Gopalakrishnan Kumar

List of Publications by Year
in descending order

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		8172	22808
349	18,973	76	112
papers	citations	h-index	g-index

356	356	356	14000
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A review on lignin structure, pretreatments, fermentation reactions and biorefinery potential. Bioresource Technology, 2019, 271, 462-472.	4.8	386
2	An overview of food waste management in developing countries: Current status and future perspective. Journal of Environmental Management, 2015, 157, 220-229.	3.8	366
3	Fermentative hydrogen production from wastewaters: A review and prognosis. International Journal of Hydrogen Energy, 2012, 37, 15632-15642.	3.8	259
4	A comprehensive review on green nanomaterials using biological systems: Recent perception and their future applications. Colloids and Surfaces B: Biointerfaces, 2018, 170, 20-35.	2.5	252
5	Techno-economic assessment of various hydrogen production methods â€“ A review. Bioresource Technology, 2021, 319, 124175.	4.8	249
6	Lignocellulose biohydrogen: Practical challenges and recent progress. Renewable and Sustainable Energy Reviews, 2015, 44, 728-737.	8.2	244
7	A review on the biosynthesis of metallic nanoparticles (gold and silver) using bio-components of microalgae: Formation mechanism and applications. Enzyme and Microbial Technology, 2016, 95, 28-44.	1.6	234
8	New insights on the green synthesis of metallic nanoparticles using plant and waste biomaterials: current knowledge, their agricultural and environmental applications. Environmental Science and Pollution Research, 2018, 25, 10164-10183.	2.7	220
9	A review of thermochemical conversion of microalgal biomass for biofuels: chemistry and processes. Green Chemistry, 2017, 19, 44-67.	4.6	216
10	A critical review of pretreatment technologies to enhance anaerobic digestion and energy recovery. Fuel, 2020, 270, 117494.	3.4	216
11	A critical review on anaerobic digestion of microalgae and macroalgae and co-digestion of biomass for enhanced methane generation. Bioresource Technology, 2018, 262, 319-332.	4.8	214
12	Unraveling the catalyzing behaviors of different iron species (Fe2+ vs. Fe0) in activating persulfate-based oxidation process with implications to waste activated sludge dewaterability. Water Research, 2018, 134, 101-114.	5.3	202
13	Influence on the effect of zinc oxide and titanium dioxide nanoparticles as an additive with Calophyllum inophyllum methyl ester in a CI engine. Energy Conversion and Management, 2017, 146, 8-19.	4.4	198
14	A critical review on issues and overcoming strategies for the enhancement of dark fermentative hydrogen production in continuous systems. International Journal of Hydrogen Energy, 2016, 41, 3820-3836.	3.8	194
15	Anaerobic membrane bioreactors for wastewater treatment: Novel configurations, fouling control and energy considerations. Bioresource Technology, 2019, 283, 358-372.	4.8	183
16	A review on biopolymer production via lignin valorization. Bioresource Technology, 2019, 290, 121790.	4.8	180
17	Wastewater based microalgal biorefinery for bioenergy production: Progress and challenges. Science of the Total Environment, 2021, 751, 141599.	3.9	177
18	Fermentative hydrogen production using lignocellulose biomass: An overview of pre-treatment methods, inhibitor effects and detoxification experiences. Renewable and Sustainable Energy Reviews, 2017, 77, 28-42.	8.2	176

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19	Anaerobic co-digestion on improving methane production from mixed microalgae (Scenedesmus sp.,) Tj ETQq1 1 0.784314 rgBT /Ov Engineering Journal, 2016, 299, 332-341.	6.6	172
20	Recent insights into the cell immobilization technology applied for dark fermentative hydrogen production. Bioresource Technology, 2016, 219, 725-737.	4.8	161
21	Application of nanotechnology in dark fermentation for enhanced biohydrogen production using inorganic nanoparticles. International Journal of Hydrogen Energy, 2019, 44, 13106-13113.	3.8	159
22	Renewable biohydrogen production from lignocellulosic biomass using fermentation and integration of systems with other energy generation technologies. Science of the Total Environment, 2021, 765, 144429.	3.9	159
23	Carbon dioxide capture and bioenergy production using biological system â€“ A review. Renewable and Sustainable Energy Reviews, 2019, 110, 143-158.	8.2	152
24	A compressive review on the effects of alcohols and nanoparticles as an oxygenated enhancer in compression ignition engine. Energy Conversion and Management, 2020, 203, 112244.	4.4	150
25	Exploiting antidiabetic activity of silver nanoparticles synthesized using Punica granatum leaves and anticancer potential against human liver cancer cells (HepG2). Artificial Cells, Nanomedicine and Biotechnology, 2018, 46, 211-222.	1.9	148
26	Bio-fabrication of silver nanoparticles using the leaf extract of an ancient herbal medicine, dandelion (Taraxacum officinale), evaluation of their antioxidant, anticancer potential, and antimicrobial activity against phytopathogens. Environmental Science and Pollution Research, 2018, 25, 10392-10406.	2.7	147
27	Microalgae based biorefinery promoting circular bioeconomy-techno economic and life-cycle analysis. Bioresource Technology, 2020, 302, 122822.	4.8	147
28	A comprehensive overview on electro-active biofilms, role of exo-electrogens and their microbial niches in microbial fuel cells (MFCs). Chemosphere, 2017, 178, 534-547.	4.2	146
29	Biogas Production from Organic Waste: Recent Progress and Perspectives. Waste and Biomass Valorization, 2020, 11, 1019-1040.	1.8	141
30	Developments in biochar application for pesticide remediation: Current knowledge and future research directions. Journal of Environmental Management, 2019, 232, 505-513.	3.8	140
31	A comprehensive overview and recent advances on polyhydroxyalkanoates (PHA) production using various organic waste streams. Bioresource Technology, 2021, 325, 124685.	4.8	138
32	Microbial electrolysis cell platform for simultaneous waste biorefinery and clean electrofuels generation: Current situation, challenges and future perspectives. Progress in Energy and Combustion Science, 2017, 63, 119-145.	15.8	137
33	Lignocellulosic biomass-based pyrolysis: A comprehensive review. Chemosphere, 2022, 286, 131824.	4.2	129
34	Anti-diabetic Potential of Silver Nanoparticles Synthesized with Argyreia nervosa Leaf Extract High Synergistic Antibacterial Activity with Standard Antibiotics Against Foodborne Bacteria. Journal of Cluster Science, 2017, 28, 1709-1727.	1.7	128
35	Lignocellulosic biomass based biorefinery: A successful platform towards circular bioeconomy. Fuel, 2021, 302, 121086.	3.4	127
36	Updates on the pretreatment of lignocellulosic feedstocks for bioenergy productionâ€“a review. Biomass Conversion and Biorefinery, 2018, 8, 471-483.	2.9	126

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37	Lemon peel oil â€“ A novel renewable alternative energy source for diesel engine. Energy Conversion and Management, 2017, 139, 110-121.	4.4	124
38	An overview on advancements in biobased transesterification methods for biodiesel production: Oil resources, extraction, biocatalysts, and process intensification technologies. Fuel, 2021, 285, 119117.	3.4	121
39	Effects of n-octanol as a fuel blend with biodiesel on diesel engine characteristics. Fuel, 2019, 235, 363-373.	3.4	120
40	Electronic waste generation, recycling and resource recovery: Technological perspectives and trends. Journal of Hazardous Materials, 2021, 416, 125664.	6.5	120
41	Potential of microalgae as a sustainable feed ingredient for aquaculture. Journal of Biotechnology, 2021, 341, 1-20.	1.9	120
42	Promoted electromethanosynthesis in a two-chamber microbial electrolysis cells (MECs) containing a hybrid biocathode covered with graphite felt (GF). Chemical Engineering Journal, 2016, 284, 1146-1155.	6.6	119
43	Biomass based hydrogen production by dark fermentation â€” recent trends and opportunities for greener processes. Current Opinion in Biotechnology, 2018, 50, 136-145.	3.3	117
44	An assessment on the effects of 1-pentanol and 1-butanol as additives with Calophyllum Inophyllum biodiesel. Energy Conversion and Management, 2018, 158, 70-80.	4.4	117
45	A comprehensive review on thermochemical, biological, biochemical and hybrid conversion methods of bio-derived lignocellulosic molecules into renewable fuels. Fuel, 2019, 251, 352-367.	3.4	111
46	Biobutanol as a promising liquid fuel for the future - recent updates and perspectives. Fuel, 2019, 253, 637-646.	3.4	110
47	Review on sustainable production of biochar through hydrothermal liquefaction: Physico-chemical properties and applications. Bioresource Technology, 2020, 310, 123414.	4.8	109
48	Enhancement of biofuel production via microbial augmentation: The case of dark fermentative hydrogen. Renewable and Sustainable Energy Reviews, 2016, 57, 879-891.	8.2	108
49	A review on bio-electrochemical systems (BESs) for the syngas and value added biochemicals production. Chemosphere, 2017, 177, 84-92.	4.2	108
50	Comparative analysis on the effect of zinc oxide and ethanox as additives with biodiesel in CI engine. Energy, 2017, 140, 352-364.	4.5	108
51	Synthesis of platinum nanoparticles using seaweed Padina gymnospora and their catalytic activity as PVP/PtNPs nanocomposite towards biological applications. Biomedicine and Pharmacotherapy, 2017, 92, 479-490.	2.5	107
52	A comprehensive overview on light independent fermentative hydrogen production from wastewater feedstock and possible integrative options. Energy Conversion and Management, 2017, 141, 390-402.	4.4	107
53	Seaweeds: A resource for marine bionanotechnology. Enzyme and Microbial Technology, 2016, 95, 45-57.	1.6	106
54	Application of nanotechnology (nanoparticles) in dark fermentative hydrogen production. International Journal of Hydrogen Energy, 2019, 44, 1431-1440.	3.8	105

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55	Anaerobic membrane bioreactor towards biowaste biorefinery and chemical energy harvest: Recent progress, membrane fouling and future perspectives. Renewable and Sustainable Energy Reviews, 2019, 115, 109392.	8.2	103
56	A brief review of anaerobic membrane bioreactors emphasizing recent advancements, fouling issues and future perspectives. Journal of Environmental Management, 2020, 270, 110909.	3.8	101
57	Anaerobic membrane bioreactors for biohydrogen production: Recent developments, challenges and perspectives. Bioresource Technology, 2018, 269, 452-464.	4.8	100
58	Valorization of spent coffee grounds into biofuels and value-added products: Pathway towards integrated bio-refinery. Fuel, 2019, 254, 115640.	3.4	100
59	Integrated valorization of waste cooking oil and spent coffee grounds for biodiesel production: Blending with higher alcohols, FTâ€“IR, TGA, DSC and NMR characterizations. Fuel, 2019, 244, 419-430.	3.4	97
60	Biohydrogen production from industrial wastewater: An overview. Bioresource Technology Reports, 2019, 7, 100287.	1.5	96
61	Comparative assessment of hexanol and decanol as oxygenated additives with calophyllum inophyllum biodiesel. Energy, 2019, 173, 494-510.	4.5	95
62	Catalytic hydrothermal liquefaction of biomass into bio-oils and other value-added products â€“ A review. Fuel, 2021, 285, 119053.	3.4	95
63	Hydrogen and methane production via a two-stage processes (H 2 -SBRÂ+ÂCH 4 -UASB) using tequila vinasses. International Journal of Hydrogen Energy, 2014, 39, 19249-19255.	3.8	93
64	Surpassing the current limitations of high purity H2 production in microbial electrolysis cell (MECs): Strategies for inhibiting growth of methanogens. Bioelectrochemistry, 2018, 119, 211-219.	2.4	92
65	Bio-hythane production from microalgae biomass: Key challenges and potential opportunities for algal bio-refineries. Bioresource Technology, 2017, 241, 525-536.	4.8	91
66	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
67	Effect of next generation higher alcohols and Calophyllum inophyllum methyl ester blends in diesel engine. Journal of Cleaner Production, 2018, 180, 50-63.	4.6	91
68	Biodiesel production by valorizing waste Phoenix dactylifera L. Kernel oil in the presence of synthesized heterogeneous metallic oxide catalyst (Mn@MgO-ZrO 2). Energy Conversion and Management, 2018, 155, 128-137.	4.4	90
69	Biohydrogen production from rice straw: Effect of combinative pretreatment, modelling assessment and energy balance consideration. International Journal of Hydrogen Energy, 2019, 44, 2203-2215.	3.8	90
70	Bioelectrochemical systems using microalgae â€“ A concise research update. Chemosphere, 2017, 177, 35-43.	4.2	88
71	Profitable ultrasonic assisted microwave disintegration of sludge biomass: Modelling of biomethanation and energy parameter analysis. Bioresource Technology, 2018, 254, 203-213.	4.8	87
72	Research perspectives on constraints, prospects and opportunities in biohydrogen production. International Journal of Hydrogen Energy, 2017, 42, 27471-27481.	3.8	85

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73	Wheat straw extracted lignin in silver nanoparticles synthesis: Expanding its prophecy towards antineoplastic potency and hydrogen peroxide sensing ability. International Journal of Biological Macromolecules, 2019, 128, 391-400.	3.6	84
74	Pretreatment of kenaf (Hibiscus cannabinus L.) biomass feedstock for polyhydroxybutyrate (PHB) production and characterization. Bioresource Technology, 2019, 282, 75-80.	4.8	84
75	Evaluation of different pretreatments on organic matter solubilization and hydrogen fermentation of mixed microalgae consortia. International Journal of Hydrogen Energy, 2016, 41, 21628-21640.	3.8	82
76	Study on decanol and Calophyllum Inophyllum biodiesel as ternary blends in CI engine. Fuel, 2019, 239, 862-873.	3.4	82
77	A review on the biomass pretreatment and inhibitor removal methods as key-steps towards efficient macroalgae-based biohydrogen production. Bioresource Technology, 2017, 244, 1341-1348.	4.8	79
78	Microbial electrochemical systems for sustainable biohydrogen production: Surveying the experiences from a start-up viewpoint. Renewable and Sustainable Energy Reviews, 2017, 70, 589-597.	8.2	79
79	Development of machine learning - based models to forecast solid waste generation in residential areas: A case study from Vietnam. Resources, Conservation and Recycling, 2021, 167, 105381.	5.3	79
80	Study on isobutanol and Calophyllum inophyllum biodiesel as a partial replacement in CI engine applications. Fuel, 2019, 235, 984-994.	3.4	78
81	Food Waste to Bioenergy via Anaerobic Processes. Energy Procedia, 2014, 61, 307-312.	1.8	75
82	A review on the conversion of volatile fatty acids to polyhydroxyalkanoates using dark fermentative effluents from hydrogen production. Bioresource Technology, 2019, 287, 121427.	4.8	74
83	Microbiome involved in microbial electrochemical systems (MESs): A review. Chemosphere, 2017, 177, 176-188.	4.2	72
84	Biohythane production from food processing wastes â€“ Challenges and perspectives. Bioresource Technology, 2020, 298, 122449.	4.8	72
85	Biofouling of membranes in microbial electrochemical technologies: Causes, characterization methods and mitigation strategies. Bioresource Technology, 2019, 279, 327-338.	4.8	71
86	Biorefinery of spent coffee grounds waste: Viable pathway towards circular bioeconomy. Bioresource Technology, 2020, 302, 122821.	4.8	71
87	Food waste valorization: Biofuels and value added product recovery. Bioresource Technology Reports, 2020, 11, 100524.	1.5	70
88	Effect of hydrogen on compression-ignition (CI) engine fueled with vegetable oil/biodiesel from various feedstocks: A review. International Journal of Hydrogen Energy, 2022, 47, 37648-37667.	3.8	70
89	A novel study on the effect lemon peel oil as a fuel in CRDI engine at various injection strategies. Energy Conversion and Management, 2018, 172, 517-528.	4.4	69
90	Impact of pretreatment on food waste for biohydrogen production: A review. International Journal of Hydrogen Energy, 2020, 45, 18211-18225.	3.8	69

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91	Pretreatment technologies for industrial effluents: Critical review on bioenergy production and environmental concerns. Journal of Environmental Management, 2018, 218, 165-180.	3.8	68
92	Microbial electrohydrogenesis linked to dark fermentation as integrated application for enhanced biohydrogen production: A review on process characteristics, experiences and lessons. Bioresource Technology, 2018, 251, 381-389.	4.8	68
93	Impervious and influence in the liquid fuel production from municipal plastic waste through thermo-chemical biomass conversion technologies - A review. Science of the Total Environment, 2020, 718, 137287.	3.9	68
94	Algal-based system for removal of emerging pollutants from wastewater: A review. Bioresource Technology, 2022, 344, 126245.	4.8	68
95	HRT dependent performance and bacterial community population of granular hydrogen-producing mixed cultures fed with galactose. Bioresource Technology, 2016, 206, 188-194.	4.8	66
96	Exploiting fruit byproducts for eco-friendly nanosynthesis: CitrusÂÃ—Âclementina peel extract mediated fabrication of silver nanoparticles with high efficacy against microbial pathogens and rat glial tumor C6 cells. Environmental Science and Pollution Research, 2018, 25, 10250-10263.	2.7	66
97	Hydrogen fermentation of different galactoseâ€“glucose compositions during various hydraulic retention times (HRTs). International Journal of Hydrogen Energy, 2014, 39, 20625-20631.	3.8	65
98	Waste-to-wealth for valorization of food waste to hydrogen and methane towards creating a sustainable ideal source of bioenergy. Journal of Cleaner Production, 2016, 122, 29-41.	4.6	65
99	Synergetic pretreatment of algal biomass through H2O2 induced microwave in acidic condition for biohydrogen production. Fuel, 2019, 253, 833-839.	3.4	64
100	A review on chemical mechanism of microalgae flocculation via polymers. Biotechnology Reports (Amsterdam, Netherlands), 2019, 21, e00302.	2.1	64
101	Pt Nanoparticles Supported on Mesoporous CeO₂ Nanostructures Obtained through Green Approach for Efficient Catalytic Performance toward Ethanol Electro-oxidation. ACS Sustainable Chemistry and Engineering, 2017, 5, 11290-11299.	3.2	63
102	Architectural engineering of bioelectrochemical systems from the perspective of polymeric membrane separators: A comprehensive update on recent progress and future prospects. Journal of Membrane Science, 2018, 564, 508-522.	4.1	63
103	Pretreatment and hydrolysis methods for recovery of fermentable sugars from de-oiled Jatropha waste. Bioresource Technology, 2013, 145, 275-279.	4.8	61
104	Enhanced biohydrogen production from beverage industrial wastewater using external nitrogen sources and bioaugmentation with facultative anaerobic strains. Journal of Bioscience and Bioengineering, 2015, 120, 155-160.	1.1	61
105	Surfactant assisted disperser pretreatment on the liquefaction of Ulva reticulata and evaluation of biodegradability for energy efficient biofuel production through nonlinear regression modelling. Bioresource Technology, 2018, 255, 116-122.	4.8	60
106	Effect of hydraulic retention time (HRT) on biohydrogen production from galactose in an up-flow anaerobic sludge blanket reactor. International Journal of Hydrogen Energy, 2016, 41, 21670-21677.	3.8	59
107	Exploitation of de-oiled jatropha waste for gold nanoparticles synthesis: A green approach. Arabian Journal of Chemistry, 2018, 11, 247-255.	2.3	58
108	Novel insights into scalability of biosurfactant combined microwave disintegration of sludge at alkali pH for achieving profitable bioenergy recovery and net profit. Bioresource Technology, 2018, 267, 281-290.	4.8	58

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109	Investigation of novel Pistacia khinjuk biodiesel in DI diesel engine with post combustion capture system. Applied Thermal Engineering, 2019, 159, 113969.	3.0	57
110	A review on the factors influencing biohydrogen production from lactate: The key to unlocking enhanced dark fermentative processes. Bioresource Technology, 2021, 324, 124595.	4.8	57
111	Lignocellulosic biomass as an optimistic feedstock for the production of biofuels as valuable energy source: Techno-economic analysis, Environmental Impact Analysis, Breakthrough and Perspectives. Environmental Technology and Innovation, 2021, 24, 102080.	3.0	57
112	Fuels properties, characterizations and engine and emission performance analyses of ternary waste cooking oil biodieselâ€“dieselâ€“propanol blends. Sustainable Energy Technologies and Assessments, 2019, 35, 321-334.	1.7	56
113	Biohydrogen purification using a commercial polyimide membrane module: Studying the effects of some process variables. International Journal of Hydrogen Energy, 2013, 38, 15092-15099.	3.8	55
114	Changes in performance and bacterial communities in response to various process disturbances in a high-rate biohydrogen reactor fed with galactose. Bioresource Technology, 2015, 188, 109-116.	4.8	55
115	Controlled synthesis of Pt nanoparticle supported TiO₂ nanorods as efficient and stable electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2018, 6, 23435-23444.	5.2	55
116	Industrial wastewater to biohydrogen: Possibilities towards successful biorefinery route. Bioresource Technology, 2020, 298, 122378.	4.8	55
117	A critical review on limitations and enhancement strategies associated with biohydrogen production. International Journal of Hydrogen Energy, 2021, 46, 16565-16590.	3.8	55
118	Emergent green technologies for cost-effective valorization of microalgal biomass to renewable fuel products under a biorefinery scheme. Chemical Engineering Journal, 2021, 415, 128932.	6.6	55
119	Bioconversion of de-oiled Jatropha Waste (DJW) to hydrogen and methane gas by anaerobic fermentation: Influence of substrate concentration, temperature and pH. International Journal of Hydrogen Energy, 2013, 38, 63-72.	3.8	54
120	Current trends and prospects in microalgae-based bioenergy production. Journal of Environmental Chemical Engineering, 2020, 8, 104025.	3.3	54
121	A review on valorization of spent coffee grounds (SCG) towards biopolymers and biocatalysts production. Bioresource Technology, 2020, 314, 123800.	4.8	54
122	Sustainable carbonaceous biochar adsorbents derived from agro-wastes and invasive plants for cation dye adsorption from water. Chemosphere, 2021, 282, 131009.	4.2	54
123	Valorization of spent coffee grounds recycling as a potential alternative fuel resource in Turkey: An experimental study. Journal of the Air and Waste Management Association, 2018, 68, 196-214.	0.9	53
124	Synthesis of Î³-valerolactone (GVL) and their applications for lignocellulosic deconstruction for sustainable green biorefineries. Fuel, 2021, 303, 121333.	3.4	52
125	Effects of 5-hydromethylfurfural, levulinic acid and formic acid, pretreatment byproducts of biomass, on fermentative H2 production from glucose and galactose. International Journal of Hydrogen Energy, 2014, 39, 16885-16890.	3.8	51
126	Effect of feeding mode and dilution on the performance and microbial community population in anaerobic digestion of food waste. Bioresource Technology, 2018, 248, 134-140.	4.8	51

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127	Fermentative hydrogen production from mixed and pure microalgae biomass: Key challenges and possible opportunities. International Journal of Hydrogen Energy, 2017, 42, 26440-26453.	3.8	50
128	Cultivation of microalgal biomass using swine manure for biohydrogen production: Impact of dilution ratio and pretreatment. Bioresource Technology, 2018, 260, 16-22.	4.8	50
129	Recent developments on alternative fuels, energy and environment for sustainability. Bioresource Technology, 2020, 317, 124010.	4.8	50
130	Renewable hydrogen production from biomass and wastes (ReBioH2-2020). Bioresource Technology, 2021, 331, 125024.	4.8	50
131	Valorization of agricultural residues: Different biorefinery routes. Journal of Environmental Chemical Engineering, 2021, 9, 105435.	3.3	50
132	Impact of pH control and heat pre-treatment ofÂseed inoculum in dark H 2 fermentation: AÂfeasibility report using mixed microalgae biomass as feedstock. International Journal of Hydrogen Energy, 2016, 41, 4382-4392.	3.8	49
133	Effects of various dilute acid pretreatments on the biochemical hydrogen production potential of marine macroalgal biomass. International Journal of Hydrogen Energy, 2017, 42, 27600-27606.	3.8	49
134	Effects of concentration and gas flow rate on the removal of gas-phase toluene and xylene mixture in a compost biofilter. Bioresource Technology, 2018, 248, 28-35.	4.8	49
135	Progress in microalgal mediated bioremediation systems for the removal of antibiotics and pharmaceuticals from wastewater. Science of the Total Environment, 2022, 825, 153895.	3.9	49
136	A comprehensive review on two-stage integrative schemes for the valorization of dark fermentative effluents. Critical Reviews in Biotechnology, 2018, 38, 868-882.	5.1	48
137	Cultivation of microalgae Chlorella sp. in municipal sewage for biofuel production and utilization of biochar derived from residue for the conversion of hematite iron ore (Fe2O3) to iron (Fe) â€“ Integrated algal biorefinery. Energy, 2019, 189, 116128.	4.5	47
138	Nanoparticle induced biological disintegration: A new phase separated pretreatment strategy on microalgal biomass for profitable biomethane recovery. Bioresource Technology, 2019, 289, 121624.	4.8	47
139	Integrated valorization of Moringa oleifera and waste Phoenix dactylifera L. dates as potential feedstocks for biofuels production from Algerian Sahara: An experimental perspective. Biocatalysis and Agricultural Biotechnology, 2019, 20, 101234.	1.5	46
140	Trends and resource recovery in biological wastewater treatment system. Bioresource Technology Reports, 2019, 7, 100235.	1.5	46
141	Integrated biorefinery routes of biohydrogen: Possible utilization of acidogenic fermentative effluent. Bioresource Technology, 2021, 319, 124241.	4.8	46
142	Improved microbial conversion of de-oiled Jatropha waste into biohydrogen via inoculum pretreatment: process optimization by experimental design approach. Biofuel Research Journal, 0, , 209-214.	7.2	46
143	Screening and optimization of pretreatments in the preparation of sugarcane bagasse feedstock for biohydrogen production and process optimization. International Journal of Hydrogen Energy, 2018, 43, 11470-11483.	3.8	45
144	An investigation on CRDi engine characteristic using renewable orange-peel oil. Energy Conversion and Management, 2019, 180, 1026-1038.	4.4	45

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145	Electro-fermentation for biofuels and biochemicals production: Current status and future directions. Bioresource Technology, 2021, 323, 124598.	4.8	45
146	Engine performance, emission and bio characteristics of rice bran oil derived biodiesel blends. Fuel, 2019, 239, 153-161.	3.4	44
147	Combined pretreatment of electrolysis and ultra-sonication towards enhancing solubilization and methane production from mixed microalgae biomass. Bioresource Technology, 2017, 245, 196-200.	4.8	43
148	A hybrid constructed wetland for organic-material and nutrient removal from sewage: Process performance and multi-kinetic models. Journal of Environmental Management, 2018, 222, 378-384.	3.8	43
149	Insights into evolutionary trends in molecular biology tools in microbial screening for biohydrogen production through dark fermentation. International Journal of Hydrogen Energy, 2018, 43, 19885-19901.	3.8	42
150	Recent advances on biogranules formation in dark hydrogen fermentation system: Mechanism of formation and microbial characteristics. Bioresource Technology, 2018, 268, 787-796.	4.8	42
151	Energetically efficient microwave disintegration of waste activated sludge for biofuel production by zeolite: Quantification of energy and biodegradability modelling. International Journal of Hydrogen Energy, 2019, 44, 2274-2288.	3.8	42
152	Anaerobic co-digestion of oil-extracted spent coffee grounds with various wastes: Experimental and kinetic modeling studies. Bioresource Technology, 2021, 322, 124470.	4.8	42
153	Recovery of biohydrogen in a single-chamber microbial electrohydrogenesis cell using liquid fraction of pressed municipal solid waste (LPW) asÂsubstrate. International Journal of Hydrogen Energy, 2016, 41, 17896-17906.	3.8	41
154	Process performance of biohydrogen production using glucose at various HRTs and assessment of microbial dynamics variation via q-PCR. International Journal of Hydrogen Energy, 2017, 42, 27550-27557.	3.8	41
155	A cost-effective strategy for the bio-prospecting of mixed microalgae with high carbohydrate content: Diversity fluctuations in different growth media. Bioresource Technology, 2014, 163, 370-373.	4.8	40
156	High rate hydrogen fermentation of cello-lignin fraction in de-oiled jatropha waste using hybrid immobilized cell system. Fuel, 2016, 182, 131-140.	3.4	40
157	Performance evaluation of microbial electrochemical systems operated with Nafion and supported ionic liquid membranes. Chemosphere, 2017, 175, 350-355.	4.2	40
158	Biohydrogen production integrated with an external dynamic membrane: A novel approach. International Journal of Hydrogen Energy, 2017, 42, 27543-27549.	3.8	40
159	Mesophilic continuous fermentative hydrogen production from acid pretreated de-oiled jatropha waste hydrolysate using immobilized microorganisms. Bioresource Technology, 2017, 240, 137-143.	4.8	40
160	Various potential techniques to reduce the water footprint of microalgal biomass production for biofuelâ€"A review. Science of the Total Environment, 2020, 749, 142218.	3.9	40
161	Feasibility of enriched mixed cultures obtained by repeated batch transfer in continuous hydrogen fermentation. International Journal of Hydrogen Energy, 2016, 41, 4393-4403.	3.8	39
162	Disperser-induced bacterial disintegration of partially digested anaerobic sludge for efficient biomethane recovery. Chemical Engineering Journal, 2018, 347, 165-172.	6.6	39

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163	A review of research trends in the enhancement of biomass-to-hydrogen conversion. Waste Management, 2018, 79, 580-594.	3.7	39
164	Upgrading of micro algal derived bio-fuels in thermochemical liquefaction path and its perspectives: A review. International Biodeterioration and Biodegradation, 2017, 119, 260-272.	1.9	38
165	Simultaneous removal of 5-hydroxy methyl furfural (5-HMF) and hydrogen production from acid (H 2) Tj ETQq1 1 0.784314 rgBT /Ove	2.4	37
166	Enhancement of hydrogen production by optimization of pH adjustment and separation conditions following dilute acid pretreatment of lignocellulosic biomass. International Journal of Hydrogen Energy, 2017, 42, 27502-27511.	3.8	37
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