

ElÃ- as Razo-Flores

List of Publications by Year in descending order

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87
papers

3,675
citations

136885

32
h-index

143943

57
g-index

88
all docs

88
docs citations

88
times ranked

3133
citing authors

#	ARTICLE	IF	CITATIONS
1	Simultaneous biological removal of nitrogen, carbon and sulfur by denitrification. <i>Water Research</i> , 2004, 38, 3313-3321.	5.3	230
2	Chemolithotrophic denitrification with elemental sulfur for groundwater treatment. <i>Water Research</i> , 2007, 41, 1253-1262.	5.3	230
3	Fermentative hydrogen production in batch experiments using lactose, cheese whey and glucose: Influence of initial substrate concentration and pH. <i>International Journal of Hydrogen Energy</i> , 2008, 33, 4989-4997.	3.8	193
4	Continuous biohydrogen production using cheese whey: Improving the hydrogen production rate. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 4296-4304.	3.8	165
5	Complete Biodegradation of the Azo Dye Azodisalicylate under Anaerobic Conditions. <i>Environmental Science & Technology</i> , 1997, 31, 2098-2103.	4.6	160
6	Stability problems in the hydrogen production by dark fermentation: Possible causes and solutions. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 119, 109602.	8.2	137
7	Fermentative biohydrogen production: trends and perspectives. <i>Reviews in Environmental Science and Biotechnology</i> , 2008, 7, 27-45.	3.9	135
8	Precipitation and recovery of metal sulfides from metal containing acidic wastewater in a sulfidogenic downâ€flow fluidized bed reactor. <i>Biotechnology and Bioengineering</i> , 2009, 102, 91-99.	1.7	84
9	Biotransformation and biodegradation of N-substituted aromatics in methanogenic granular sludge. <i>FEMS Microbiology Reviews</i> , 1997, 20, 525-538.	3.9	83
10	Hydrogen Sulfide Oxidation by a Microbial Consortium in a Recirculation Reactor System: Sulfur Formation under Oxygen Limitation and Removal of Phenols. <i>Environmental Science & Technology</i> , 2004, 38, 918-923.	4.6	82
11	Arsenic mobility controlled by solid calcium arsenates: A case study in Mexico showcasing a potentially widespread environmental problem. <i>Environmental Pollution</i> , 2013, 176, 114-122.	3.7	81
12	Microbial communities from 20 different hydrogen-producing reactors studied by 454 pyrosequencing. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 3371-3384.	1.7	81
13	Dark-fermentative biohydrogen pathways and microbial networks in continuous stirred tank reactors: Novel insights on their control. <i>Applied Energy</i> , 2017, 198, 77-87.	5.1	77
14	Continuous detoxification, transformation, and degradation of nitrophenols in upflow anaerobic sludge blanket (UASB) reactors. , 2000, 51, 439-449.		75
15	Continuous hydrogen and methane production from Agave tequilana bagasse hydrolysate by sequential process to maximize energy recovery efficiency. <i>Bioresource Technology</i> , 2018, 249, 334-341.	4.8	74
16	Different start-up strategies to enhance biohydrogen production from cheese whey in UASB reactors. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 5591-5601.	3.8	63
17	Hydrogen production by <i>Escherichia coli</i> hycA ⁺ hycA ⁻ using cheese whey as substrate. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 491-499.	3.8	61
18	Continuous production of hydrogen from oat straw hydrolysate in a biotrickling filter. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 3442-3449.	3.8	60

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19	Performance of a down-flow fluidized bed reactor under sulfate reduction conditions using volatile fatty acids as electron donors. <i>Biotechnology and Bioengineering</i> , 2007, 97, 771-779.	1.7	56
20	Inoculum pretreatment promotes differences in hydrogen production performance in EGSB reactors. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 6329-6339.	3.8	53
21	Chemical and enzymatic sequential pretreatment of oat straw for methane production. <i>Bioresource Technology</i> , 2012, 116, 372-378.	4.8	52
22	Direct and Quinone-Mediated Palladium Reduction by <i>Geobacter sulfurreducens</i> : Mechanisms and Modeling. <i>Environmental Science & Technology</i> , 2014, 48, 2910-2919.	4.6	49
23	The buffer composition impacts the hydrogen production and the microbial community composition in non-axenic cultures. <i>Biomass and Bioenergy</i> , 2011, 35, 3174-3181.	2.9	47
24	Hydrogen production from acid and enzymatic oat straw hydrolysates in an anaerobic sequencing batch reactor: Performance and microbial population analysis. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 13884-13894.	3.8	47
25	Inhibition of sulfate reduction by iron, cadmium and sulfide in granular sludge. <i>Journal of Hazardous Materials</i> , 2009, 172, 400-407.	6.5	44
26	Fermentation of lactose and its constituent sugars by <i>Escherichia coli</i> WDHL: Impact on hydrogen production. <i>Bioresource Technology</i> , 2012, 111, 180-184.	4.8	44
27	Decreasing methane production in hydrogenogenic UASB reactors fed with cheese whey. <i>Biomass and Bioenergy</i> , 2014, 63, 101-108.	2.9	43
28	Hydrogen metabolic patterns driven by <i>Clostridium-Streptococcus</i> community shifts in a continuous stirred tank reactor. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 2465-2475.	1.7	42
29	Continuous hydrogen production from enzymatic hydrolysate of <i>Agave tequilana</i> bagasse: Effect of the organic loading rate and reactor configuration. <i>Chemical Engineering Journal</i> , 2017, 313, 671-679.	6.6	41
30	Reduction of palladium and production of nano-catalyst by <i>Geobacter sulfurreducens</i> . <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 9553-9560.	1.7	40
31	Effect of initial sulfide concentration on sulfide and phenol oxidation under denitrifying conditions. <i>Chemosphere</i> , 2009, 74, 200-205.	4.2	38
32	<i>Agave</i> bagasse biorefinery: processing and perspectives. <i>Clean Technologies and Environmental Policy</i> , 2018, 20, 1423-1441.	2.1	38
33	Biotransformation and Biodegradation of Selected Nitroaromatics under Anaerobic Conditions. <i>Biotechnology Progress</i> , 1999, 15, 358-365.	1.3	37
34	Sequential hydrolysis of oat straw and hydrogen production from hydrolysates: Role of hydrolysates constituents. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 10756-10765.	3.8	36
35	Biogenic sulphide plays a major role on the riboflavin-mediated decolourisation of azo dyes under sulphate-reducing conditions. <i>Chemosphere</i> , 2007, 68, 1082-1089.	4.2	34
36	Phenol and sulfide oxidation in a denitrifying biofilm reactor and its microbial community analysis. <i>Process Biochemistry</i> , 2009, 44, 23-28.	1.8	33

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37	Comparative evaluation of the mesophilic and thermophilic biohydrogen production at optimized conditions using tequila vinasses as substrate. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 11000-11010.	3.8	32
38	Improvement of continuous hydrogen production using individual and binary enzymatic hydrolysates of agave bagasse in suspended-culture and biofilm reactors. <i>Bioresource Technology</i> , 2019, 283, 251-260.	4.8	30
39	Simultaneous sulfide and acetate oxidation under denitrifying conditions using an inverse fluidized bed reactor. <i>Journal of Chemical Technology and Biotechnology</i> , 2008, 83, 1197-1203.	1.6	28
40	Enhancing saccharification of <i>Agave tequilana</i> bagasse by oxidative delignification and enzymatic synergism for the production of hydrogen and methane. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 22116-22125.	3.8	28
41	Characterization of sulfate-reducing bacteria dominated surface communities during start-up of a down-flow fluidized bed reactor. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2009, 36, 111-121.	1.4	27
42	Mineralization of methyl tert-butyl ether and other gasoline oxygenates by <i>Pseudomonads</i> using short n-alkanes as growth source. <i>Biodegradation</i> , 2009, 20, 271-280.	1.5	27
43	Consortium diversity of a sulfate-reducing biofilm developed at acidic pH influent conditions in a down-flow fluidized bed reactor. <i>Engineering in Life Sciences</i> , 2013, 13, 302-311.	2.0	26
44	Continuous removal and recovery of palladium in an upflow anaerobic granular sludge bed (<sc>UASB</sc>) reactor. <i>Journal of Chemical Technology and Biotechnology</i> , 2016, 91, 1183-1189.	1.6	26
45	Benzene Biodegradation under Anaerobic Conditions Coupled with Metal Oxides Reduction. <i>Water, Air, and Soil Pollution</i> , 2008, 192, 165-172.	1.1	25
46	Hydrogen and methane production potential of agave bagasse enzymatic hydrolysates and comparative techno-economic feasibility implications. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 17792-17801.	3.8	25
47	Methyl tert-butyl ether biodegradation by microbial consortia obtained from soil samples of gasoline-polluted sites in Mexico. <i>Biotechnology Letters</i> , 2004, 26, 269-275.	1.1	24
48	Biotic and abiotic characterization of bioanodes formed on oxidized carbon electrodes as a basis to predict their performance. <i>Biosensors and Bioelectronics</i> , 2013, 50, 373-381.	5.3	24
49	A standardized biohydrogen potential protocol: An international round robin test approach. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 26237-26247.	3.8	23
50	Strategies to cope with methanogens in hydrogen producing UASB reactors: Community dynamics. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 11423-11432.	3.8	22
51	Advances towards the understanding of microbial communities in dark fermentation of enzymatic hydrolysates: Diversity, structure and hydrogen production performance. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 27459-27472.	3.8	22
52	Biodegradability of N-substituted aromatics and alkylphenols under methanogenic conditions using granular sludge. <i>Water Science and Technology</i> , 1996, 33, 47-57.	1.2	22
53	Cell wash-out enrichment increases the stability and performance of biohydrogen producing packed-bed reactors and the community transition along the operation time. <i>Renewable Energy</i> , 2016, 97, 266-273.	4.3	21
54	Enhancement of mass transfer conditions to increase the productivity and efficiency of dark fermentation in continuous reactors. <i>Fuel</i> , 2019, 254, 115648.	3.4	21

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55	Improving the Biodegradability of <i>Scenedesmus obtusiusculus</i> by Thermochemical Pretreatment to Produce Hydrogen and Methane. <i>Bioenergy Research</i> , 2020, 13, 477-486.	2.2	21
56	Gold recovery from very dilute solutions from a mine in closing process: Adsorption-desorption onto carbon materials. <i>Journal of Molecular Liquids</i> , 2017, 240, 549-555.	2.3	20
57	Continuous thermophilic hydrogen production from an enzymatic hydrolysate of agave bagasse: Inoculum origin, homoacetogenesis and microbial community analysis. <i>Bioresource Technology</i> , 2020, 306, 123087.	4.8	20
58	Biotransformation of aromatic compounds from wastewaters containing N and/or S, by nitrification/denitrification: a review. <i>Reviews in Environmental Science and Biotechnology</i> , 2009, 8, 325-342.	3.9	18
59	Improvement of methane production at alkaline and neutral pH from anaerobic co-digestion of microalgal biomass and cheese whey. <i>Biochemical Engineering Journal</i> , 2021, 169, 107972.	1.8	18
60	Recovery of palladium(II) by methanogenic granular sludge. <i>Chemosphere</i> , 2016, 144, 745-753.	4.2	17
61	Discontinuous biomass recycling as a successful strategy to enhance continuous hydrogen production at high organic loading rates. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 17260-17269.	3.8	17
62	Anchorage of anthraquinone molecules onto activated carbon fibers to enhance the reduction of 4-nitrophenol. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 1685-1691.	1.6	15
63	Continuous hydrogen production in a trickling bed reactor by using triticale silage as inoculum: effect of simple and complex substrates. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 1062-1069.	1.6	15
64	Effect of inoculum pretreatment on the microbial community structure and its performance during dark fermentation using anaerobic fluidized-bed reactors. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 9589-9599.	3.8	15
65	The effect of granular sludge source on the anaerobic biodegradability of aromatic compounds. <i>Bioresource Technology</i> , 1996, 56, 215-220.	4.8	14
66	Immobilization of biogenic Pd(0) in anaerobic granular sludge for the biotransformation of recalcitrant halogenated pollutants in UASB reactors. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 1427-1436.	1.7	14
67	Pretreatment and upward liquid velocity effects over granulation in hydrogen producing EGSB reactors. <i>Biochemical Engineering Journal</i> , 2016, 107, 75-84.	1.8	13
68	Methane production from thermally pretreated <i>Scenedesmus obtusiusculus</i> biomass in semi-batch reactors at low reaction times. <i>Biochemical Engineering Journal</i> , 2018, 136, 61-68.	1.8	13
69	High robustness of a simplified microbial consortium producing hydrogen in long term operation of a biofilm fermentative reactor. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 2367-2376.	3.8	12
70	Distribution of CO ₂ fixation and acetate mineralization pathways in microorganisms from extremophilic anaerobic biotopes. <i>Extremophiles</i> , 2012, 16, 805-817.	0.9	11
71	Optimization by response surface methodology of the enzymatic hydrolysis of non-pretreated agave bagasse with binary mixtures of commercial enzymatic preparations. <i>Biomass Conversion and Biorefinery</i> , 2021, 11, 2923-2935.	2.9	11
72	Evaluation of the continuous methane production from an enzymatic agave bagasse hydrolysate in suspended (CSTR) and granular biomass systems (UASB). <i>Fuel</i> , 2021, 304, 121406.	3.4	11

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73	Anaerobic biodegradation of phenol in sulfide-rich media. <i>Journal of Chemical Technology and Biotechnology</i> , 2004, 79, 554-561.	1.6	10
74	Maximizing Hydrogen Production and Substrate Consumption by <i>Escherichia coli</i> WDHL in Cheese Whey Fermentation. <i>Applied Biochemistry and Biotechnology</i> , 2013, 171, 704-715.	1.4	10
75	An Overview of Reclaimed Wastewater Reuse in Gold Heap Leaching. <i>Mineral Processing and Extractive Metallurgy Review</i> , 2016, 37, 274-285.	2.6	10
76	Characterization of oxidized carbon foil as a low-cost alternative to carbon felt-based electrodes in bioelectrochemical systems. <i>Journal of Applied Electrochemistry</i> , 2016, 46, 217-227.	1.5	9
77	Rapid start-up of a sulfidogenic biofilm reactor: overcoming low acetate consumption. <i>Journal of Chemical Technology and Biotechnology</i> , 2013, 88, 1672-1679.	1.6	8
78	Knowing the enemy: homoacetogens in hydrogen production reactors. <i>Applied Microbiology and Biotechnology</i> , 2021, 105, 8989-9002.	1.7	8
79	Riboflavin prevents inhibitory effects during the reductive decolorisation of Reactive Orange 14 by methanogenic sludge. <i>Journal of Chemical Technology and Biotechnology</i> , 2008, 83, 1703-1709.	1.6	7
80	Inhibitory effect of ethanol on the experimental electrical charge and hydrogen production in microbial electrolysis cells (MECs). <i>Journal of Electroanalytical Chemistry</i> , 2019, 835, 106-113.	1.9	7
81	Saccharification of agave bagasse with Cellulase 50 XL is an effective alternative to highly specialized lignocellulosic enzymes for continuous hydrogen production. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105448.	3.3	7
82	Partial thiosulfate oxidation by steady-state continuous culture in a bioreactor-settler system. <i>Journal of Chemical Technology and Biotechnology</i> , 2004, 79, 132-139.	1.6	6
83	Humic substances improve the co-production of hydrogen and carboxylic acids by anaerobic mixed cultures. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 32800-32808.	3.8	4
84	Anaerobic Digestion Under Alkaline Conditions from Thermochemical Pretreated Microalgal Biomass. <i>Bioenergy Research</i> , 2022, 15, 346-356.	2.2	4
85	Coping with mass transfer constrains in dark fermentation using a two-phase partitioning bioreactor. <i>Chemical Engineering Journal</i> , 2022, 445, 136749.	6.6	4
86	Acetotrophic sulfate-reducing consortia develop active biofilms on zeolite and glass beads in batch cultures at initial pH 3. <i>Applied Microbiology and Biotechnology</i> , 2021, 105, 5213-5227.	1.7	3
87	Comment on "Extracellular Palladium Nanoparticle Production Using <i>Geobacter sulfurreducens</i> ". <i>ACS Sustainable Chemistry and Engineering</i> , 2013, 1, 1345-1345.	3.2	2