, 829-835.	5.1	100
121	An overview of engine durability and compatibility using biodieselâ€“bioethanolâ€“diesel blends in compression-ignition engines. Energy Conversion and Management, 2016, 128, 66-81.	4.4	99
122	Pyrolysis of microalgae residues â€“ A kinetic study. Bioresource Technology, 2016, 199, 362-366.	4.8	99
123	Micro (nano) plastic pollution: The ecological influence on soil-plant system and human health. Science of the Total Environment, 2021, 788, 147815.	3.9	99
124	Predictions of biochar yield and elemental composition during torrefaction of forest residues. Bioresource Technology, 2016, 215, 239-246.	4.8	98
125	Biodiesel production by lipase-catalyzed transesterification of Ocimum basilicum L. (sweet basil) seed oil. Energy Conversion and Management, 2017, 132, 82-90.	4.4	98
126	Renewable aviation fuel by advanced hydroprocessing of biomass: Challenges and perspective. Energy Conversion and Management, 2019, 199, 112015.	4.4	98

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127	Nanomaterials Utilization in Biomass for Biofuel and Bioenergy Production. Energies, 2020, 13, 892.	1.6	97
128	Critical review on third generation micro algae biodiesel production and its feasibility as future bioenergy for IC engine applications. Energy Conversion and Management, 2021, 228, 113655.	4.4	96
129	Impact of dilute acid pretreatment on the structure of bagasse for bioethanol production. International Journal of Energy Research, 2010, 34, 265-274.	2.2	95
130	Comparative assessment of hexanol and decanol as oxygenated additives with calophyllum inophyllum biodiesel. Energy, 2019, 173, 494-510.	4.5	95
131	A review on application of artificial neural network (ANN) for performance and emission characteristics of diesel engine fueled with biodiesel-based fuels. Sustainable Energy Technologies and Assessments, 2021, 47, 101416.	1.7	94
132	Oxidative torrefaction of biomass nutshells: Evaluations of energy efficiency as well as biochar transportation and storage. Applied Energy, 2019, 235, 428-441.	5.1	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. Renewable Energy, 2020, 158, 202-214.	4.3	93
134	Heavy metal toxicity, sources, and remediation techniques for contaminated water and soil. Environmental Technology and Innovation, 2022, 25, 102114.	3.0	93
135	Novel approaches of producing bioenergies from microalgae: A recent review. Biotechnology Advances, 2015, 33, 1219-1227.	6.0	92
136	A comprehensive analysis of food waste derived liquefaction bio-oil properties for industrial application. Applied Energy, 2019, 237, 283-291.	5.1	92
137	Effect of torrefaction pretreatment on the pyrolysis of rubber wood sawdust analyzed by Py-GC/MS. Bioresource Technology, 2018, 259, 469-473.	4.8	91
138	Emulsification analysis of bio-oil and diesel under various combinations of emulsifiers. Applied Energy, 2016, 178, 746-757.	5.1	90
139	Characterization and production of Ceiba pentandra biodiesel and its blends. Fuel, 2013, 108, 855-858.	3.4	89
140	Optimization of transesterification process for Ceiba pentandra oil: A comparative study between kernel-based extreme learning machine and artificial neural networks. Energy, 2017, 134, 24-34.	4.5	89
141	Food waste compost as an organic nutrient source for the cultivation of Chlorella vulgaris. Bioresource Technology, 2018, 267, 356-362.	4.8	89
142	Green technology for the industrial production of biofuels and bioproducts from microalgae: a review. Environmental Chemistry Letters, 2020, 18, 1967-1985.	8.3	89
143	Advances in production of bioplastics by microalgae using food waste hydrolysate and wastewater: A review. Bioresource Technology, 2021, 342, 125947.	4.8	89
144	A review on emissions and mitigation strategies for road transport in Malaysia. Renewable and Sustainable Energy Reviews, 2011, 15, 3516-3522.	8.2	87

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145	Analysis of Economic and Environmental Aspects of Microalgae Biorefinery for Biofuels Production: A Review. Biotechnology Journal, 2018, 13, 1700618.	1.8	87
146	Effect of nanocatalysts on the transesterification reaction of first, second and third generation biodiesel sources- A mini-review. Chemosphere, 2021, 270, 128642.	4.2	87
147	Engine performance and emission characteristics of palm biodiesel blends with graphene oxide nanoplatelets and dimethyl carbonate additives. Journal of Environmental Management, 2021, 282, 111917.	3.8	86
148	Microalgae and ammonia: A review on inter-relationship. Fuel, 2021, 303, 121303.	3.4	86
149	Variation of lignocellulosic biomass structure from torrefaction: A critical review. Renewable and Sustainable Energy Reviews, 2021, 152, 111698.	8.2	86
150	Microalgal-based biochar in wastewater remediation: Its synthesis, characterization and applications. Environmental Research, 2022, 204, 111966.	3.7	86
151	Biomass-derived biochar: From production to application in removing heavy metal-contaminated water. Chemical Engineering Research and Design, 2022, 160, 704-733.	2.7	86
152	Synthesis and optimization of Hevea brasiliensis and Ricinus communis as feedstock for biodiesel production: A comparative study. Industrial Crops and Products, 2016, 85, 274-286.	2.5	84
153	A comprehensive review on state-of-the-art photo-, sono-, and sonophotocatalytic treatments to degrade emerging contaminants. International Journal of Environmental Science and Technology, 2019, 16, 601-628.	1.8	83
154	Effects of acids pre-treatment on the microbial fermentation process for bioethanol production from microalgae. Biotechnology for Biofuels, 2019, 12, 191.	6.2	83
155	A critical review on the principles, applications, and challenges of waste-to-hydrogen technologies. Renewable and Sustainable Energy Reviews, 2020, 134, 110365.	8.2	83
156	Prospects and development of algal-bacterial biotechnology in environmental management and protection. Biotechnology Advances, 2021, 47, 107684.	6.0	83
157	Microalgae Cultivation in Palm Oil Mill Effluent (POME) Treatment and Biofuel Production. Sustainability, 2021, 13, 3247.	1.6	83
158	Enhancing biomass and lipid productions of microalgae in palm oil mill effluent using carbon and nutrient supplementation. Energy Conversion and Management, 2018, 164, 188-197.	4.4	82
159	Impact of various microalgal-bacterial populations on municipal wastewater bioremediation and its energy feasibility for lipid-based biofuel production. Journal of Environmental Management, 2019, 249, 109384.	3.8	82
160	Acid-based lignocellulosic biomass biorefinery for bioenergy production: Advantages, application constraints, and perspectives. Journal of Environmental Management, 2021, 296, 113194.	3.8	82
161	A global comparative review of biodiesel production from jatropha curcas using different homogeneous acid and alkaline catalysts: Study of physical and chemical properties. Renewable and Sustainable Energy Reviews, 2013, 24, 514-533.	8.2	81
162	Prospect of biobased antiviral face mask to limit the coronavirus outbreak. Environmental Research, 2021, 192, 110294.	3.7	80

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163	Source, distribution and emerging threat of micro- and nanoplastics to marine organism and human health: Socio-economic impact and management strategies. Environmental Research, 2021, 195, 110857.	3.7	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. Ultrasonics Sonochemistry, 2021, 72, 105410.	3.8	79
165	Performances of pulverized coal injection in blowpipe and tuyere at various operational conditions. Energy Conversion and Management, 2007, 48, 2069-2076.	4.4	78
166	Numerical investigation on performance of coal gasification under various injection patterns in an entrained flow gasifier. Applied Energy, 2012, 100, 218-228.	5.1	77
167	Independent parallel pyrolysis kinetics of cellulose, hemicelluloses and lignin at various heating rates analyzed by evolutionary computation. Energy Conversion and Management, 2020, 221, 113165.	4.4	77
168	Valorisation of medical waste through pyrolysis for a cleaner environment: Progress and challenges. Environmental Pollution, 2021, 279, 116934.	3.7	77
169	An energy analysis of torrefaction for upgrading microalga residue as a solid fuel. Bioresource Technology, 2015, 185, 285-293.	4.8	76
170	The effect of stress environment towards lipid accumulation in microalgae after harvesting. Renewable Energy, 2020, 154, 1083-1091.	4.3	76
171	Characterization of biomass waste torrefaction under conventional and microwave heating. Bioresource Technology, 2018, 264, 7-16.	4.8	75
172	Overview on catalytic deoxygenation for biofuel synthesis using metal oxide supported catalysts. Renewable and Sustainable Energy Reviews, 2019, 112, 834-852.	8.2	75
173	Sustainable utilization of biowaste compost for renewable energy and soil amendments. Environmental Pollution, 2020, 267, 115662.	3.7	75
174	Critical review on sesame seed oil and its methyl ester on cold flow and oxidation stability. Energy Reports, 2020, 6, 40-54.	2.5	74
175	Modified mesoporous HMS supported Ni for deoxygenation of triolein into hydrocarbon-biofuel production. Energy Conversion and Management, 2018, 165, 495-508.	4.4	73
176	Microalgae cultivation in palm oil mill effluent (POME) for lipid production and pollutants removal. Energy Conversion and Management, 2018, 174, 430-438.	4.4	73
177	A comparative study of biodiesel production methods for Reutealis trisperma biodiesel. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2017, 39, 2006-2014.	1.2	71
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