## Sang-Hyoun Kim

List of Publications by Year in descending order

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235 papers 11,800 citations

25014 57 h-index 93 g-index

238 all docs

238 docs citations

times ranked

238

7698 citing authors

#	Article	IF	Citations
1	Feasibility of biohydrogen production by anaerobic co-digestion of food waste and sewage sludge. International Journal of Hydrogen Energy, 2004, 29, 1607-1616.	3.8	388
2	Hydrogen production from food waste in anaerobic mesophilic and thermophilic acidogenesis. International Journal of Hydrogen Energy, 2004, 29, 1355-1363.	3.8	386
3	Effect of gas sparging on continuous fermentative hydrogen production. International Journal of Hydrogen Energy, 2006, 31, 2158-2169.	3.8	285
4	Effect of substrate concentration on hydrogen production and 16S rDNA-based analysis of the microbial community in a continuous fermenter. Process Biochemistry, 2006, 41, 199-207.	1.8	280
5	Microbial strategies for bio-transforming food waste into resources. Bioresource Technology, 2020, 299, 122580.	4.8	248
6	Lignocellulose biohydrogen: Practical challenges and recent progress. Renewable and Sustainable Energy Reviews, 2015, 44, 728-737.	8.2	244
7	A review of thermochemical conversion of microalgal biomass for biofuels: chemistry and processes. Green Chemistry, 2017, 19, 44-67.	4.6	216
8	Current status and strategies for second generation biofuel production using microbial systems. Energy Conversion and Management, 2017, 148, 1142-1156.	4.4	213
9	Use of Gelidium amansii as a promising resource for bioethanol: A practical approach for continuous dilute-acid hydrolysis and fermentation. Bioresource Technology, 2012, 108, 83-88.	4.8	204
10	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
11	Conversion of waste cooking oil into biodiesel using heterogenous catalyst derived from cork biochar. Bioresource Technology, 2020, 302, 122872.	4.8	186
12	A review on biopolymer production via lignin valorization. Bioresource Technology, 2019, 290, 121790.	4.8	180
13	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
14	Bioreactor design for continuous dark fermentative hydrogen production. Bioresource Technology, 2011, 102, 8612-8620.	4.8	172
15	Hydrogen fermentation of food waste without inoculum addition. Enzyme and Microbial Technology, 2009, 45, 181-187.	1.6	158
16	Feasibility of biohydrogen production from Gelidium amansii. International Journal of Hydrogen Energy, 2011, 36, 13997-14003.	3.8	154
17	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
18	Continuous biohydrogen production in a CSTR using starch as a substrate. International Journal of Hydrogen Energy, 2008, 33, 3289-3294.	3.8	136

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19	Effects of base-pretreatment on continuous enriched culture for hydrogen production from food waste. International Journal of Hydrogen Energy, 2008, 33, 5266-5274.	3.8	125
20	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
21	Biobutanol as a promising liquid fuel for the future - recent updates and perspectives. Fuel, 2019, 253, 637-646.	3.4	110
22	Effect of initial pH independent of operational pH on hydrogen fermentation of food waste. Bioresource Technology, 2011, 102, 8646-8652.	4.8	109
23	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
24	A review on bio-electrochemical systems (BESs) for the syngas and value added biochemicals production. Chemosphere, 2017, 177, 84-92.	4.2	108
25	Effect of severity on dilute acid pretreatment of lignocellulosic biomass and the following hydrogen fermentation. International Journal of Hydrogen Energy, 2016, 41, 21678-21684.	3.8	105
26	Insights on biological hydrogen production routes and potential microorganisms for high hydrogen yield. Fuel, 2021, 291, 120136.	3.4	105
27	Sewage sludge addition to food waste synergistically enhances hydrogen fermentation performance. Bioresource Technology, 2011, 102, 8501-8506.	4.8	101
28	UASB treatment of wastewater with VFA and alcohol generated during hydrogen fermentation of food waste. Process Biochemistry, 2005, 40, 2897-2905.	1.8	98
29	Waste based hydrogen production for circular bioeconomy: Current status and future directions. Bioresource Technology, 2020, 302, 122920.	4.8	98
30	Experience of a pilot-scale hydrogen-producing anaerobic sequencing batch reactor (ASBR) treating food waste. International Journal of Hydrogen Energy, 2010, 35, 1590-1594.	3.8	95
31	Recent advances in commercial biorefineries for lignocellulosic ethanol production: Current status, challenges and future perspectives. Bioresource Technology, 2022, 344, 126292.	4.8	92
32	Production of (3-hydroxybutyrate-co-3-hydroxyhexanoate) copolymer from coffee waste oil using engineered Ralstonia eutropha. Bioprocess and Biosystems Engineering, 2018, 41, 229-235.	1.7	90
33	Lignocellulosic biomass as renewable feedstock for biodegradable and recyclable plastics production: A sustainable approach. Renewable and Sustainable Energy Reviews, 2022, 158, 112130.	8.2	90
34	Evidence of syntrophic acetate oxidation by Spirochaetes during anaerobic methane production. Bioresource Technology, 2015, 190, 543-549.	4.8	89
35	Optimization of continuous hydrogen fermentation of food waste as a function of solids retention time independent of hydraulic retention time. Process Biochemistry, 2008, 43, 213-218.	1.8	85
36	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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37	Recycling of cathode material from spent lithium-ion batteries: Challenges and future perspectives. Journal of Hazardous Materials, 2022, 429, 128312.	6.5	83
38	Sodium inhibition of fermentative hydrogen production. International Journal of Hydrogen Energy, 2009, 34, 3295-3304.	3.8	82
39	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
40	Production of biosurfactants from agro-industrial waste and waste cooking oil in a circular bioeconomy: An overview. Bioresource Technology, 2022, 343, 126059.	4.8	82
41	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
42	Optimization of batch dilute-acid hydrolysis for biohydrogen production from red algal biomass. International Journal of Hydrogen Energy, 2013, 38, 6130-6136.	3.8	76
43	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
44	State-of-the-art technologies for continuous high-rate biohydrogen production. Bioresource Technology, 2021, 320, 124304.	4.8	73
45	Sustainable and eco-friendly strategies for shrimp shell valorization. Environmental Pollution, 2020, 267, 115656.	3.7	70
46	Impact of pretreatment on food waste for biohydrogen production: A review. International Journal of Hydrogen Energy, 2020, 45, 18211-18225.	3.8	69
47	Two-phase anaerobic treatment system for fat-containing wastewater. Journal of Chemical Technology and Biotechnology, 2004, 79, 63-71.	1.6	66
48	Anaerobic digestibility of algal bioethanol residue. Bioresource Technology, 2012, 113, 78-82.	4.8	66
49	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
50	Hydrogen fermentation of different galactose–glucose compositions during various hydraulic retention times (HRTs). International Journal of Hydrogen Energy, 2014, 39, 20625-20631.	3.8	65
51	Valorization of cashew nut processing residues for industrial applications. Industrial Crops and Products, 2020, 152, 112550.	2.5	65
52	Critical review on microbial community during in-situ bioremediation of heavy metals from industrial wastewater. Environmental Technology and Innovation, 2021, 24, 101826.	3.0	65
53	Lignin valorisation via enzymes: A sustainable approach. Fuel, 2022, 311, 122608.	3.4	64
54	Effect of HRT on ASBR converting starch into biological hydrogen. International Journal of Hydrogen Energy, 2008, 33, 6509-6514.	3.8	63

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55	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
56	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
57	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
58	Production of Polysaccharides and Corresponding Sugars from Red Seaweed. Advanced Materials Research, 0, 93-94, 463-466.	0.3	58
59	Bioconversion of barley straw lignin into biodiesel using Rhodococcus sp. YHY01. Bioresource Technology, 2019, 289, 121704.	4.8	58
60	Kinetics of LCFA Inhibition on Acetoclastic Methanogenesis, Propionate Degradation and $\hat{l}^2$ -Oxidation. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2004, 39, 1025-1037.	0.9	56
61	Predominance of cluster I Clostridium in hydrogen fermentation of galactose seeded with various heat-treated anaerobic sludges. Bioresource Technology, 2014, 157, 98-106.	4.8	56
62	Start-up strategy for continuous fermentative hydrogen production: Early switchover from batch to continuous operation. International Journal of Hydrogen Energy, 2008, 33, 1532-1541.	3.8	55
63	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
64	Biocatalytic remediation of industrial pollutants for environmental sustainability: Research needs and opportunities. Chemosphere, 2021, 272, 129936.	4.2	55
65	Deoiled algal biomass derived renewable sugars for bioethanol and biopolymer production in biorefinery framework. Bioresource Technology, 2020, 296, 122315.	4.8	53
66	Optimization of substrate concentration of dilute acid hydrolyzate of lignocellulosic biomass in batch hydrogen production. International Biodeterioration and Biodegradation, 2016, 113, 22-27.	1.9	52
67	Synthesis of $\hat{I}^3$ -valerolactone (GVL) and their applications for lignocellulosic deconstruction for sustainable green biorefineries. Fuel, 2021, 303, 121333.	3.4	52
68	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
69	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
70	Pilot-scale two-stage process: a combination of acidogenic hydrogenesis and methanogenesis. Water Science and Technology, 2005, 52, 131-138.	1.2	50
71	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
72	Recent developments on alternative fuels, energy and environment for sustainability. Bioresource Technology, 2020, 317, 124010.	4.8	50

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73	Renewable hydrogen production from biomass and wastes (ReBioH2-2020). Bioresource Technology, 2021, 331, 125024.	4.8	50
74	Enhancement of carbon monoxide mass transfer using an innovative external hollow fiber membrane (HFM) diffuser for syngas fermentation: Experimental studies and model development. Chemical Engineering Journal, 2012, 184, 268-277.	6.6	49
75	Alkaline-mechanical pretreatment process for enhanced anaerobic digestion of thickened waste activated sludge with a novel crushing device: Performance evaluation and economic analysis. Bioresource Technology, 2014, 165, 183-190.	4.8	49
76	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
77	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
78	A critical review on different harvesting techniques for algal based biodiesel production. Science of the Total Environment, 2021, 780, 146467.	3.9	48
79	Effect of substrate concentration on the competition between Clostridium and Lactobacillus during biohydrogen production. International Journal of Hydrogen Energy, 2018, 43, 11460-11469.	3.8	46
80	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
81	Electro-fermentation for biofuels and biochemicals production: Current status and future directions. Bioresource Technology, 2021, 323, 124598.	4.8	45
82	Lipid content, biomass density, fatty acid as selection markers for evaluating the suitability of four fast growing cyanobacterial strains for biodiesel production. Bioresource Technology, 2021, 325, 124654.	4.8	45
83	Dark fermentative hydrogen production following the sequential dilute acid pretreatment and enzymatic saccharification of rice husk. International Journal of Hydrogen Energy, 2017, 42, 27577-27583.	3.8	44
84	Enhanced anaerobic digestion of waste-activated sludge via bioaugmentation strategy—Phylogenetic investigation of communities by reconstruction of unobserved states (PICRUSt2) analysis through hydrolytic enzymes and possible linkage to system performance. Bioresource Technology, 2021, 332, 125014.	4.8	44
85	Dark fermentation: Production and utilization of volatile fatty acid from different wastes- A review. Chemosphere, 2022, 288, 132444.	4.2	44
86	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
87	Effects of vertical and horizontal configurations of different numbers of brush anodes on performance and electrochemistry of microbial fuel cells. Journal of Cleaner Production, 2020, 277, 124125.	4.6	43
88	Effect of algae (Scenedesmus obliquus) biomass pre-treatment on bio-oil production in hydrothermal liquefaction (HTL): Biochar and aqueous phase utilization studies. Science of the Total Environment, 2021, 778, 146262.	3.9	43
89	Effect of ultrasonic treatment of digestion sludge on bio-hydrogen production from sucrose by anaerobic fermentation. International Journal of Hydrogen Energy, 2010, 35, 3450-3455.	3 <b>.</b> 8	41
90	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

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91	Effect of biochar on emission, maturity and bacterial dynamics during sheep manure compositing. Renewable Energy, 2020, 152, 421-429.	4.3	41
92	Sludge characteristics in anaerobic SBR system producing hydrogen gas. Water Research, 2007, 41, 1177-1184.	5.3	40
93	Performance evaluation of microbial electrochemical systems operated with Nafion and supported ionic liquid membranes. Chemosphere, 2017, 175, 350-355.	4.2	40
94	Biohydrogen production integrated with an external dynamic membrane: A novel approach. International Journal of Hydrogen Energy, 2017, 42, 27543-27549.	3.8	40
95	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
96	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
97	Upgrading the value of anaerobic fermentation via renewable chemicals production: A sustainable integration for circular bioeconomy. Science of the Total Environment, 2022, 806, 150312.	3.9	39
98	Acidity Tunable Ionic Liquids as Catalysts for Conversion of Agar into Mixed Sugars. Bulletin of the Korean Chemical Society, 2010, 31, 511-514.	1.0	38
99	Simultaneous removal of 5-hydroxy methyl furfural (5-HMF) and hydrogen production from acid (H 2) Tj ETQq1 I	l 0,78431	1 rgBT /Overl
100	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
101	Mesophilic biogenic H2 production using galactose in a fixed bed reactor. International Journal of Hydrogen Energy, 2017, 42, 3658-3666.	3.8	37
102	Dynamic membrane bioreactor for high rate continuous biohydrogen production from algal biomass. Bioresource Technology, 2021, 340, 125562.	4.8	37
103	Formation of a dynamic membrane altered the microbial community and metabolic flux in fermentative hydrogen production. Bioresource Technology, 2019, 282, 63-68.	4.8	36
104	A perspective on galactose-based fermentative hydrogen production from macroalgal biomass: Trends and opportunities. Bioresource Technology, 2019, 280, 447-458.	4.8	36
105	A review on evaluation of applied pretreatment methods of wastewater towards sustainable H2 generation: Energy efficiency analysis. International Journal of Hydrogen Energy, 2020, 45, 8329-8345.	3.8	36
106	Research and development perspectives of lignocellulose-based biohydrogen production. International Biodeterioration and Biodegradation, 2017, 119, 225-238.	1.9	35
107	Food waste treatment in an anaerobic dynamic membrane bioreactor (AnDMBR): Performance monitoring and microbial community analysis. Bioresource Technology, 2019, 280, 158-164.	4.8	35
108	Enhancing anaerobic digestion for rural wastewater treatment with granular activated carbon (GAC) supplementation. Bioresource Technology, 2020, 315, 123890.	4.8	35

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109	Metal and metal(loids) removal efficiency using genetically engineered microbes: Applications and challenges. Journal of Hazardous Materials, 2021, 416, 125855.	6.5	35
110	Conversion of organic solid waste to hydrogen and methane by two-stage fermentation system with reuse of methane fermenter effluent as diluting water in hydrogen fermentation. Bioresource Technology, 2013, 139, 120-127.	4.8	34
111	Algae biorefinery: A promising approach to promote microalgae industry and waste utilization. Journal of Biotechnology, 2022, 345, 1-16.	1.9	34
112	Recent advances in computational fluid dynamics (CFD) modelling of photobioreactors: Design and applications. Bioresource Technology, 2022, 350, 126920.	4.8	34
113	Failure of biohydrogen production by low levels of substrate and lactic acid accumulation. Renewable Energy, 2016, 86, 889-894.	4.3	33
114	A review of the innovative gas separation membrane bioreactor with mechanisms for integrated production and purification of biohydrogen. Bioresource Technology, 2018, 270, 643-655.	4.8	33
115	Optimization of dilute acid and enzymatic hydrolysis for dark fermentative hydrogen production from the empty fruit bunch of oil palm. International Journal of Hydrogen Energy, 2019, 44, 2191-2202.	3.8	33
116	Microbial Electro-Remediation (MER) of hazardous waste in aid of sustainable energy generation and resource recovery. Environmental Technology and Innovation, 2020, 19, 100997.	3.0	33
117	Evaluation of a membrane permeation system for biogas upgrading using model and real gaseous mixtures: The effect of operating conditions on separation behaviour, methane recovery and process stability. Journal of Cleaner Production, 2018, 185, 44-51.	4.6	32
118	Photoautotrophic cultivation of mixed microalgae consortia using various organic waste streams towards remediation and resource recovery. Bioresource Technology, 2018, 247, 576-581.	4.8	32
119	Efficiency of transporter genes and proteins in hyperaccumulator plants for metals tolerance in wastewater treatment: Sustainable technique for metal detoxification. Environmental Technology and Innovation, 2021, 23, 101725.	3.0	32
120	Utilization of different lignocellulosic hydrolysates as carbon source for electricity generation using novel Shewanella marisflavi BBL25. Journal of Cleaner Production, 2020, 277, 124084.	4.6	31
121	Bio-hydrogen and bio-methane potential analysis for production of bio-hythane using various agricultural residues. Bioresource Technology, 2020, 309, 123297.	4.8	31
122	A detailed scrutinize on panorama of catalysts in biodiesel synthesis. Science of the Total Environment, 2021, 777, 145683.	3.9	31
123	Critical challenges and technological breakthroughs in food waste hydrolysis and detoxification for fuels and chemicals production. Bioresource Technology, 2022, 360, 127512.	4.8	31
124	Anaerobic digestion of food waste to methane at various organic loading rates (OLRs) and hydraulic retention times (HRTs): Thermophilic vs. mesophilic regimes. Environmental Engineering Research, 2016, 21, 69-73.	1.5	30
125	Polyhydroxy butyrate production by Acinetobacter junii BP25, Aeromonas hydrophila ATCC 7966, and their co-culture using a feast and famine strategy. Bioresource Technology, 2019, 293, 122062.	4.8	29
126	Insights into the effect of cerium oxide nanoparticle on microalgal degradation of sulfonamides. Bioresource Technology, 2020, 309, 123452.	4.8	29

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127	Granular Mg-Fe layered double hydroxide prepared using dual polymers: Insights into synergistic removal of As(III) and As(V). Journal of Hazardous Materials, 2021, 403, 123883.	6.5	29
128	Comparative study of pyrolysis and hydrothermal liquefaction of microalgal species: Analysis of product yields with reaction temperature. Fuel, 2022, 311, 121932.	3.4	29
129	Performance comparison of a continuous-flow stirred-tank reactor and an anaerobic sequencing batch reactor for fermentative hydrogen production depending on substrate concentration. Water Science and Technology, 2005, 52, 23-29.	1.2	28
130	Enhancement of hydrogen production by recycling of methanogenic effluent in two-phase fermentation of food waste. International Journal of Hydrogen Energy, 2012, 37, 13777-13782.	3.8	28
131	Mesophilic co-digestion of palm oil mill effluent and empty fruit bunches. Environmental Technology (United Kingdom), 2013, 34, 2163-2170.	1.2	28
132	Modeling and Optimization of Biohydrogen Production from De-oiled Jatropha Using the Response Surface Method. Arabian Journal for Science and Engineering, 2015, 40, 15-22.	1.1	28
133	Metabolic flux and functional potential of microbial community in an acidogenic dynamic membrane bioreactor. Bioresource Technology, 2020, 305, 123060.	4.8	28
134	Recent trends in biochar integration with anaerobic fermentation: Win-win strategies in a closed-loop. Renewable and Sustainable Energy Reviews, 2021, 149, 111371.	8.2	28
135	Waste activated sludge treatment in an anaerobic dynamic membrane bioreactor at varying hydraulic retention time: Performance monitoring and microbial community analysis. International Journal of Energy Research, 2020, 44, 12485-12495.	2.2	27
136	Hazardous minerals mining: Challenges and solutions. Journal of Hazardous Materials, 2021, 402, 123474.	6.5	27
137	Downstream recovery of Li and value-added metals (Ni, Co, and Mn) from leach liquor of spent lithium-ion batteries using a membrane-integrated hybrid system. Chemical Engineering Journal, 2022, 447, 137507.	6.6	27
138	Evaluation of gradual adaptation of mixed microalgae consortia cultivation using textile wastewater via fed batch operation. Biotechnology Reports (Amsterdam, Netherlands), 2018, 20, e00289.	2.1	26
139	Recent advances in black liquor valorization. Bioresource Technology, 2022, 350, 126916.	4.8	26
140	Kinetics and equilibria of 5â€hydroxymethylfurfural (5â€ <scp>HMF</scp> ) sequestration from algal hydrolyzate using granular activated carbon. Journal of Chemical Technology and Biotechnology, 2016, 91, 1157-1163.	1.6	25
141	Co-digestion of untreated macro and microalgal biomass for biohydrogen production: Impact of inoculum augmentation and microbial insights. International Journal of Hydrogen Energy, 2018, 43, 11484-11492.	3.8	25
142	Assessment via the modified gompertz-model reveals new insights concerning the effects of ionic liquids on biohydrogen production. International Journal of Hydrogen Energy, 2018, 43, 18918-18924.	3.8	25
143	Anaerobic co-digester microbiome during food waste valorization reveals Methanosaeta mediated methanogenesis with improved carbohydrate and lipid metabolism. Bioresource Technology, 2021, 332, 125123.	4.8	25
144	Degradation synergism between sonolysis and photocatalysis for organic pollutants with different hydrophobicity: A perspective of mechanism and application for high mineralization efficiency. Journal of Hazardous Materials, 2021, 416, 125787.	6.5	25

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145	Biofilm formation as a method of improved treatment during anaerobic digestion of organic matter for biogas recovery. Bioresource Technology, 2022, 344, 126309.	4.8	25
146	Sludge disintegration and anaerobic digestion enhancement by alkaline-thermal pretreatment: Economic evaluation and microbial population analysis. Bioresource Technology, 2022, 346, 126594.	4.8	25
147	Inhibitory effect of 5-hydroxymethylfurfural on continuous hydrogen fermentation by mixed culture in a fixed bed reactor. International Journal of Hydrogen Energy, 2017, 42, 27570-27576.	3.8	24
148	Effect of 5-hydroxymethylfurfural (5-HMF) on high-rate continuous biohydrogen production from galactose. Bioresource Technology, 2018, 247, 1197-1200.	4.8	24
149	Recent biotechnological trends in lactic acid bacterial fermentation for food processing industries. Systems Microbiology and Biomanufacturing, 2022, 2, 14-40.	1.5	24
150	Enhancement Strategies for Hydrogen Production from Wastewater: A Review. Current Organic Chemistry, 2016, 20, 2744-2752.	0.9	24
151	Effect of shear velocity and feed concentration on the treatment of food waste in an anaerobic dynamic membrane Bioreactor: Performance Monitoring and microbial community analysis. Bioresource Technology, 2020, 296, 122301.	4.8	22
152	Quantum dot synthesis from waste biomass and its applications in energy and bioremediation. Chemosphere, 2022, 293, 133564.	4.2	22
153	Continuous biogenic hydrogen production from dilute acid pretreated algal hydrolysate using hybrid immobilized mixed consortia. International Journal of Hydrogen Energy, 2018, 43, 11452-11459.	3.8	21
154	Improvement in H2 production from Clostridium butyricum by co-culture with Sporolactobacillus vineae. Fuel, 2021, 285, 119051.	3.4	21
155	Novel dynamic membrane, metabolic flux balance and PICRUSt analysis for high-rate biohydrogen production at various substrate concentrations. Chemical Engineering Journal, 2021, 420, 127685.	6.6	21
156	Anaerobic digestion of waste activated sludge using dynamic membrane at varying substrate concentration reveals new insight towards methanogenic pathway and biofilm formation. Chemical Engineering Journal, 2021, 423, 130249.	6.6	21
157	Enhanced H2 fermentation of organic waste by CO2 sparging. International Journal of Hydrogen Energy, 2012, 37, 15563-15568.	3.8	20
158	Possibilities for the biologically-assisted utilization of CO2-rich gaseous waste streams generated during membrane technological separation of biohydrogen. Journal of CO2 Utilization, 2020, 36, 231-243.	3.3	20
159	Effect of conductive material for overcoming inhibitory conditions derived from red algae-based substrate on biohydrogen production. Fuel, 2021, 285, 119059.	3.4	20
160	Relative evaluation of acid, alkali, and hydrothermal pretreatment influence on biochemical methane potential of date biomass. Journal of Environmental Chemical Engineering, 2021, 9, 106031.	3.3	20
161	Regulation and augmentation of anaerobic digestion processes via the use of bioelectrochemical systems. Bioresource Technology, 2022, 346, 126628.	4.8	20
162	Biohydrogen and biomethane production from food waste using a two-stage dynamic membrane bioreactor (DMBR) system. Bioresource Technology, 2022, 352, 127094.	4.8	20

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163	Simultaneous utilization of galactose and glucose by Saccharomyces cerevisiae mutant strain for ethanol production. Renewable Energy, 2014, 65, 213-218.	4.3	19
164	Kinetic modeling and microbial community analysis for high-rate biohydrogen production using a dynamic membrane. Bioresource Technology, 2018, 262, 59-64.	4.8	19
165	Unravelling metabolism and microbial community of a phytobed co-planted with Typha angustifolia and Ipomoea aquatica for biodegradation of doxylamine from wastewater. Journal of Hazardous Materials, 2021, 401, 123404.	6.5	19
166	Novel anaerobic process for the recovery of methane and compost from food waste. Water Science and Technology, 2002, 45, 313-319.	1.2	18
167	Selective sequestration of carboxylic acids from biomass fermentation by surface-functionalized mesoporous silica nanoparticles. Journal of Materials Chemistry, 2011, 21, 12103.	6.7	18
168	Feasibility of anaerobic digestion from bioethanol fermentation residue. Bioresource Technology, 2013, 141, 177-183.	4.8	18
169	Enhanced Lipid Degradation in an Upflow Anaerobic Sludge Blanket Reactor by Integration with an Acidogenic Reactor. Water Environment Research, 2010, 82, 267-272.	1.3	17
170	Removal of BTX using granular octyl-functionalized mesoporous silica nanoparticle. International Biodeterioration and Biodegradation, 2014, 95, 219-224.	1.9	17
171	Improved Hydrogen Production from Galactose Via Immobilized Mixed Consortia. Arabian Journal for Science and Engineering, 2015, 40, 2117-2122.	1.1	17
172	Removal of $17 \cdot \hat{l}^2$ estradiol in water by sonolysis. International Biodeterioration and Biodegradation, 2015, 102, 11-14.	1.9	17
173	Improvement of hydrogen fermentation of galactose by combined inoculationÂstrategy. Journal of Bioscience and Bioengineering, 2017, 123, 353-357.	1.1	17
174	Microbial responses to various process disturbances in a continuous hydrogen reactor fed with galactose. Journal of Bioscience and Bioengineering, 2017, 123, 216-222.	1.1	17
175	Bio-Hythane production from organic fraction of municipal solid waste in single and two stage anaerobic digestion processes. Bioresource Technology, 2019, 294, 122220.	4.8	17
176	Evaluation of the biochemical methane potential of different sorts of Algerian date biomass. Environmental Technology and Innovation, 2020, 20, 101180.	3.0	17
177	Unexpected discovery of superoxide radical generation by oxygen vacancies containing biomass derived granular activated carbon. Water Research, 2021, 190, 116757.	<b>5.</b> 3	17
178	Recovering hydrogen production performance of upflow anaerobic sludge blanket reactor (UASBR) fed with galactose via repeated heat treatment strategy. Bioresource Technology, 2017, 240, 207-213.	4.8	16
179	Effects of acclimation and pH on ammonia inhibition for mesophilic methanogenic microflora. Waste Management, 2018, 80, 218-223.	3.7	16
180	Optimization of soaking in aqueous ammonia pretreatment for anaerobic digestion of African maize bran. Fuel, 2019, 253, 552-560.	3.4	16

#	Article	IF	Citations
181	Enhancement of Sewage Sludge Digestion by Co-digestion with Food Waste and Swine Waste. Waste and Biomass Valorization, 2020, 11, 2421-2430.	1.8	16
182	High-rate mesophilic hydrogen production from food waste using hybrid immobilized microbiome. Bioresource Technology, 2021, 320, 124279.	4.8	16
183	A review on energy and cost effective phase separated pretreatment of biosolids. Water Research, 2021, 198, 117169.	5.3	16
184	Bioelectrochemical system-mediated waste valorization. Systems Microbiology and Biomanufacturing, 2021, 1, 432-443.	1.5	16
185	Improved bio-hydrogen production by overexpression of glucose-6-phosphate dehydrogenase and FeFe hydrogenase in Clostridium acetobutylicum. International Journal of Hydrogen Energy, 2021, 46, 36687-36695.	3.8	16
186	Direct upcycling of polyethylene terephthalate (PET) waste bottles into α-Fe2O3 incorporated MIL-53(Al) for the synthesis of Al2O3/Fe3O4-encapsulated magnetic carbon composite and efficient removal of non-steroidal anti-inflammatory drugs. Separation and Purification Technology, 2021, 279, 119719.	3.9	16
187	Evaluation of process performance on biohydrogen production in continuous fixed bed reactor (C-FBR) using acid algae hydrolysate (AAH) as feedstock. International Journal of Hydrogen Energy, 2019, 44, 2164-2169.	3.8	15
188	Effects of alginate immobilization on dynamic membrane formation and H2 fermentation from galactose. International Journal of Hydrogen Energy, 2020, 45, 5874-5880.	3.8	15
189	Effect of shear velocity on dark fermentation for biohydrogen production using dynamic membrane. Bioresource Technology, 2020, 308, 123265.	4.8	15
190	Characteristics of hydrogen production from food waste and waste activated sludge. Journal of Water and Environment Technology, 2003, 1, 177-187.	0.3	15
191	Acceleration of lactate-utilizing pathway for enhancing biohydrogen production by magnetite supplementation in Clostridium butyricum. Bioresource Technology, 2022, 359, 127448.	4.8	15
192	Comparative evaluation of biochemical methane potential of various types of Ugandan agricultural biomass following soaking aqueous ammonia pretreatment. Environmental Science and Pollution Research, 2020, 27, 17631-17641.	2.7	14
193	Recent biotechnological developments in reshaping the microalgal genome: A signal for green recovery in biorefinery practices. Chemosphere, 2022, 293, 133513.	4.2	14
194	Surface-functionalized mesoporous silica nanoparticles as sorbents for BTEX. Journal of Porous Materials, 2013, 20, 1087-1093.	1.3	13
195	Effect of genus Clostridium abundance on mixed-culture fermentation converting food waste into biohydrogen. Bioresource Technology, 2021, 342, 125942.	4.8	13
196	The effects of ammonia acclimation on biogas recovery and the microbial population in continuous anaerobic digestion of swine manure. Environmental Research, 2022, 212, 113483.	3.7	13
197	Biological nutrient and organic removal from meat packing wastewater with a unique sequence of suspended growth and fixed-film reactors. Water Science and Technology, 2009, 60, 3189-3197.	1.2	12
198	Shift of microbial community structure by substrate level in dynamic membrane bioreactor for biohydrogen production. International Journal of Energy Research, 2021, 45, 17408-17416.	2.2	12

#	Article	IF	CITATIONS
199	Comparative effect of silver nanoparticles (AgNPs) derived from actinomycetes and henna on biohydrogen production by <i>Clostridium beijerinckii</i> (KTCC1737). International Journal of Energy Research, 2021, 45, 17269-17278.	2.2	12
200	Biotechnological valorization of algal biomass: an overview. Systems Microbiology and Biomanufacturing, 2021, $1,131-141$ .	1.5	12
201	High-rate biohydrogen production from xylose using a dynamic membrane bioreactor. Bioresource Technology, 2022, 344, 126205.	4.8	12
202	Impact of thermal pretreatment on anaerobic digestion of dewatered sludge from municipal and industrial wastewaters and its economic feasibility. Energy, 2022, 254, 124345.	4.5	12
203	Comparison of alkali and ionic liquid pretreatment methods on the biochemical methane potential of date palm waste biomass. Bioresource Technology, 2022, 360, 127505.	4.8	12
204	High-rate hydrogen production from galactose in an upflow anaerobic sludge blanket reactor (UASBr). RSC Advances, 2016, 6, 59823-59833.	1.7	11
205	Effects of anti-foaming agents on biohydrogen production. Bioresource Technology, 2016, 213, 121-128.	4.8	11
206	Biohydrogen fermentation of galactose at various substrate concentrations in an immobilized system and its microbial correspondence. Journal of Bioscience and Bioengineering, 2018, 125, 559-564.	1.1	11
207	Tailoring of microbes for the production of high value plant-derived compounds: From pathway engineering to fermentative production. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2019, 1867, 140262.	1.1	11
208	Unravelling the enhancement of biohydrogen production via adding magnetite nanoparticles and applying electrical energy input. International Journal of Hydrogen Energy, 2022, 47, 40628-40636.	3.8	11
209	Assessment of Chlorella sp. as a potential feedstock for biological methane production. Bioresource Technology, 2020, 305, 123075.	4.8	10
210	Comparative Evaluation of CO2 Fixation of Microalgae Strains at Various CO2 Aeration Conditions. Waste and Biomass Valorization, 2021, 12, 2999-3007.	1.8	10
211	Evaluation of bio-hydrogen production using rice straw hydrolysate extracted by acid and alkali hydrolysis. International Journal of Hydrogen Energy, 2022, 47, 37385-37393.	3.8	10
212	Biohydrogen production from glucose using submerged dynamic filtration module: Metabolic product distribution and flux-based analysis. Bioresource Technology, 2019, 287, 121445.	4.8	9
213	Biopolymer production using volatile fatty acids as resource: Effect of feast-famine strategy and lignin reinforcement. Bioresource Technology, 2021, 326, 124736.	4.8	9
214	Harnessing dark fermentative hydrogen from pretreated mixture of food waste and sewage sludge under sequencing batch mode. Environmental Science and Pollution Research, 2016, 23, 7155-7161.	2.7	7
215	Biohydrogen production from glycerol by novel Clostridium sp. SH25 and its application to biohydrogen car operation. Korean Journal of Chemical Engineering, 2022, 39, 2156-2164.	1.2	7
216	Profitable disperser coupled surfactant pretreatment of aquatic phytomass for energy efficient solubilization and biomethanation: a study on lignin inhibition and its possible solutions. Sustainable Energy and Fuels, 2022, 6, 3195-3207.	2.5	7

#	Article	IF	CITATIONS
217	Mixed-culture H 2 fermentation performance and the relation between microbial community composition and hydraulic retention times for a fixed bed reactor fed with galactose/glucose mixtures. Journal of Bioscience and Bioengineering, 2017, 124, 339-345.	1.1	5
218	Biohydrogen Production From Industrial Wastewater., 2019,, 733-760.		5
219	A facile acid induced water-based solvent by improving hydrophobicity for simultaneous remediating total petroleum hydrocarbon, heavy metals and benzo(a) pyrene contaminated soil: Laboratory- and pilot-scale studies. Journal of Cleaner Production, 2021, 278, 123425.	4.6	5
220	Effect of low-thermal pretreatment on the methanogenic performance and microbiome population of continuous high-solid anaerobic digester treating dewatered sludge. Bioresource Technology, 2021, 341, 125756.	4.8	5
221	Valorization of pretreated waste activated sludge to organic acids and biopolymer. Chemosphere, 2022, 303, 135078.	4.2	5
222	Two-Stage Flow-Through Pretreatment of Helianthus tuberosus Residue for Enzymatic Production of Fermentable Sugar by Alkaline and Acidic Solutions. BioResources, 2017, 12, .	0.5	4
223	Bioresource technology for bioenergy, bioproducts & environmental sustainability. Bioresource Technology, 2022, 347, 126736.	4.8	4
224	Biomass Conversion of Plant Residues. , 2017, , 351-383.		3
225	Impact of 5-hydroxy methyl furfural on continuous hydrogen production from galactose and glucose feedstock with periodic recovery. International Journal of Hydrogen Energy, 2020, 45, 19045-19051.	3.8	3
226	Feasibility study of polyetherimide membrane for enrichment of carbon dioxide from synthetic biohydrogen mixture and subsequent utilization scenario using microalgae. International Journal of Energy Research, 2021, 45, 8327-8334.	2.2	3
227	Biomass Based Bioenergy: Technologies and Impact on Environmental Sustainability. Daehan Hwan'gyeong Gonghag Hoeji, 2022, 44, 1-12.	0.4	3
228	Anaerobic lipid degradation through acidification and methanization. Journal of Microbiology and Biotechnology, 2010, 20, 179-186.	0.9	2
229	Microbial behavior and characteristics of biomass during starvation and their influence on ultrafiltration of activated sludge. Desalination and Water Treatment, 2016, 57, 7487-7494.	1.0	1
230	Biohydrogen. , 2020, , 51-87.		1
231	Corrigendum to "Enhancement of biofuel production via microbial augmentation: The case of dark fermentative hydrogen―[Renew Sustain Energy Rev 57 (2016) 879–891]. Renewable and Sustainable Energy Reviews, 2016, 66, 220.	8.2	0
232	Preface: ICAFE-2017 Special Issue. Bioresource Technology, 2018, 260, 433.	4.8	0
233	Editorial introduction to the special issue from ICAFE-2017: The 2nd international conference on alternative fuels & energy. Biotechnology Reports (Amsterdam, Netherlands), 2019, 21, e00304.	2.1	0
234	Wastewater treatment systems and power generation., 2021,, 321-348.		0

#	Article	IF	CITATIONS
235	Feasibility of Odor Removal using Ultrasonic Droplet of Dilute Hydrochloric Acid Electrolyzed Water. Journal of Korea Society of Waste Management, 2017, 34, 813-818.	0.1	0