

Hwai Chyuan Ong

List of Publications by Year in descending order

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510
papers

40,869
citations

1532

106
h-index

4545

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. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 18, 211-245.	8.2	953
2	Microalgae biorefinery: High value products perspectives. <i>Bioresource Technology</i> , 2017, 229, 53-62.	4.8	947
3	A state-of-the-art review of biomass torrefaction, densification and applications. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 44, 847-866.	8.2	887
4	A review on conventional and novel materials towards heavy metal adsorption in wastewater treatment application. <i>Journal of Cleaner Production</i> , 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. <i>Energy</i> , 2010, 35, 2580-2586.	4.5	465
6	Microalgae biofuels as an alternative to fossil fuel for power generation. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 58, 180-197.	8.2	454
7	Thermochemical conversion of microalgal biomass into biofuels: A review. <i>Bioresource Technology</i> , 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. <i>Energy</i> , 2011, 36, 803-811.	4.5	442
9	Progress in biomass torrefaction: Principles, applications and challenges. <i>Progress in Energy and Combustion Science</i> , 2021, 82, 100887.	15.8	429
10	Biosequestration of atmospheric CO ₂ and flue gas-containing CO ₂ by microalgae. <i>Bioresource Technology</i> , 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. <i>Sustainable Production and Consumption</i> , 2021, 26, 343-359.	5.7	370
12	Comparison of palm oil, <i>Jatropha curcas</i> and <i>Calophyllum inophyllum</i> for biodiesel: A review. <i>Renewable and Sustainable Energy Reviews</i> , 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. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 67, 1225-1236.	8.2	334
14	Recent developments in physical, biological, chemical, and hybrid treatment techniques for removing emerging contaminants from wastewater. <i>Journal of Hazardous Materials</i> , 2021, 416, 125912.	6.5	300
15	Patent landscape review on biodiesel production: Technology updates. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 118, 109526.	8.2	298
16	Catalytic thermochemical conversion of biomass for biofuel production: A comprehensive review. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 113, 109266.	8.2	289
17	Sustainability of direct biodiesel synthesis from microalgae biomass: A critical review. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 107, 59-74.	8.2	283
18	Optimization of biodiesel production process for mixed <i>Jatropha curcas</i> and <i>Ceiba pentandra</i> biodiesel using response surface methodology. <i>Energy Conversion and Management</i> , 2016, 115, 178-190.	4.4	281

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19	Recent developments on algal biochar production and characterization. <i>Bioresource Technology</i> , 2017, 246, 2-11.	4.8	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.	8.2	276
21	Thermogravimetric analysis and kinetics of co-pyrolysis of raw/torrefied wood and coal blends. <i>Applied Energy</i> , 2013, 105, 57-65.	5.1	274
22	A review on energy scenario and sustainable energy in Malaysia. <i>Renewable and Sustainable Energy Reviews</i> , 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. <i>Energy Conversion and Management</i> , 2020, 210, 112707.	4.4	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.	4.4	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.	4.4	267
26	Pyrolysis of high ash sewage sludge: Kinetics and thermodynamic analysis using Coats-Redfern method. <i>Renewable Energy</i> , 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. <i>Energy Policy</i> , 2021, 154, 112322.	4.2	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.	5.1	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.	4.8	258
30	Progress on the lignocellulosic biomass pyrolysis for biofuel production toward environmental sustainability. <i>Fuel Processing Technology</i> , 2021, 223, 106997.	3.7	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.	4.5	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.	4.4	246
33	A critical review on various remediation approaches for heavy metal contaminants removal from contaminated soils. <i>Chemosphere</i> , 2022, 287, 132369.	4.2	246
34	Sustainable approaches for algae utilisation in bioenergy production. <i>Renewable Energy</i> , 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. <i>Energy Conversion and Management</i> , 2020, 209, 112634.	4.4	238
36	Isothermal torrefaction kinetics of hemicellulose, cellulose, lignin and xylan using thermogravimetric analysis. <i>Energy</i> , 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. <i>Bioresource Technology</i> , 2020, 298, 122476.	4.8	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.	6.6	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.	4.8	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.	3.4	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.	4.3	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.	5.1	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.	5.1	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.	8.2	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.	5.1	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.	2.7	174
66	Biodiesel production from Calophyllum inophyllum-Ceiba pentandra oil mixture: Optimization and characterization. <i>Journal of Cleaner Production</i> , 2019, 219, 183-198.	4.6	174
67	Catalytic effects of potassium on biomass pyrolysis, combustion and torrefaction. <i>Applied Energy</i> , 2019, 235, 346-355.	5.1	170
68	Research progress on iron oxide-based magnetic materials: Synthesis techniques and photocatalytic applications. <i>Ceramics International</i> , 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. <i>Environmental Pollution</i> , 2021, 272, 115986.	3.7	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.	2.2	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.	3.4	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.	3.1	159

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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.	4.4	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.	8.2	153
75	Greenhouse gases utilization: A review. <i>Fuel</i> , 2021, 301, 121017.	3.4	153
76	Impact of torrefaction on the composition, structure and reactivity of a microalga residue. <i>Applied Energy</i> , 2016, 181, 110-119.	5.1	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.	4.6	149
78	Progress and challenges of contaminate removal from wastewater using microalgae biomass. <i>Chemosphere</i> , 2022, 286, 131656.	4.2	147
79	Non-oxidative and oxidative torrefaction characterization and SEM observations of fibrous and ligneous biomass. <i>Applied Energy</i> , 2014, 114, 104-113.	5.1	145
80	Microalgae from wastewater treatment to biochar “ Feedstock preparation and conversion technologies. <i>Energy Conversion and Management</i> , 2017, 150, 1-13.	4.4	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.	4.4	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.	4.8	139
83	Experimental study on thermoelectric modules for power generation at various operating conditions. <i>Energy</i> , 2012, 45, 874-881.	4.5	137
84	Recent advances of titanium dioxide (TiO ₂) for green organic synthesis. <i>RSC Advances</i> , 2016, 6, 108741-108754.	1.7	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.	4.4	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.	2.7	136
87	Comparative study of nanoparticles and alcoholic fuel additives-biodiesel-diesel blend for performance and emission improvements. <i>Fuel</i> , 2020, 279, 118434.	3.4	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.	8.2	136
89	Thermal decomposition dynamics and severity of microalgae residues in torrefaction. <i>Bioresource Technology</i> , 2014, 169, 258-264.	4.8	135
90	Overview: Comparison of pretreatment technologies and fermentation processes of bioethanol from microalgae. <i>Energy Conversion and Management</i> , 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. <i>Environmental Research</i> , 2022, 204, 111967.	3.7	132
92	Enzymatic transesterification for biodiesel production: a comprehensive review. <i>RSC Advances</i> , 2016, 6, 60034-60055.	1.7	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.	8.2	131
94	Torrefied biomasses in a drop tube furnace to evaluate their utility in blast furnaces. <i>Bioresource Technology</i> , 2012, 111, 433-438.	4.8	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.	4.5	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.	4.2	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.	4.4	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.	4.8	124
99	Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities. <i>Bioresource Technology</i> , 2013, 146, 152-160.	4.8	119
100	Life cycle cost and sensitivity analysis of palm biodiesel production. <i>Fuel</i> , 2012, 98, 131-139.	3.4	117
101	Genetic engineering of microalgae for enhanced biorefinery capabilities. <i>Biotechnology Advances</i> , 2020, 43, 107554.	6.0	117
102	A comprehensive study on pyrolysis kinetics of microalgal biomass. <i>Energy Conversion and Management</i> , 2017, 131, 109-116.	4.4	116
103	Power output analysis and optimization of two straight-bladed vertical-axis wind turbines. <i>Applied Energy</i> , 2017, 185, 223-232.	5.1	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.	4.3	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.	4.2	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.	4.4	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.	4.8	113
108	Hygroscopic transformation of woody biomass torrefaction for carbon storage. <i>Applied Energy</i> , 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. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 4394-4425.	3.8	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.	4.8	109
111	Energy-related approach for reduction of CO ₂ emissions: A critical strategy on the port-to-ship pathway. <i>Journal of Cleaner Production</i> , 2022, 355, 131772.	4.6	109
112	Enhanced microalgal protein extraction and purification using sustainable microwave-assisted multiphase partitioning technique. <i>Chemical Engineering Journal</i> , 2019, 367, 1-8.	6.6	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.	4.6	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.	4.4	103
115	Liquid hot water as sustainable biomass pretreatment technique for bioenergy production: A review. <i>Bioresource Technology</i> , 2022, 344, 126207.	4.8	103
116	Pulverized coal burnout in blast furnace simulated by a drop tube furnace. <i>Energy</i> , 2010, 35, 576-581.	4.5	101
117	Torrefaction operation and optimization of microalga residue for energy densification and utilization. <i>Applied Energy</i> , 2015, 154, 622-630.	5.1	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.	4.8	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.	4.4	101
120	Characterization of solid and liquid products from bamboo torrefaction. <i>Applied Energy</i> , 2015, 160, 829-835.	5.1	100
121	An overview of engine durability and compatibility using biodiesel–bioethanol–diesel blends in compression-ignition engines. <i>Energy Conversion and Management</i> , 2016, 128, 66-81.	4.4	99
122	Pyrolysis of microalgae residues – A kinetic study. <i>Bioresource Technology</i> , 2016, 199, 362-366.	4.8	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.	3.9	99
124	Predictions of biochar yield and elemental composition during torrefaction of forest residues. <i>Bioresource Technology</i> , 2016, 215, 239-246.	4.8	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.	4.4	98
126	Renewable aviation fuel by advanced hydroprocessing of biomass: Challenges and perspective. <i>Energy Conversion and Management</i> , 2019, 199, 112015.	4.4	98

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127	Nanomaterials Utilization in Biomass for Biofuel and Bioenergy Production. <i>Energies</i> , 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. <i>Energy Conversion and Management</i> , 2021, 228, 113655.	4.4	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.	2.2	95
130	Comparative assessment of hexanol and decanol as oxygenated additives with calophyllum inophyllum biodiesel. <i>Energy</i> , 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. <i>Sustainable Energy Technologies and Assessments</i> , 2021, 47, 101416.	1.7	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.	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. <i>Renewable Energy</i> , 2020, 158, 202-214.	4.3	93
134	Heavy metal toxicity, sources, and remediation techniques for contaminated water and soil. <i>Environmental Technology and Innovation</i> , 2022, 25, 102114.	3.0	93
135	Novel approaches of producing bioenergies from microalgae: A recent review. <i>Biotechnology Advances</i> , 2015, 33, 1219-1227.	6.0	92
136	A comprehensive analysis of food waste derived liquefaction bio-oil properties for industrial application. <i>Applied Energy</i> , 2019, 237, 283-291.	5.1	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.	4.8	91
138	Emulsification analysis of bio-oil and diesel under various combinations of emulsifiers. <i>Applied Energy</i> , 2016, 178, 746-757.	5.1	90
139	Characterization and production of Ceiba pentandra biodiesel and its blends. <i>Fuel</i> , 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. <i>Energy</i> , 2017, 134, 24-34.	4.5	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.	4.8	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.	8.3	89
143	Advances in production of bioplastics by microalgae using food waste hydrolysate and wastewater: A review. <i>Bioresource Technology</i> , 2021, 342, 125947.	4.8	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.	8.2	87

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145	Analysis of Economic and Environmental Aspects of Microalgae Biorefinery for Biofuels Production: A Review. <i>Biotechnology Journal</i> , 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. <i>Chemosphere</i> , 2021, 270, 128642.	4.2	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.	3.8	86
148	Microalgae and ammonia: A review on inter-relationship. <i>Fuel</i> , 2021, 303, 121303.	3.4	86
149	Variation of lignocellulosic biomass structure from torrefaction: A critical review. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 152, 111698.	8.2	86
150	Microalgal-based biochar in wastewater remediation: Its synthesis, characterization and applications. <i>Environmental Research</i> , 2022, 204, 111966.	3.7	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.	2.7	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.	2.5	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.	1.8	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.	8.2	83
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