

Gahyun Baek

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4170844/publications.pdf>

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	Role and Potential of Direct Interspecies Electron Transfer in Anaerobic Digestion. <i>Energies</i> , 2018, 11, 107.	1.6	238
2	The biostimulation of anaerobic digestion with (semi)conductive ferric oxides: their potential for enhanced biomethanation. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 10355-10366.	1.7	128
3	A long-term study on the effect of magnetite supplementation in continuous anaerobic digestion of dairy effluent – Enhancement in process performance and stability. <i>Bioresource Technology</i> , 2016, 222, 344-354.	4.8	103
4	Anaerobic co-digestion of spent coffee grounds with different waste feedstocks for biogas production. <i>Waste Management</i> , 2017, 60, 322-328.	3.7	101
5	A long-term study on the effect of magnetite supplementation in continuous anaerobic digestion of dairy effluent – Magnetic separation and recycling of magnetite. <i>Bioresource Technology</i> , 2017, 241, 830-840.	4.8	100
6	Influence of ferric oxyhydroxide addition on biomethanation of waste activated sludge in a continuous reactor. <i>Bioresource Technology</i> , 2014, 166, 596-601.	4.8	60
7	Pilot scale microbial fuel cells using air cathodes for producing electricity while treating wastewater. <i>Water Research</i> , 2022, 215, 118208.	5.3	60
8	Addition of a carbon fiber brush improves anaerobic digestion compared to external voltage application. <i>Water Research</i> , 2021, 188, 116575.	5.3	58
9	Development of biocathode during repeated cycles of bioelectrochemical conversion of carbon dioxide to methane. <i>Bioresource Technology</i> , 2017, 241, 1201-1207.	4.8	53
10	Bioaugmentation of anaerobic sludge digestion with iron-reducing bacteria: process and microbial responses to variations in hydraulic retention time. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 927-937.	1.7	45
11	Treatment of Cattle Manure by Anaerobic Co-Digestion with Food Waste and Pig Manure: Methane Yield and Synergistic Effect. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 4737.	1.2	40
12	Individual and combined effects of magnetite addition and external voltage application on anaerobic digestion of dairy wastewater. <i>Bioresource Technology</i> , 2020, 297, 122443.	4.8	39
13	Mild-temperature thermochemical pretreatment of green macroalgal biomass: Effects on solubilization, methanation, and microbial community structure. <i>Bioresource Technology</i> , 2016, 199, 326-335.	4.8	36
14	Magnetite-assisted in situ microbial oxidation of H ₂ S to S ₀ during anaerobic digestion: A new potential for sulfide control. <i>Chemical Engineering Journal</i> , 2020, 397, 124982.	6.6	32
15	Impact of surface area and current generation of microbial electrolysis cell electrodes inserted into anaerobic digesters. <i>Chemical Engineering Journal</i> , 2021, 426, 131281.	6.6	28
16	Continuous Flow Microbial Flow Cell with an Anion Exchange Membrane for Treating Low Conductivity and Poorly Buffered Wastewater. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 2946-2954.	3.2	19
17	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. <i>Science of the Total Environment</i> , 2021, 787, 147683.	3.9	19
18	Vapor-Fed Cathode Microbial Electrolysis Cells with Closely Spaced Electrodes Enables Greatly Improved Performance. <i>Environmental Science & Technology</i> , 2022, 56, 1211-1220.	4.6	16

#	ARTICLE	IF	CITATIONS
19	High-rate microbial electrosynthesis using a zero-gap flow cell and vapor-fed anode design. <i>Water Research</i> , 2022, 219, 118597.	5.3	16
20	Using copper-based biocathodes to improve carbon dioxide conversion efficiency into methane in microbial methanogenesis cells. <i>Chemical Engineering Journal</i> , 2022, 435, 135076.	6.6	14
21	Effectiveness of electromagnetic in situ magnetite capture in anaerobic sequencing batch treatment of dairy effluent under electro-syntrophic conditions. <i>Renewable Energy</i> , 2021, 179, 105-115.	4.3	13
22	Energy Use for Electricity Generation Requires an Assessment More Directly Relevant to Climate Change. <i>ACS Energy Letters</i> , 2020, 5, 3514-3517.	8.8	10
23	Changes in electrode resistances and limiting currents as a function of microbial electrolysis cell reactor configurations. <i>Electrochimica Acta</i> , 2021, 388, 138590.	2.6	9
24	Designing a marine outfall to reduce microbial risk on a recreational beach: Field experiment and modeling. <i>Journal of Hazardous Materials</i> , 2021, 409, 124587.	6.5	7