

# Germán Buitrago

## List of Publications by Year in descending order

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206  
papers

4,822  
citations

87843

38  
h-index

143943

57  
g-index

207  
all docs

207  
docs citations

207  
times ranked

4397  
citing authors

#	ARTICLE	IF	CITATIONS
1	Microalgal-bacterial aggregates: Applications and perspectives for wastewater treatment. <i>Biotechnology Advances</i> , 2017, 35, 772-781.	6.0	218
2	Biohydrogen production from Tequila vinasses in an anaerobic sequencing batch reactor: Effect of initial substrate concentration, temperature and hydraulic retention time. <i>Bioresource Technology</i> , 2010, 101, 9071-9077.	4.8	156
3	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
4	Enhancement of biofuel production via microbial augmentation: The case of dark fermentative hydrogen. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 57, 879-891.	8.2	108
5	Aerobic degradation of the azo dye acid red 151 in a sequencing batch biofilter. <i>Bioresource Technology</i> , 2004, 92, 143-149.	4.8	99
6	Hydrogen and methane production via a two-stage processes (H <sub>2</sub> -SBR+ACH 4-UASB) using tequila vinasses. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 19249-19255.	3.8	93
7	Microalgae-bacteria aggregates: effect of the hydraulic retention time on the municipal wastewater treatment, biomass settleability and methane potential. <i>Journal of Chemical Technology and Biotechnology</i> , 2016, 91, 2862-2870.	1.6	93
8	Influence of solar irradiance levels on the formation of microalgae-bacteria aggregates for municipal wastewater treatment. <i>Algal Research</i> , 2017, 27, 190-197.	2.4	93
9	Hydrogen and butanol production from native wheat straw by synthetic microbial consortia integrated by species of <i>Enterococcus</i> and <i>Clostridium</i> . <i>Fuel</i> , 2015, 159, 214-222.	3.4	86
10	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
11	Effect of the initial total solids concentration and initial pH on the bio-hydrogen production from cafeteria food waste. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 13288-13295.	3.8	80
12	Hydrogen production in a microbial electrolysis cell fed with a dark fermentation effluent. <i>Journal of Applied Electrochemistry</i> , 2015, 45, 1223-1229.	1.5	71
13	Surveillance of SARS-CoV-2 in sewage and wastewater treatment plants in Mexico. <i>Journal of Water Process Engineering</i> , 2021, 40, 101815.	2.6	68
14	Simultaneous biohydrogen production and purification in a double-membrane bioreactor system. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 1690-1697.	3.8	64
15	A novel gas separation integrated membrane bioreactor to evaluate the impact of self-generated biogas recycling on continuous hydrogen fermentation. <i>Applied Energy</i> , 2017, 190, 813-823.	5.1	64
16	Evaluation of two control strategies for a sequencing batch reactor degrading high concentration peaks of 4-chlorophenol. <i>Water Research</i> , 2005, 39, 1015-1024.	5.3	62
17	Biodegradation of phenolic compounds by an acclimated activated sludge and isolated bacteria. <i>Water Science and Technology</i> , 1998, 37, 371.	1.2	61
18	Suppression of methanogenic activity in anaerobic granular biomass for hydrogen production. <i>Journal of Chemical Technology and Biotechnology</i> , 2014, 89, 143-149.	1.6	59

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19	Anaerobic/aerobic treatment of colorants present in textile effluents. <i>Water Science and Technology</i> , 2004, 50, 149-155.	1.2	58
20	Biological pretreatments of microalgal biomass for gaseous biofuel production and the potential use of rumen microorganisms: A review. <i>Algal Research</i> , 2016, 18, 341-351.	2.4	57
21	Microbial co-culturing strategies for the production high value compounds, a reliable framework towards sustainable biorefinery implementation – an overview. <i>Bioresource Technology</i> , 2021, 321, 124458.	4.8	57
22	A review on the factors influencing biohydrogen production from lactate: The key to unlocking enhanced dark fermentative processes. <i>Bioresource Technology</i> , 2021, 324, 124595.	4.8	57
23	The source of inoculum plays a defining role in the development of MEC microbial consortia fed with acetic and propionic acid mixtures. <i>Journal of Biotechnology</i> , 2014, 182-183, 11-18.	1.9	52
24	Enhancement of methane production from various microalgae cultures via novel ozonation pretreatment. <i>Chemical Engineering Journal</i> , 2017, 307, 948-954.	6.6	51
25	Fully aerobic bioscrubber for the desulfurization of H <sub>2</sub> S-rich biogas. <i>Fuel</i> , 2019, 241, 884-891.	3.4	49
26	Controlled backwashing in a membrane sequencing batch reactor used for toxic wastewater treatment. <i>Journal of Membrane Science</i> , 2008, 320, 185-190.	4.1	47
27	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
28	Distinct effects of furfural, hydroxymethylfurfural and its mixtures on dark fermentation hydrogen production and microbial structure of a mixed culture. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 2289-2297.	3.8	47
29	Hydrolysis of microalgal biomass using ruminal microorganisms as a pretreatment to increase methane recovery. <i>Bioresource Technology</i> , 2017, 244, 100-107.	4.8	45
30	Production of polyhydroxybutyrate by pure and mixed cultures of purple non-sulfur bacteria: A review. <i>Journal of Biotechnology</i> , 2020, 317, 39-47.	1.9	45
31	Variation of the microbial activity during the acclimation phase of a SBR system degrading 4-chlorophenol. <i>Water Science and Technology</i> , 2004, 50, 251-258.	1.2	43
32	Evaluation of various cheese whey treatment scenarios in single-chamber microbial electrolysis cells for improved biohydrogen production. <i>Chemosphere</i> , 2017, 174, 253-259.	4.2	43
33	Biological treatment for the degradation of cyanide: A review. <i>Journal of Materials Research and Technology</i> , 2021, 12, 1418-1433.	2.6	43
34	Biohydrogen and methane production via a two-step process using an acid pretreated native microalgae consortium. <i>Bioresource Technology</i> , 2016, 221, 324-330.	4.8	42
35	Characterization of the microorganisms from an acclimated activated sludge degrading phenolic compounds. <i>Water Science and Technology</i> , 1996, 34, 289-294.	1.2	40
36	Biodegradation of disperse blue 79 using sequenced anaerobic/aerobic biofilters. <i>Water Science and Technology</i> , 2001, 44, 159-166.	1.2	40

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37	Performance of a Single-Chamber Microbial Fuel Cell Degrading Phenol: Effect of Phenol Concentration and External Resistance. <i>Applied Biochemistry and Biotechnology</i> , 2014, 174, 2471-2481.	1.4	40
38	A cost-effective strategy for the bio-prospecting of mixed microalgae with high carbohydrate content: Diversity fluctuations in different growth media. <i>Bioresource Technology</i> , 2014, 163, 370-373.	4.8	40
39	BIOSORPTION OF CD, CR, MN, AND PB FROM AQUEOUS SOLUTIONS BY <i>Bacillus</i> SP STRAINS ISOLATED FROM INDUSTRIAL WASTE ACTIVATED SLUDGE. <i>TIP Revista Especializada En Ciencias Químico-Biológicas</i> , 2016, 19, 5-14.	0.3	40
40	Biohydrogen production using a granular sludge membrane bioreactor. <i>Fuel</i> , 2019, 241, 954-961.	3.4	40
41	Biohydrogen production from tequila vinasses using a fixed bed reactor. <i>Water Science and Technology</i> , 2014, 70, 1919-1925.	1.2	39
42	The hydraulic retention time influences the abundance of <i>Enterobacter</i> , <i>Clostridium</i> and <i>Lactobacillus</i> during the hydrogen production from food waste. <i>Letters in Applied Microbiology</i> , 2019, 69, 138-147.	1.0	39
43	Supported ionic liquid membrane based on [bmim][PF6] can be a promising separator to replace Nafion in microbial fuel cells and improve energy recovery: A comparative process evaluation. <i>Journal of Membrane Science</i> , 2019, 570-571, 215-225.	4.1	39
44	Influence of the origin of the inoculum and the acclimation strategy on the degradation of 4-chlorophenol. <i>Bioresource Technology</i> , 2004, 94, 215-218.	4.8	37
45	Azo dye decolorization assisted by chemical and biogenic sulfide. <i>Journal of Hazardous Materials</i> , 2013, 250-251, 462-468.	6.5	37
46	Comparison of hydrogen-producing bacterial communities adapted in continuous and discontinuous reactors. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 14234-14239.	3.8	37
47	Loop-mediated isothermal amplification-based electrochemical sensor for detecting SARS-CoV-2 in wastewater samples. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107488.	3.3	37
48	Characterization of the microorganisms from an acclimated activated sludge degrading phenolic compounds. <i>Water Science and Technology</i> , 1996, 34, 289.	1.2	36
49	Observer-based time-optimal control of an aerobic SBR for chemical and petrochemical wastewater treatment. <i>Water Science and Technology</i> , 2000, 42, 163-170.	1.2	36
50	Exploitation of anaerobic enriched mixed bacteria (AEMB) for the silver and gold nanoparticles synthesis. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2014, 462, 264-270.	2.3	35
51	Use of solid phosphorus fractionation data to evaluate phosphorus release from waste activated sludge. <i>Waste Management</i> , 2018, 76, 90-97.	3.7	35
52	Enhanced hydrogen production from lignocellulosic substrates via bioaugmentation with <i>Clostridium</i> strains. <i>Industrial Crops and Products</i> , 2019, 137, 105-111.	2.5	33
53	Denitrification of metallurgic wastewater: mechanisms of inhibition by Fe, Cr and Ni. <i>Journal of Chemical Technology and Biotechnology</i> , 2018, 93, 440-449.	1.6	32
54	A comparison of biological, enzymatic, chemical and hydrothermal pretreatments for producing biomethane from Agave bagasse. <i>Industrial Crops and Products</i> , 2020, 145, 112160.	2.5	32

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55	Biodegradation of phenolic compounds by an acclimated activated sludge and isolated bacteria. <i>Water Science and Technology</i> , 1998, 37, 371-378.	1.2	31
56	Biochemical methane potential from lignocellulosic wastes hydrothermally pretreated. <i>Industrial Crops and Products</i> , 2019, 139, 111555.	2.5	31
57	The use of fatty acid methyl esters as biomarkers to determine aerobic, facultatively aerobic and anaerobic communities in wastewater treatment systems. <i>FEMS Microbiology Letters</i> , 2007, 266, 75-82.	0.7	30
58	Hydrogen production in two-chamber MEC using a low-cost and biodegradable poly(vinyl) alcohol/chitosan membrane. <i>Bioresource Technology</i> , 2021, 319, 124168.	4.8	30
59	Biohydrogen production from industrial wastewaters. <i>Water Science and Technology</i> , 2015, 71, 105-110.	1.2	29
60	Application of microbial electrolysis cells to treat spent yeast from an alcoholic fermentation. <i>Bioresource Technology</i> , 2016, 200, 342-349.	4.8	29
61	Production of activated carbon from petroleum coke and its application in water treatment for the removal of metals and phenol. <i>Water Science and Technology</i> , 2000, 42, 119-126.	1.2	27
62	Start-up of a sequential anaerobic/aerobic batch reactor for the mineralization of p-nitrophenol. <i>Water Science and Technology</i> , 2000, 42, 289-292.	1.2	25
63	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
64	Fully aerobic two-step desulfurization process for purification of highly H <sub>2</sub> -laden biogas. <i>Journal of Chemical Technology and Biotechnology</i> , 2018, 93, 3553-3561.	1.6	24
65	Polyhydroxyalkanoates from organic waste streams using purple non-sulfur bacteria. <i>Bioresource Technology</i> , 2021, 323, 124610.	4.8	24
66	Influence of Added Nutrients and Substrate Concentration in Biohydrogen Production from Winery Wastewaters Coupled to Methane Production. <i>Applied Biochemistry and Biotechnology</i> , 2019, 187, 140-151.	1.4	23
67	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
68	Influence of the origin of the inoculum on the anaerobic biodegradability test. <i>Water Science and Technology</i> , 2004, 49, 53-59.	1.2	22
69	Kinetic characterization of microalgal-bacterial systems: Contributions of microalgae and heterotrophic bacteria to the oxygen balance in wastewater treatment. <i>Biochemical Engineering Journal</i> , 2021, 165, 107819.	1.8	22
70	Practical optimal control of fed-batch bioreactors for the waste water treatment. <i>International Journal of Robust and Nonlinear Control</i> , 2006, 16, 173-190.	2.1	21
71	Evaluation of different support materials used with a photo-fermentative consortium for hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 17231-17238.	3.8	21
72	Effect of volatile fatty acids mixtures on the simultaneous photofermentative production of hydrogen and polyhydroxybutyrate. <i>Bioprocess and Biosystems Engineering</i> , 2017, 40, 231-239.	1.7	21

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73	Improvement of the bioelectrochemical hydrogen production from food waste fermentation effluent using a novel start-up strategy. <i>Journal of Chemical Technology and Biotechnology</i> , 2018, 93, 878-886.	1.6	21
74	Biogas Production from a Highly Organic Loaded Winery Effluent Through a Two-Stage Process. <i>Bioenergy Research</i> , 2019, 12, 714-721.	2.2	21
75	Comparison of suspended and granular cell anaerobic bioreactors for hydrogen production from acid agave bagasse hydrolyzates. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 275-285.	3.8	21
76	Thermophilic biogas production from microalgae-bacteria aggregates: biogas yield, community variation and energy balance. <i>Chemosphere</i> , 2021, 275, 129898.	4.2	21
77	Degradation of p-nitrophenol in a batch biofilter under sequential anaerobic/aerobic environments. <i>Water Science and Technology</i> , 2001, 44, 151-157.	1.2	20
78	Pharmaceutical Wastewater Treatment Using an Anaerobic/Aerobic Sequencing Batch Biofilter. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2003, 38, 2077-2088.	0.9	20
79	Performance Evaluation of a Low-Cost Microbial Fuel Cell Using Municipal Wastewater. <i>Water, Air, and Soil Pollution</i> , 2013, 224, 1.	1.1	20
80	Biohydrogen production by batch indoor and outdoor photo-fermentation with an immobilized consortium: A process model with Neural Networks. <i>Biochemical Engineering Journal</i> , 2018, 135, 1-10.	1.8	20
81	Biohydrogen production from winery effluents: control of the homoacetogenesis through the headspace gas recirculation. <i>Journal of Chemical Technology and Biotechnology</i> , 2020, 95, 544-552.	1.6	20
82	Degradation of azo dye mixtures through sequential hybrid systems: Evaluation of three advanced oxidation processes for the pre-treatment stage. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2011, 223, 103-110.	2.0	19
83	Evaluation of three reagent dosing strategies in a photo-Fenton process for the decolorization of azo dye mixtures. <i>Journal of Hazardous Materials</i> , 2012, 217-218, 293-300.	6.5	19
84	Optimization of volatile fatty acids concentration for photofermentative hydrogen production by a consortium. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 17212-17223.	3.8	19
85	Biohydrogen production from microalgae. , 2017, , 209-234.		19
86	Automated sequencing batch bioreactor under extreme peaks of 4-chlorophenol. <i>Water Science and Technology</i> , 2003, 47, 175-181.	1.2	18
87	Optimal biodegradation of phenol and municipal wastewater using a controlled sequencing batch reactor. <i>Water Science and Technology</i> , 2006, 54, 273-280.	1.2	18
88	Investigating the effect of hydrogen sulfide impurities on the separation of fermentatively produced hydrogen by PDMS membrane. <i>Separation and Purification Technology</i> , 2016, 157, 222-228.	3.9	18
89	Fermentation of organic wastes and CO <sub>2</sub> + H <sub>2</sub> off-gas by microbiotas provides short-chain fatty acids and ethanol for n-caproate production. <i>Journal of CO<sub>2</sub> Utilization</i> , 2020, 42, 101314.	3.3	18
90	Enhancement of the Biodegradation Activity by the Acclimation of the Inoculum. <i>Environmental Technology (United Kingdom)</i> , 1995, 16, 1175-1184.	1.2	17

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91	Strategies to enhance the biodegradation of toxic compounds using discontinuous processes. <i>Water Science and Technology</i> , 2001, 43, 283-290.	1.2	17
92	Influence of the initial substrate to microorganisms concentration ratio on the methanogenic inhibition test. <i>Water Science and Technology</i> , 2003, 48, 17-22.	1.2	17
93	Event-driven time-optimal control for a class of discontinuous bioreactors. <i>Biotechnology and Bioengineering</i> , 2006, 94, 803-814.	1.7	17
94	Biodegradation kinetics of a mixture of phenols in a sequencing batch moving bed biofilm reactor under starvation and shock loads. <i>Journal of Chemical Technology and Biotechnology</i> , 2011, 86, 669-674.	1.6	17
95	Improvement of methane content in a hydrogenotrophic anaerobic digester via the proper operation of membrane module integrated into an external-loop. <i>Bioresource Technology</i> , 2017, 245, 1294-1298.	4.8	17
96	H <sub>2</sub> S oxidation coupled to nitrate reduction in a two-stage bioreactor: Targeting H <sub>2</sub> S-rich biogas desulfurization. <i>Waste Management</i> , 2021, 120, 76-84.	3.7	17
97	Control of phenol biodegradation by using CO <sub>2</sub> evolution rate as an activity indicator. <i>Environmental Technology (United Kingdom)</i> , 1993, 14, 227-236.	1.2	16
98	On-line heuristic optimization strategy to maximize the hydrogen production rate in a continuous stirred tank reactor. <i>Process Biochemistry</i> , 2015, 50, 893-900.	1.8	16
99	A mechanistic model supported by data-based classification models for batch hydrogen production with an immobilized photo-bacteria consortium. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 22802-22811.	3.8	16
100	Effect of microalgae inoculation on the start-up of microalgae-bacteria systems treating municipal, piggy and digestate wastewaters. <i>Water Science and Technology</i> , 2016, 73, 687-696.	1.2	16
101	H <sub>2</sub> production in membraneless bioelectrochemical cells with optimized architecture: The effect of cathode surface area and electrode distance. <i>Chemosphere</i> , 2017, 171, 379-385.	4.2	16
102	Microbial Electrolysis Cell for Biohydrogen Production. , 2019, , 159-185.		16
103	Growth kinetics and quantification of carbohydrate, protein, lipids, and chlorophyll of <i>Spirulina platensis</i> under aqueous conditions using different carbon and nitrogen sources. <i>Bioresource Technology</i> , 2022, 346, 126456.	4.8	16
104	Improvement and Control of the Microbial Activity of a Mixed Population for Degradation of Xenobiotic Compounds. <i>Water Science and Technology</i> , 1994, 29, 317-326.	1.2	14
105	Biotransformation of disperse blue 79 by an anaerobic sequencing batch biofilter. <i>Water Science and Technology</i> , 2000, 42, 317-320.	1.2	14
106	Temporary feeding shocks increase the productivity in a continuous biohydrogen-producing reactor. <i>Clean Technologies and Environmental Policy</i> , 2018, 20, 1581-1588.	2.1	14
107	Experimental validation of online monitoring and optimization strategies applied to a biohydrogen production dark fermenter. <i>Chemical Engineering Science</i> , 2018, 190, 48-59.	1.9	14
108	Standardized protocol for determination of biohydrogen potential. <i>MethodsX</i> , 2020, 7, 100754.	0.7	14

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109	Effect of Starvation and Shock Loads on the Biodegradation of 4-Chlorophenol in a Discontinuous Moving Bed Biofilm Reactor. <i>Applied Biochemistry and Biotechnology</i> , 2009, 158, 222-230.	1.4	13
110	Robust observation strategy to estimate the substrate concentration in the influent of a fermentative bioreactor for hydrogen production. <i>Chemical Engineering Science</i> , 2015, 129, 126-134.	1.9	13
111	Microrespirometric determination of the effectiveness factor and biodegradation kinetics of aerobic granules degrading 4-chlorophenol as the sole carbon source. <i>Journal of Hazardous Materials</i> , 2016, 313, 112-121.	6.5	13
112	Reduction of start-up time in a microbial fuel cell through the variation of external resistance. <i>Energy Procedia</i> , 2017, 142, 694-699.	1.8	13
113	Characterization and anaerobic digestion of highly concentrated Mexican wine by-products and effluents. <i>Water Science and Technology</i> , 2020, 81, 190-198.	1.2	13
114	Thermophilic anaerobic digestion of winery effluents in a two-stage process and the effect of the feeding frequency on methane production. <i>Chemosphere</i> , 2021, 272, 129865.	4.2	13
115	Energy and economic advantages of simultaneous hydrogen and biogas production in microbial electrolysis cells as a function of the applied voltage and biomass content. <i>Sustainable Energy and Fuels</i> , 2021, 5, 2003-2017.	2.5	12
116	Optimal degradation of inhibitory wastewaters in a fed-batch bioreactor. <i>Journal of Chemical Technology and Biotechnology</i> , 2006, 81, 713-720.	1.6	11
117	Treatment of fatty solid waste from the meat industry in an anaerobic sequencing batch reactor: start-up period and establishment of the design criteria. <i>Water Science and Technology</i> , 2009, 60, 2245-2251.	1.2	11
118	Kinetic and Physiological Evaluation of Ammonium and Nitrite Oxidation Processes in Presence of 2-Chlorophenol. <i>Applied Biochemistry and Biotechnology</i> , 2013, 169, 990-1000.	1.4	11
119	Improvement of the robustness of solar photo-Fenton processes using chemometric techniques for the decolorization of azo dye mixtures. <i>Journal of Environmental Management</i> , 2013, 131, 66-73.	3.8	11
120	Removal of p-nonylphenol isomers using nitrifying sludge in a membrane sequencing batch reactor. <i>Chemical Engineering Journal</i> , 2015, 281, 860-868.	6.6	11
121	Use of a sequencing batch biofilter for degradation of azo dyes (acids and bases). <i>Water Science and Technology</i> , 2000, 42, 329-336.	1.2	11
122	Degradation of acid orange 7 by a controlled anaerobic-aerobic sequencing batch reactor. <i>Water Science and Technology</i> , 2006, 54, 187-192.	1.2	10
123	Hydrogen and methane production from microalgal biomass hydrolyzed in a discontinuous reactor inoculated with ruminal microorganisms. <i>Biomass and Bioenergy</i> , 2020, 143, 105825.	2.9	10
124	Performance of native open cultures (winery effluents, ruminal fluid, anaerobic sludge and digestate) for medium-chain carboxylic acid production using ethanol and acetate. <i>Journal of Water Process Engineering</i> , 2021, 40, 101784.	2.6	10
125	Uptake rate and mineralization of hexadecane and naphthalene by a mixed aerobic culture. <i>Water Research</i> , 1993, 27, 847-853.	5.3	9
126	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



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127	Essential Nutrients for Improving the Direct Processing of Raw Lignocellulosic Substrates Through the Dark Fermentation Process. <i>Bioenergy Research</i> , 2020, 13, 349-357.	2.2	9
128	Feasibility of quaternary ammonium and 1,4-diazabicyclo[2.2.2]octane-functionalized anion-exchange membranes for biohydrogen production in microbial electrolysis cells. <i>Bioelectrochemistry</i> , 2020, 133, 107479.	2.4	9
129	Biomass purge strategies to control the bacterial community and reactor stability for biohydrogen production from winery wastewater. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 5891-5900.	3.8	9
130	Influence of So/Xo ratio on anaerobic activity test. <i>Water Science and Technology</i> , 1999, 40, 9.	1.2	8
131	Biodegradation of nonylphenols using nitrifying sludge, 4-chlorophenol-adapted consortia and activated sludge in liquid and solid phases. <i>Environmental Technology (United Kingdom)</i> , 2012, 33, 1727-1737.	1.2	8
132	Anaerobic digestion of mixed microalgae cultivated in secondary effluent under mesophilic and thermophilic conditions. <i>Water Science and Technology</i> , 2015, 72, 1398-1403.	1.2	8
133	Fermentative biohydrogen production in fixed bed reactors using ceramic and polyethylene carriers as supporting material. <i>Energy Procedia</i> , 2017, 142, 743-748.	1.8	8
134	From mesophilic to thermophilic conditions: one-step temperature increase improves the methane production of a granular sludge treating agroindustrial effluents. <i>Biotechnology Letters</i> , 2018, 40, 569-575.	1.1	8
135	Evaluation and ranking of polymeric ion exchange membranes used in microbial electrolysis cells for biohydrogen production. <i>Bioresource Technology</i> , 2021, 319, 124182.	4.8	8
136	Nutrient influence on acidogenesis and native microbial community of Agave bagasse. <i>Industrial Crops and Products</i> , 2021, 170, 113751.	2.5	8
137	Modeling for the optimal biodegradation of toxic wastewater in a discontinuous reactor. <i>Bioprocess and Biosystems Engineering</i> , 2008, 31, 307-313.	1.7	7
138	Comparison of the Performance of Membrane and Conventional Sequencing Batch Reactors Degrading 4-Chlorophenol. <i>Water, Air, and Soil Pollution</i> , 2012, 223, 2083-2091.	1.1	7
139	Membrane biofouling mechanism in an aerobic granular reactor degrading 4-chlorophenol. <i>Water Science and Technology</i> , 2014, 69, 1759-1767.	1.2	7
140	Biorecovery of Metals from a Stainless Steel Industrial Effluent through Denitrification Performed in a Novel Anaerobic Swirling Fluidized Membrane Bioreactor (ASFMBR). <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 2725-2735.	1.8	7
141	Influence of the solids retention time on the formation of the microalgal-bacterial aggregates produced with municipal wastewater. <i>Journal of Water Process Engineering</i> , 2022, 46, 102617.	2.6	7
142	Influence of the initial proportion of carbohydrates, proteins, and lipids on biohydrogen production by dark fermentation: A multi-response optimization approach. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 30128-30139.	3.8	7
143	Effect of compression-decompression on helminth eggs present in sludge of a settling tank. <i>Water Research</i> , 1998, 32, 1708-1712.	5.3	6
144	Co-digestion of microalga-bacteria biomass with papaya waste for methane production. <i>Water Science and Technology</i> , 2018, 78, 125-131.	1.2	6

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145	A step-forward in the characterization of microalgal consortia: Microbiological and kinetic aspects. <i>Biochemical Engineering Journal</i> , 2019, 145, 170-176.	1.8	6
146	Influence of wavelength photoperiods and N/P ratio on wastewater treatment with microalgae-bacteria. <i>Water Science and Technology</i> , 2021, 84, 712-724.	1.2	6
147	Respirometry based optimal control of an aerobic bioreactor for the industrial waste water treatment. <i>Water Science and Technology</i> , 1998, 38, 219-226.	1.2	6
148	Use of a sequencing batch reactor to study the biodegradation of 4-chlorophenol in soil. <i>Biotechnology Letters</i> , 1993, 7, 149-154.	0.5	5
149	Oxidation-Reduction Potential as a Control Variable for the Anaerobic Stage during Anaerobic-Aerobic p-Nitrophenol Degradation. <i>Biotechnology Progress</i> , 2003, 19, 1822-1827.	1.3	5
150	Effect of starvation on activity and viability of <i>Pseudomonas aeruginosa</i> ATCC 10145 degrading 4-chlorophenol. <i>Water Science and Technology</i> , 2006, 54, 163-168.	1.2	5
151	Effect of loading rate on TOC consumption efficiency in a sulfate reducing process: sulfide effect in batch culture. <i>Journal of Chemical Technology and Biotechnology</i> , 2008, 83, 1648-1657.	1.6	5
152	Solar photoassisted advanced oxidation process of azo dyes. <i>Water Science and Technology</i> , 2009, 59, 965-972.	1.2	5
153	Effect of the Organic Matter to Ammonia Ratio on Aerobic Granulation during 4-chlorophenol Degradation in a Sequencing Batch Reactor. <i>Clean - Soil, Air, Water</i> , 2014, 42, 428-433.	0.7	5
154	On-line maximization of biogas production in an anaerobic reactor using a pseudo-super-twisting controller—Project financed by PAPIIT-UNAM IN112114 and CONACYT 245954.. <i>IFAC-PapersOnLine</i> , 2015, 48, 14-19.	0.5	5
155	Diagnosis of undesired scenarios in hydrogen production by photo-fermentation. <i>Water Science and Technology</i> , 2018, 78, 1652-1657.	1.2	5
156	Decolourization of Direct Blue 2 by peroxidases obtained from an industrial soybean waste. <i>Water Science and Technology</i> , 2018, 78, 1652-1657.	0.2	5
157	A fast extremum-seeking approach for the methanisation of organic waste in an anaerobic bioreactor. <i>IFAC-PapersOnLine</i> , 2019, 52, 269-274.	0.5	5
158	Swirling fluidization in an anoxic membrane bioreactor as an antifouling technique. <i>Journal of Membrane Science</i> , 2020, 600, 117856.	4.1	5
159	Feedback control strategy for optimizing biohydrogen production from organic solid waste in a discontinuous process. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 35831-35831.	3.8	5
160	Experimental validation of an interval observer-based sensor fault detection strategy applied to a biohydrogen production dark fermenter. <i>Journal of Process Control</i> , 2022, 114, 131-142.	1.7	5
161	On-line concentration measurements in wastewater using nonlinear deconvolution and partial least squares of spectrophotometric data. <i>Water Science and Technology</i> , 2006, 53, 457-463.	1.2	4
162	Experiments for modelling the biodegradation of wastewater in sequencing batch reactors. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2008, 14, 3-15.	1.4	4

#	ARTICLE	IF	CITATIONS
163	Controlled operation of a membrane SBR for inhibitory wastewater treatment. <i>Water Science and Technology</i> , 2009, 60, 655-661.	1.2	4
164	Kinetic characterization and modeling simplification of an anaerobic sulfate reducing batch process. <i>Journal of Chemical Technology and Biotechnology</i> , 2010, 85, 453-459.	1.6	4
165	Practical automatic control of a sequencing batch reactor for toxic wastewater treatment. <i>Water Science and Technology</i> , 2011, 63, 782-788.	1.2	4
166	Biodegradation of 4-methylaniline in a sequencing batch reactor. <i>Water Science and Technology</i> , 2012, 65, 1081-1086.	1.2	4
167	Biodegradation of Toilet Wastewaters Generated in Aircrafts. <i>Journal of the Chinese Chemical Society</i> , 2014, 61, 814-818.	0.8	4
168	On the practical estimation of unknown inputs for polytopic LTI systems. <i>IET Control Theory and Applications</i> , 2018, 12, 466-476.	1.2	4
169	Bioelectrosynthesis of Methane Integrated With Anaerobic Digestion. , 2019, , 899-919.		4
170	Cyanide treatment of mining tailings using suspended biomass and moving bed biomass reactors. <i>Environmental Science and Pollution Research</i> , 2022, 29, 37458-37470.	2.7	4
171	Effect of co-substrate, biomass and sulfate concentration on the performance of a control strategy used to determine the anaerobic stage length of an anaerobic/aerobic SBR degrading p-nitrophenol. <i>Water Science and Technology</i> , 2005, 52, 441-447.	1.2	3
172	Biodegradation of high 4-chlorophenol concentrations in a discontinuous reactor fed with an optimally controlled influent flow rate. <i>Water Science and Technology</i> , 2006, 53, 261-268.	1.2	3
173	Acclimatization model of an aerobic bioreactor for the treatment of toxic wastewater. <i>Simulation Modelling Practice and Theory</i> , 2009, 17, 680-691.	2.2	3
174	Kinetic characterization of <i>Scenedesmus quadricauda</i> under low irradiation conditions. <i>Journal of Chemical Technology and Biotechnology</i> , 2018, 93, 842-848.	1.6	3
175	Transient shifts in hydraulic retention times improve the methane production from ruminal hydrolysates of agave bagasse. <i>Journal of Chemical Technology and Biotechnology</i> , 0, , .	1.6	3
176	Comparison between Three Secondary Effluents in Tertiary High Rate Filtration. <i>Environmental Technology (United Kingdom)</i> , 1996, 17, 987-995.	1.2	2
177	Comparison of two types of inocula during acclimation and stable operation for nitrophenol biodegradation in an anaerobic-aerobic SBR. <i>Water Science and Technology</i> , 2006, 54, 39-45.	1.2	2
178	Automation of the acclimation phase in a sequencing batch reactor using dissolved oxygen regulation. <i>Biotechnology Progress</i> , 2008, 24, 1067-1074.	1.3	2
179	A simple output-feedback controller for fed-batch cultures of microbial strains with overflow metabolism. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012, 45, 934-939.	0.4	2
180	Microalgal bacterial aggregates with flue gas supply as a platform for the treatment of anaerobic digestion centrate. <i>Journal of Chemical Technology and Biotechnology</i> , 2020, 95, 289-296.	1.6	2

#	ARTICLE	IF	CITATIONS
181	Evaluation of the methane production rate from an acidogenic effluent generated in a two-stage process treating winery wastewater. <i>Biomass Conversion and Biorefinery</i> , 2020, 10, 987-995.	2.9	2
182	Recent advances in biopolymers production from biomass and waste (RABP-2020). <i>Bioresource Technology</i> , 2021, 328, 124879.	4.8	2
183	Role of xylose from acidic hydrolysates of agave bagasse during biohydrogen production. <i>Water Science and Technology</i> , 2021, 84, 656-666.	1.2	2
184	Strategy for the formation of microalgae-bacteria aggregates in high-rate algal ponds. <i>Environmental Technology (United Kingdom)</i> , 2023, 44, 1863-1876.	1.2	2
185	Feedback Control-Based Strategy Applied for Biohydrogen Production from Acid Cheese Whey. <i>Waste and Biomass Valorization</i> , 2023, 14, 447-460.	1.8	2
186	Practical Optimal Control for Fed-Batch Bioreactors. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2004, 37, 1437-1442.	0.4	1
187	CONTROL STRATEGIES FOR TREATING TOXIC WASTEWATER USING BIOREACTORS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2005, 38, 177-182.	0.4	1
188	ACCLIMATION MODEL OF AN AEROBIC BIOREACTOR FOR THE TREATMENT OF TOXIC WASTEWATER. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2007, 40, 67-72.	0.4	1
189	Evaluation of an optimal fill strategy to biodegrade inhibitory wastewater using an industrial prototype discontinuous reactor. <i>Water Science and Technology</i> , 2007, 55, 47-54.	1.2	1
190	Anaerobic digestion of gelatinous water at laboratory and pilot scale and nitrogen inhibition. <i>Water Science and Technology</i> , 2008, 57, 1735-1741.	1.2	1
191	Performance of an optimally filled discontinuous bioreactor degrading 4-chlorophenol. <i>Water Science and Technology</i> , 2008, 57, 1991-1997.	1.2	1
192	Time-Optimal Output Feedback Controller for Toxic Wastewater Treatment in a Fed-batch Bioreactor. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011, 44, 3812-3817.	0.4	1
193	Real-time optimization of a fed-batch bioreactor with substrate inhibition using extremum-seeking. , 2012, , .		1
194	Effect of Starvation upon Activity of Microorganisms Degrading 4-Chlorophenol. <i>Journal of the Chinese Chemical Society</i> , 2014, 61, 785-790.	0.8	1
195	Effect of the variation of the operating parameters in the production of methane from lignocellulosic waste. <i>IFAC-PapersOnLine</i> , 2018, 51, 639-643.	0.5	1
196	Novel photo-microrespirometric method for the rapid determination of photosynthesis-irradiance (PI) curves in microalgal-bacterial systems. <i>Algal Research</i> , 2021, 58, 102414.	2.4	1
197	A Dynamic Model for Microalgae-Bacteria Aggregates Used for Wastewater Treatment. <i>Lecture Notes in Civil Engineering</i> , 2017, , 602-606.	0.3	1
198	Biodegradation of Phenolic Compounds with a Sequencing Batch Biofilter. , 2020, , 263-269.		1

#	ARTICLE	IF	CITATIONS
199	BIODEGRADATION OF TOXIC WASTEWATERS IN AN OPTIMALLY CONTROLLED DISCONTINUOUS REACTOR. Proceedings of the Water Environment Federation, 2005, 2005, 8019-8030.	0.0	0
200	AUTOMATION OF THE ACCLIMATION PHASE IN A SEQUENCING BATCH REACTOR DEGRADING INHIBITORY COMPOUNDS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 55-60.	0.4	0
201	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
202	Robust observation strategy to estimate unknown inputs**This research was financed by CONACYT (project 100298) and PAPIIT-UNAM (project IN112114). IFAC-PapersOnLine, 2016, 49, 1199-1204.	0.5	0
203	Comparison of two real-time optimization strategies to maximize the hydrogen production in a dark fermenter. IFAC-PapersOnLine, 2018, 51, 137-142.	0.5	0
204	Enhanced PHA Production with Mixed Cultures Using a Robust and Simple Controller. Waste and Biomass Valorization, 2020, 11, 277-290.	1.8	0
205	Influence of So/Xo Ratio and Medium Composition on Anaerobic Biodegradability Test. , 2020, , 125-133.		0
206	Study on manipulation of ruminal fermentation using a bioelectrochemical system. Journal of Animal Physiology and Animal Nutrition, 2022, , .	1.0	0