Gahyun Baek

List of Publications by Year
in descending order

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Version: 2024-02-01

24 papers	1,244 citations	471371 17 h-index	610775 24 g-index
24 all docs	24 docs citations	24 times ranked	1128 citing authors

#	Article	IF	Citations
1	Using copper-based biocathodes to improve carbon dioxide conversion efficiency into methane in microbial methanogenesis cells. Chemical Engineering Journal, 2022, 435, 135076.	6.6	14
2	Pilot scale microbial fuel cells using air cathodes for producing electricity while treating wastewater. Water Research, 2022, 215, 118208.	5.3	60
3	Vapor-Fed Cathode Microbial Electrolysis Cells with Closely Spaced Electrodes Enables Greatly Improved Performance. Environmental Science & Technology, 2022, 56, 1211-1220.	4.6	16
4	High-rate microbial electrosynthesis using a zero-gap flow cell and vapor-fed anode design. Water Research, 2022, 219, 118597.	5.3	16
5	Designing a marine outfall to reduce microbial risk on a recreational beach: Field experiment and modeling. Journal of Hazardous Materials, 2021, 409, 124587.	6.5	7
6	Addition of a carbon fiber brush improves anaerobic digestion compared to external voltage application. Water Research, 2021, 188, 116575.	5.3	58
7	Continuous Flow Microbial Flow Cell with an Anion Exchange Membrane for Treating Low Conductivity and Poorly Buffered Wastewater. ACS Sustainable Chemistry and Engineering, 2021, 9, 2946-2954.	3.2	19
8	Changes in electrode resistances and limiting currents as a function of microbial electrolysis cell reactor configurations. Electrochimica Acta, 2021, 388, 138590.	2.6	9
9	The impact of different types of high surface area brush fibers with different electrical conductivity and biocompatibility on the rates of methane generation in anaerobic digestion. Science of the Total Environment, 2021, 787, 147683.	3.9	19
10	Impact of surface area and current generation of microbial electrolysis cell electrodes inserted into anaerobic digesters. Chemical Engineering Journal, 2021, 426, 131281.	6.6	28
11	Effectiveness of electromagnetic in situ magnetite capture in anaerobic sequencing batch treatment of dairy effluent under electro-syntrophic conditions. Renewable Energy, 2021, 179, 105-115.	4.3	13
12	Individual and combined effects of magnetite addition and external voltage application on anaerobic digestion of dairy wastewater. Bioresource Technology, 2020, 297, 122443.	4.8	39
13	Energy Use for Electricity Generation Requires an Assessment More Directly Relevant to Climate Change. ACS Energy Letters, 2020, 5, 3514-3517.	8.8	10
14	Treatment of Cattle Manure by Anaerobic Co-Digestion with Food Waste and Pig Manure: Methane Yield and Synergistic Effect. International Journal of Environmental Research and Public Health, 2020, 17, 4737.	1.2	40
15	Magnetite-assisted in situ microbial oxidation of H2S to S0 during anaerobic digestion: A new potential for sulfide control. Chemical Engineering Journal, 2020, 397, 124982.	6.6	32
16	Role and Potential of Direct Interspecies Electron Transfer in Anaerobic Digestion. Energies, 2018, 11, 107.	1.6	238
17	A long-term study on the effect of magnetite supplementation in continuous anaerobic digestion of dairy effluent â€“ Magnetic separation and recycling of magnetite. Bioresource Technology, 2017, 241, 830-840.	4.8	100
18	Development of biocathode during repeated cycles of bioelectrochemical conversion of carbon dioxide to methane. Bioresource Technology, 2017, 241, 1201-1207.	4.8	53

#	Article	IF	Citations
19	Anaerobic co-digestion of spent coffee grounds with different waste feedstocks for biogas production. Waste Management, 2017, 60, 322-328.	3.7	101
20	A long-term study on the effect of magnetite supplementation in continuous anaerobic digestion of dairy effluent â€“ Enhancement in process performance and stability. Bioresource Technology, 2016, 222, 344-354.	4.8	103
21	Bioaugmentation of anaerobic sludge digestion with iron-reducing bacteria: process and microbial responses to variations in hydraulic retention time. Applied Microbiology and Biotechnology, 2016, 100, 927-937.	1.7	45
22	Mild-temperature thermochemical pretreatment of green macroalgal biomass: Effects on solubilization, methanation, and microbial community structure. Bioresource Technology, 2016, 199, 326-335.	4.8	36
23	The biostimulation of anaerobic digestion with (semi)conductive ferric oxides: their potential for enhanced biomethanation. Applied Microbiology and Biotechnology, 2015, 99, 10355-10366.	1.7	128
24	Influence of ferric oxyhydroxide addition on biomethanation of waste activated sludge in a continuous reactor. Bioresource Technology, 2014, 166, 596-601.	4.8	60