Richen Lin

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/890915/publications.pdf

Version: 2024-02-01

170	7,842	36203	69108
papers	citations	51	77
		h-index	g-index

172	172	172	5575
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microalgal Cultivation in Treating Liquid Digestate from Biogas Systems. Trends in Biotechnology, 2016, 34, 264-275.	4.9	302
2	Boosting biomethane yield and production rate with graphene: The potential of direct interspecies electron transfer in anaerobic digestion. Bioresource Technology, 2017, 239, 345-352.	4.8	272
3	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
4	Innovation in biological production and upgrading of methane and hydrogen for use as gaseous transport biofuel. Biotechnology Advances, 2016, 34, 451-472.	6.0	178
5	Improved efficiency of anaerobic digestion through direct interspecies electron transfer at mesophilic and thermophilic temperature ranges. Chemical Engineering Journal, 2018, 350, 681-691.	6.6	168
6	Production of hydrogen, ethanol and volatile fatty acids through co-fermentation of macro- and micro-algae. Bioresource Technology, 2016, 205, 118-125.	4.8	167
7	Enhanced dark hydrogen fermentation by addition of ferric oxide nanoparticles using Enterobacter aerogenes. Bioresource Technology, 2016, 207, 213-219.	4.8	162
8	Improving hydrogen and methane co-generation in cascading dark fermentation and anaerobic digestion: The effect of magnetite nanoparticles on microbial electron transfer and syntrophism. Chemical Engineering Journal, 2020, 397, 125394.	6.6	123
9	Fermentative hydrogen production using algal biomass as feedstock. Renewable and Sustainable Energy Reviews, 2015, 51, 209-230.	8.2	115
10	Recent advances and challenges of inter-disciplinary biomass valorization by integrating hydrothermal and biological techniques. Renewable and Sustainable Energy Reviews, 2021, 135, 110370.	8.2	108
11	Pyrolysis kinetics and reaction mechanism of the electrode materials during the spent LiCoO2 batteries recovery process. Journal of Hazardous Materials, 2020, 398, 122955.	6.5	108
12	Characterisation of water hyacinth with microwave-heated alkali pretreatment for enhanced enzymatic digestibility and hydrogen/methane fermentation. Bioresource Technology, 2015, 182, 1-7.	4.8	103
13	What is the gross energy yield of third generation gaseous biofuel sourced from seaweed?. Energy, 2015, 81, 352-360.	4.5	100
14	Ensiling of seaweed for a seaweed biofuel industry. Bioresource Technology, 2015, 196, 301-313.	4.8	100
15	Comparison in dark hydrogen fermentation followed by photo hydrogen fermentation and methanogenesis between protein and carbohydrate compositions in Nannochloropsis oceanica biomass. Bioresource Technology, 2013, 138, 204-213.	4.8	94
16	Enhancement of energy production efficiency from mixed biomass of Chlorella pyrenoidosa and cassava starch through combined hydrogen fermentation and methanogenesis. Applied Energy, 2014, 120, 23-30.	5.1	91
17	Combination of dark- and photo-fermentation to improve hydrogen production from Arthrospira platensis wet biomass with ammonium removal by zeolite. International Journal of Hydrogen Energy, 2012, 37, 13330-13337.	3.8	90
18	Laccase pretreatment of wheat straw: effects of the physicochemical characteristics and the kinetics of enzymatic hydrolysis. Biotechnology for Biofuels, 2019, 12, 159.	6.2	90

#	Article	IF	Citations
19	Inhibitory effects of furan derivatives and phenolic compounds on dark hydrogen fermentation. Bioresource Technology, 2015, 196, 250-255.	4.8	89
20	Co-generation of biohydrogen and biomethane through two-stage batch co-fermentation of macro- and micro-algal biomass. Bioresource Technology, 2016, 218, 224-231.	4.8	88
21	Fermentative biohydrogen and biomethane co-production from mixture of food waste and sewage sludge: Effects of physiochemical properties and mix ratios on fermentation performance. Applied Energy, 2016, 184, 1-8.	5.1	87
22	Photo-bioreactor design for microalgae: A review from the aspect of CO2 transfer and conversion. Bioresource Technology, 2019, 292, 121947.	4.8	86
23	Potential of seaweed as a feedstock for renewable gaseous fuel production in Ireland. Renewable and Sustainable Energy Reviews, 2017, 68, 136-146.	8.2	84
24	Optimised biogas production from microalgae through co-digestion with carbon-rich co-substrates. Bioresource Technology, 2016, 214, 328-337.	4.8	83
25	Improving gaseous biofuel yield from seaweed through a cascading circular bioenergy system integrating anaerobic digestion and pyrolysis. Renewable and Sustainable Energy Reviews, 2020, 128, 109895.	8.2	80
26	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
27	Improving gaseous biofuel production from seaweed Saccharina latissima: The effect of hydrothermal pretreatment on energy efficiency. Energy Conversion and Management, 2019, 196, 1385-1394.	4.4	78
28	The role of machine learning to boost the bioenergy and biofuels conversion. Bioresource Technology, 2022, 343, 126099.	4.8	76
29	Integrating planar waveguides doped with light scattering nanoparticles into a flat-plate photobioreactor to improve light distribution and microalgae growth. Bioresource Technology, 2016, 220, 215-224.	4.8	75
30	Life-cycle assessment of biohythane production via two-stage anaerobic fermentation from microalgae and food waste. Renewable and Sustainable Energy Reviews, 2019, 112, 395-410.	8.2	75
31	Improvement of the energy conversion efficiency of Chlorella pyrenoidosa biomass by a three-stage process comprising dark fermentation, photofermentation, and methanogenesis. Bioresource Technology, 2013, 146, 436-443.	4.8	73
32	Controllable Microwave Hydrothermal Synthesis of Bismuth Ferrites and Photocatalytic Characterization. Journal of the American Ceramic Society, 2012, 95, 280-289.	1.9	72
33	Comparison of Chlorella vulgaris biomass productivity cultivated in biofilm and suspension from the aspect of light transmission and microalgae affinity to carbon dioxide. Bioresource Technology, 2016, 222, 367-373.	4.8	69
34	Study of the performance of a thermophilic biological methanation system. Bioresource Technology, 2017, 225, 308-315.	4.8	69
35	Substrate consumption and hydrogen production via co-fermentation of monomers derived from carbohydrates and proteins in biomass wastes. Applied Energy, 2015, 139, 9-16.	5.1	68
36	Improving production of volatile fatty acids and hydrogen from microalgae and rice residue: Effects of physicochemical characteristics and mix ratios. Applied Energy, 2018, 230, 1082-1092.	5.1	68

#	Article	IF	Citations
37	A review on chemical mechanism of microalgae flocculation via polymers. Biotechnology Reports (Amsterdam, Netherlands), 2019, 21, e00302.	2.1	64
38	Enhancing enzymatic saccharification of water hyacinth through microwave heating with dilute acid pretreatment for biomass energy utilization. Energy, 2013, 61, 158-166.	4.5	63
39	How to optimise photosynthetic biogas upgrading: a perspective on system design and microalgae selection. Biotechnology Advances, 2019, 37, 107444.	6.0	63
40	Improving fermentative hydrogen and methane production from an algal bloom through hydrothermal/steam acid pretreatment. International Journal of Hydrogen Energy, 2019, 44, 5812-5820.	3.8	60
41	Hydrogen production using amino acids obtained by protein degradation in waste biomass by combined dark- and photo-fermentation. Bioresource Technology, 2015, 179, 13-19.	4.8	59
42	Graphene Facilitates Biomethane Production from Protein-Derived Glycine in Anaerobic Digestion. IScience, 2018, 10, 158-170.	1.9	59
43	Promotion of H2 production by microwave-assisted treatment of water hyacinth with dilute H2SO4 through combined dark fermentation and photofermentation. Energy Conversion and Management, 2013, 73, 329-334.	4.4	58
44	Fermentative hydrogen and methane cogeneration from cassava residues: Effect of pretreatment on structural characterization and fermentation performance. Bioresource Technology, 2015, 179, 407-413.	4.8	57
45	Use of surplus wind electricity in Ireland to produce compressed renewable gaseous transport fuel through biological power to gas systems. Renewable Energy, 2017, 105, 495-504.	4.3	56
46	Physiological-phased kinetic characteristics of microalgae Chlorella vulgaris growth and lipid synthesis considering synergistic effects of light, carbon and nutrients. Bioresource Technology, 2018, 250, 583-590.	4.8	56
47	Improving biohydrogen and biomethane co-production via two-stage dark fermentation and anaerobic digestion of the pretreated seaweed Laminaria digitata. Journal of Cleaner Production, 2020, 251, 119666.	4.6	56
48	Seasonal variation of chemical composition and biomethane production from the brown seaweed Ascophyllum nodosum. Bioresource Technology, 2016, 216, 219-226.	4.8	55
49	Production of hydrogen, ethanol and volatile fatty acids from the seaweed carbohydrate mannitol. Bioresource Technology, 2015, 193, 488-497.	4.8	54
50	Fermentative bio-hydrogen production from galactose. Energy, 2016, 96, 346-354.	4.5	54
51	Simultaneous enhancement of Chlorella vulgaris growth and lipid accumulation through the synergy effect between light and nitrate in a planar waveguide flat-plate photobioreactor. Bioresource Technology, 2017, 243, 528-538.	4.8	53
52	Subcritical water hydrolysis of rice straw for reducing sugar production with focus on degradation by-products and kinetic analysis. Bioresource Technology, 2015, 186, 8-14.	4.8	52
53	Comparison between heterofermentation and autofermentation in hydrogen production from Arthrospira (Spirulina) platensis wet biomass. International Journal of Hydrogen Energy, 2012, 37, 6536-6544.	3.8	51
54	Physicochemical characterization of typical municipal solid wastes for fermentative hydrogen and methane co-production. Energy Conversion and Management, 2016, 117, 297-304.	4.4	51

#	Article	IF	Citations
55	Enhancing microalgae biofilm formation and growth by fabricating microgrooves onto the substrate surface. Bioresource Technology, 2018, 261, 36-43.	4.8	51
56	Cogeneration of hydrogen and methane from the pretreated biomass of algae bloom in Taihu Lake. International Journal of Hydrogen Energy, 2014, 39, 18793-18802.	3.8	50
57	A perspective on novel cascading algal biomethane biorefinery systems. Bioresource Technology, 2020, 304, 123027.	4.8	49
58	Effects of carbon cloth on anaerobic digestion of high concentration organic wastewater under various mixing conditions. Journal of Hazardous Materials, 2022, 423, 127100.	6.5	49
59	Cogeneration of hydrogen and methane from Arthrospira maxima biomass with bacteria domestication and enzymatic hydrolysis. International Journal of Hydrogen Energy, 2011, 36, 1474-1481.	3.8	48
60	Biodegradable branched cationic starch with high C/N ratio for Chlorella vulgaris cells concentration: Regulating microalgae flocculation performance by pH. Bioresource Technology, 2019, 276, 133-139.	4.8	48
61	Effects of foam nickel supplementation on anaerobic digestion: Direct interspecies electron transfer. Journal of Hazardous Materials, 2020, 399, 122830.	6.5	48
62	Enhancement of fermentative hydrogen production from hydrolyzed water hyacinth with activated carbon detoxification and bacteria domestication. International Journal of Hydrogen Energy, 2015, 40, 2545-2551.	3.8	46
63	An annular photobioreactor with ion-exchange-membrane for non-touch microalgae cultivation with wastewater. Bioresource Technology, 2016, 219, 668-676.	4.8	46
64	How can ethanol enhance direct interspecies electron transfer in anaerobic digestion?. Biotechnology Advances, 2021, 52, 107812.	6.0	45
65	Inhibition of thermochemical treatment on biological hydrogen and methane co-production from algae-derived glucose/glycine. Energy Conversion and Management, 2018, 158, 201-209.	4.4	44
66	Graphene Addition to Digestion of Thin Stillage Can Alleviate Acidic Shock and Improve Biomethane Production. ACS Sustainable Chemistry and Engineering, 2020, 8, 13248-13260.	3.2	44
67	How do we optimize thirdâ€generation algal biofuels?. Biofuels, Bioproducts and Biorefining, 2015, 9, 358-367.	1.9	43
68	The effect of seasonal variation on biomethane production from seaweed and on application as a gaseous transport biofuel. Bioresource Technology, 2016, 209, 213-219.	4.8	43
69	Life cycle and economic assessments of biogas production from microalgae biomass with hydrothermal pretreatment via anaerobic digestion. Renewable Energy, 2020, 151, 70-78.	4.3	43
70	Boosting Nannochloropsis oculata growth and lipid accumulation in a lab-scale open raceway pond characterized by improved light distributions employing built-in planar waveguide modules. Bioresource Technology, 2018, 249, 880-889.	4.8	42
71	A rapid inoculation method for microalgae biofilm cultivation based on microalgae-microalgae co-flocculation and zeta-potential adjustment. Bioresource Technology, 2019, 278, 272-278.	4.8	42
72	Can acid pre-treatment enhance biohydrogen and biomethane production from grass silage in single-stage and two-stage fermentation processes?. Energy Conversion and Management, 2019, 195, 738-747.	4.4	42

#	Article	IF	Citations
73	Using biogas to reduce natural gas consumption and greenhouse gas emissions at a large distillery. Applied Energy, 2020, 279, 115812.	5.1	42
74	Optimizing culture conditions for heterotrophic-assisted photoautotrophic biofilm growth of Chlorella vulgaris to simultaneously improve microalgae biomass and lipid productivity. Bioresource Technology, 2018, 270, 80-87.	4.8	41
75	Enhancement of CO2 transfer and microalgae growth by perforated inverted arc trough internals in a flat-plate photobioreactor. Bioresource Technology, 2018, 269, 292-299.	4.8	40
76	Enhanced energy recovery from cassava ethanol wastewater through sequential dark hydrogen, photo hydrogen and methane fermentation combined with ammonium removal. Bioresource Technology, 2016, 214, 686-691.	4.8	39
77	Exergy analyses of biogas production from microalgae biomass via anaerobic digestion. Bioresource Technology, 2019, 289, 121709.	4.8	39
78	What physicochemical properties of biochar facilitate interspecies electron transfer in anaerobic digestion: A case study of digestion of whiskey by-products. Fuel, 2021, 306, 121736.	3.4	39
79	Spirulina platensis based biorefinery for the production of value-added products for food and pharmaceutical applications. Bioresource Technology, 2019, 289, 121727.	4.8	38
80	Low concentrations of furfural facilitate biohydrogen production in dark fermentation using Enterobacter aerogenes. Renewable Energy, 2020, 150, 23-30.	4.3	38
81	Rheological properties of microalgae slurry for application in hydrothermal pretreatment systems. Bioresource Technology, 2018, 249, 599-604.	4.8	37
82	Carbon cloth facilitates semi-continuous anaerobic digestion of organic wastewater rich in volatile fatty acids from dark fermentation. Environmental Pollution, 2021, 272, 116030.	3.7	37
83	Production of Bio-alkanes from Biomass and CO2. Trends in Biotechnology, 2021, 39, 370-380.	4.9	37
84	Effects of pre-treatment and biological acidification on fermentative hydrogen and methane co-production. Energy Conversion and Management, 2019, 185, 431-441.	4.4	36
85	Sequential generation of hydrogen and methane from glutamic acid through combined photo-fermentation and methanogenesis. Bioresource Technology, 2013, 131, 146-151.	4.8	35
86	Improvement on light penetrability and microalgae biomass production by periodically pre-harvesting Chlorella vulgaris cells with culture medium recycling. Bioresource Technology, 2016, 216, 669-676.	4.8	35
87	Preparation of nano-biochar from conventional biorefineries for high-value applications. Renewable and Sustainable Energy Reviews, 2022, 157, 112057.	8.2	35
88	Revealing the synergistic effects of cells, pigments, and light spectra on light transfer during microalgae growth: A comprehensive light attenuation model. Bioresource Technology, 2022, 348, 126777.	4.8	34
89	Production of advanced fuels through integration of biological, thermo-chemical and power to gas technologies in a circular cascading bio-based system. Renewable and Sustainable Energy Reviews, 2021, 135, 110371.	8.2	33
90	A perspective on gaseous biofuel production from micro-algae generated from CO 2 from a coal-fired power plant. Applied Energy, 2015, 148, 396-402.	5.1	32

#	Article	IF	Citations
91	Assessment of continuous fermentative hydrogen and methane co-production using macro- and micro-algae with increasing organic loading rate. Energy, 2018, 151, 760-770.	4.5	32
92	Comparative study of single- and two-stage fermentation of the brown seaweed Laminaria digitata. Energy Conversion and Management, 2017, 148, 405-412.	4.4	32
93	Improving microalgal growth with reduced diameters of aeration bubbles and enhanced mass transfer of solution in an oscillating flow field. Bioresource Technology, 2016, 211, 429-434.	4.8	31
94	Ionic-liquid pretreatment of cassava residues for the cogeneration of fermentative hydrogen and methane. Bioresource Technology, 2017, 228, 348-354.	4.8	31
95	A perspective on decarbonizing whiskey using renewable gaseous biofuel in a circular bioeconomy process. Journal of Cleaner Production, 2020, 255, 120211.	4.6	31
96	Microwave assisted low-temperature hydrothermal treatment of solid anaerobic digestate for optimising hydrochar and energy recovery. Chemical Engineering Journal, 2020, 395, 124999.	6.6	31
97	Effects of changes in microbial community on the fermentative production of hydrogen and soluble metabolites from Chlorella pyrenoidosa biomass in semi-continuous operation. Energy, 2014, 68, 982-988.	4.5	30
98	Biomethane production from various segments of brown seaweed. Energy Conversion and Management, 2018, 174, 855-862.	4.4	30
99	Optimization of liquid hot water pretreatment on Hybrid Pennisetum anaerobic digestion and its effect on energy efficiency. Energy Conversion and Management, 2020, 210, 112718.	4.4	30
100	Unexpectedly low biohydrogen yields in co-fermentation of acid pretreated cassava residue and swine manure. Energy Conversion and Management, 2017, 151, 553-561.	4.4	28
101	Adsorption thermodynamic characteristics of Chlorella vulgaris with organic polymer adsorbent cationic starch: Effect of temperature on adsorption capacity and rate. Bioresource Technology, 2019, 293, 122056.	4.8	28
102	Enhanced dark hydrogen fermentation of Enterobacter aerogenes/HoxEFUYH with carbon cloth. International Journal of Hydrogen Energy, 2019, 44, 3560-3568.	3.8	28
103	Granular activated carbon supplementation enhances anaerobic digestion of lipid-rich wastewaters. Renewable Energy, 2021, 171, 958-970.	4.3	28
104	Hydrogen from Photo Fermentation. Green Energy and Technology, 2018, , 221-317.	0.4	27
105	The kinetics of the polyacrylic superabsorbent polymers swelling in microalgae suspension to concentrate cells density. Bioresource Technology, 2018, 249, 713-719.	4.8	27
106	Improvement in biohydrogen and volatile fatty acid production from seaweed through addition of conductive carbon materials depends on the properties of the conductive materials. Energy, 2022, 239, 122188.	4.5	27
107	Sequential generation of hydrogen and methane from xylose by two-stage anaerobic fermentation. International Journal of Hydrogen Energy, 2012, 37, 13323-13329.	3.8	26
108	Structure transition and multiferroic properties of Mn-doped BiFeO3 thin films. Journal of Materials Science: Materials in Electronics, 2014, 25, 723-729.	1.1	26

#	Article	IF	Citations
109	Application of growth-phase based light-feeding strategies to simultaneously enhance Chlorella vulgaris growth and lipid accumulation. Bioresource Technology, 2018, 256, 421-430.	4.8	26
110	Boosting photo-biochemical conversion and carbon dioxide bio-fixation of Chlorella vulgaris in an optimized photobioreactor with airfoil-shaped deflectors. Bioresource Technology, 2021, 337, 125355.	4.8	24
111	Hydrothermal hydrolysis of algal biomass for biofuels production: A review. Bioresource Technology, 2022, 344, 126213.	4.8	24
112	Co-production of hydrochar, levulinic acid and value-added chemicals by microwave-assisted hydrothermal carbonization of seaweed. Chemical Engineering Journal, 2022, 441, 135915.	6.6	24
113	Impact of the accumulation and adhesion of released oxygen during Scenedesmus obliquus photosynthesis on biofilm formation and growth. Bioresource Technology, 2017, 244, 198-205.	4.8	23
114	Hydrothermal heating with sulphuric acid contributes to improved fermentative hydrogen and methane co-generation from Dianchi Lake algal bloom. Energy Conversion and Management, 2019, 192, 282-291.	4.4	23
115	The upconversion and enhanced visible light photocatalytic activity of Er³⁺-doped tetragonal BiVO₄. RSC Advances, 2015, 5, 7324-7329.	1.7	22
116	Improving phosphorus removal efficiency and Chlorella vulgaris growth in high-phosphate MFC wastewater by frequent addition of small amounts of nitrate. International Journal of Hydrogen Energy, 2017, 42, 27749-27758.	3.8	21
117	Comparison of pre-treatments to reduce salinity and enhance biomethane yields of Laminaria digitata harvested in different seasons. Energy, 2017, 140, 546-551.	4.5	21
118	Hydrothermal hydrolysis pretreatment of microalgae slurries in a continuous reactor under subcritical conditions for largeâ€“scale application. Bioresource Technology, 2018, 266, 306-314.	4.8	21
119	Degradation and transformation of furfural derivatives from hydrothermal pre-treated algae and lignocellulosic biomass during hydrogen fermentation. Renewable and Sustainable Energy Reviews, 2020, 131, 109983.	8.2	21
120	Sodium borohydride removes aldehyde inhibitors for enhancing biohydrogen fermentation. Bioresource Technology, 2015, 197, 323-328.	4.8	20
121	A novel self-adaptive microalgae photobioreactor using anion exchange membranes for continuous supply of nutrients. Bioresource Technology, 2016, 214, 629-636.	4.8	20
122	Improving methane production from Pennisetum hybrid by monitoring plant height and ensiling pretreatment. Renewable Energy, 2019, 141, 57-63.	4.3	19
123	Thermoresponsive Surfaces Grafted by Shrinkable Hydrogel Poly(N-isopropylacrylamide) for Controlling Microalgae Cells Adhesion during Biofilm Cultivation. Environmental Science & Technology, 2021, 55, 1178-1189.	4.6	19
124	Efficient production of sugar via continuous enzymatic hydrolysis in a microreactor loaded with cellulase. Chemical Engineering Journal, 2022, 445, 136633.	6.6	19
125	Biofuel production from wet microalgae biomass: Comparison of physicochemical properties and extraction performance. Energy, 2020, 212, 118581.	4.5	18
126	A perspective on the combination of alkali pre-treatment with bioaugmentation to improve biogas production from lignocellulose biomass. Bioresource Technology, 2022, 351, 126950.	4.8	18

#	Article	IF	Citations
127	Sustainable biohythane production from algal bloom biomass through two-stage fermentation: Impacts of the physicochemical characteristics and fermentation performance. International Journal of Hydrogen Energy, 2020, 45, 34461-34472.	3.8	17
128	Combination of hydrogen fermentation and methanogenesis to enhance energy conversion efficiency from trehalose. Energy, 2013, 55, 631-637.	4.5	16
129	Sequential Generation of Fermentative Hydrogen and Methane from Swine Manure with Physicochemical Characterization. Energy & Fuels, 2014, 28, 563-570.	2.5	16
130	Enhancing fermentative hydrogen production with the removal of volatile fatty acids by electrodialysis. Bioresource Technology, 2018, 263, 437-443.	4.8	16
131	Emerging bioelectrochemical technologies for biogas production and upgrading in cascading circular bioenergy systems. IScience, 2021, 24, 102998.	1.9	16
132	A perspective on the efficacy of green gas production via integration of technologies in novel cascading circular bio-systems. Renewable and Sustainable Energy Reviews, 2021, 150, 111427.	8.2	16
133	Enhancing Extracellular Electron Transfer of Geobacter sulfurreducens in Bioelectrochemical Systems Using N-Doped Fe₃O₄@Carbon Dots. ACS Sustainable Chemistry and Engineering, 2022, 10, 3935-3950.	3.2	16
134	Assessment of pretreatment and digestion temperature on anaerobic digestion of whiskey byproducts and microbial taxonomy. Energy Conversion and Management, 2021, 243, 114331.	4.4	14
135	Dual Metal Active Sites and an Enhanced Electric Field Boosting CO₂ Reduction to CH₄ in an Electromethanogenesis System. ACS Sustainable Chemistry and Engineering, 2022, 10, 2890-2902.	3.2	14
136	Activated Carbon Facilitates Anaerobic Digestion of Furfural Wastewater: Effect of Direct Interspecies Electron Transfer. ACS Sustainable Chemistry and Engineering, 2022, 10, 8206-8215.	3.2	14
137	Rheokinetics of microalgae slurry during hydrothermal pretreatment processes. Bioresource Technology, 2019, 289, 121650.	4.8	13
138	Photoenzymatic decarboxylation to produce renewable hydrocarbon fuels: A comparison between whole-cell and broken-cell biocatalysts. Energy Conversion and Management, 2022, 255, 115311.	4.4	13
139	Enhanced photocatalytic of N/F-doped-NaTaO3 photocatalyst synthesized by hydrothermal method. Journal of Materials Science: Materials in Electronics, 2014, 25, 3807-3815.	1.1	12
140	Analysis of the energy barrier between Chlorella vulgaris cells and their interfacial interactions with cationic starch under different pH and ionic strength. Bioresource Technology, 2020, 304, 123012.	4.8	12
141	How can hydrothermal treatment impact the performance of continuous two-stage fermentation for hydrogen and methane co-generation?. International Journal of Hydrogen Energy, 2021, 46, 14045-14062.	3.8	12
142	A comparative evaluation of design factors on bubble column operation in photosynthetic biogas upgrading. Biofuel Research Journal, 2021, 8, 1351-1373.	7.2	12
143	Revealing the role of conductive materials on facilitating direct interspecies electron transfer in syntrophic methanogenesis: A thermodynamic analysis. Energy, 2021, 229, 120747.	4.5	12
144	Towards green whiskey production: Anaerobic digestion of distillery by-products and the effects of pretreatment. Journal of Cleaner Production, 2022, 357, 131844.	4.6	12

#	Article	IF	Citations
145	Influential Aspects in Waste Management Practices. , 2019, , 65-78.		11
146	Hydrolysis of disaccharides via carbon-based solid acids with binding and catalytic domains: Glycosidic bond fracture properties and reaction kinetics. Fuel, 2021, 300, 120978.	3.4	11
147	Improved robustness of ex-situ biological methanation for electro-fuel production through the addition of graphene. Renewable and Sustainable Energy Reviews, 2021, 152, 111690.	8.2	11
148	Synergistic Treatment of Alkali Lignin via Fungal Coculture for Biofuel Production: Comparison of Physicochemical Properties and Adsorption of Enzymes Used As Catalysts. Frontiers in Energy Research, 2020, 8, .	1.2	11
149	Inhibitory effects of furfural and vanillin on two-stage gaseous biofuel fermentation. Fuel, 2019, 252, 350-359.	3.4	10
150	Kinetics of hydrolysis of microalgae biomass during hydrothermal pretreatment. Biomass and Bioenergy, 2021, 149, 106074.	2.9	10
151	Zeolitic imidazolate framework-derived porous carbon enhances methanogenesis by facilitating interspecies electron transfer: Understanding fluorimetric and electrochemical responses of multi-layered extracellular polymeric substances. Science of the Total Environment, 2021, 781, 146447.	3.9	10
152	Distillery decarbonisation and anaerobic digestion: balancing benefits and drawbacks using a compromise programming approach. Biofuel Research Journal, 2021, 8, 1417-1432.	7.2	10
153	How Interfacial Properties Affect Adhesion: An Analysis from the Interactions between Microalgal Cells and Solid Substrates. Langmuir, 2022, 38, 3284-3296.	1.6	10
154	An assessment of how the properties of pyrochar and process thermodynamics impact pyrochar mediated microbial chain elongation in steering the production of medium-chain fatty acids towards n-caproate. Bioresource Technology, 2022, 358, 127294.	4.8	10
155	A novel magnet-driven rotary mixing aerator for carbon dioxide fixation and microalgae cultivation: Focusing on bubble behavior and cultivation performance. Journal of Biotechnology, 2022, 352, 26-35.	1.9	10
156	Microwave hydrothermal synthesis and photocatalytic properties of ZnWO4nanorods. Crystal Research and Technology, 2012, 47, 1279-1283.	0.6	9
157	Application of bubble carrying to Chlorella vulgaris flocculation with branched cationic starch: An efficient and economical harvesting method for biofuel production. Energy Conversion and Management, 2020, 213, 112833.	4.4	9
158	Drag reduction and shear-induced cells migration behavior of microalgae slurry in tube flow. Bioresource Technology, 2018, 270, 38-45.	4.8	8
159	Design, Commissioning, and Performance Assessment of a Lab-Scale Bubble Column Reactor for Photosynthetic Biogas Upgrading with Spirulina platensis. Industrial & Engineering Chemistry Research, 2021, 60, 5688-5704.	1.8	8
160	Optimisation and performance prediction of photosynthetic biogas upgrading using a bubble column. Chemical Engineering Journal, 2022, 437, 134988.	6.6	8
161	Hydrogen fermentation of organic wastewater with high ammonium concentration via electrodialysis system. Bioresource Technology, 2019, 288, 121560.	4.8	7
162	A bio-inspired flexible squeezing reactor for efficient enzymatic hydrolysis of lignocellulosic biomass for bioenergy production. Renewable Energy, 2022, 191, 92-100.	4.3	7

#	Article	IF	Citations
163	Effects of Operational Parameters on Biofilm Formation of Mixed Bacteria for Hydrogen Fermentation. Sustainability, 2020, 12, 8863.	1.6	5
164	Hydrogen Production from Biological Sources. , 2019, , 833-863.		5
165	Structural distortion and enhanced ferroelectric properties of Tb and Cr co-doped BiFeO3 thin films. Journal of Materials Science: Materials in Electronics, 2013, 24, 4445-4451.	1.1	3
166	A comparison of digestate management options at a large anaerobic digestion plant. Journal of Environmental Management, 2022, 317, 115312.	3.8	3
167	Feedstock pretreatment for enhanced anaerobic digestion of lignocellulosic residues for bioenergy production. , 2022, , 253-282.		2
168	Biomass and Bioenergy: Current State. Green Energy and Technology, 2018, , 3-37.	0.4	0
169	Correlation between Physicochemical Properties of Biochar and Improved Interspecies Electron Transfer in Anaerobic Digestion of Whiskey By-Products. SSRN Electronic Journal, 0, , .	0.4	0
170	Hydrogen Production from Biological Sources. , 2017, , 1-31.		0