

# Benyi Xiao

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

1,974  
citations

172386  
29  
h-index

243529  
44  
g-index

51  
all docs

51  
docs citations

51  
times ranked

1903  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bioelectrochemical enhancement of hydrogen and methane production from the anaerobic digestion of sewage sludge in single-chamber membrane-free microbial electrolysis cells. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 1342-1347.	3.8	126
2	Comparison of single-stage and two-stage thermophilic anaerobic digestion of food waste: Performance, energy balance and reaction process. <i>Energy Conversion and Management</i> , 2018, 156, 215-223.	4.4	112
3	Evaluation of the microbial cell structure damages in alkaline pretreatment of waste activated sludge. <i>Bioresource Technology</i> , 2015, 196, 109-115.	4.8	97
4	Temperature-phased anaerobic digestion of food waste: A comparison with single-stage digestions based on performance and energy balance. <i>Bioresource Technology</i> , 2018, 249, 826-834.	4.8	96
5	Enhancing simultaneous electricity production and reduction of sewage sludge in two-chamber MFC by aerobic sludge digestion and sludge pretreatments. <i>Journal of Hazardous Materials</i> , 2011, 189, 444-449.	6.5	87
6	Biological hydrogen production from sterilized sewage sludge by anaerobic self-fermentation. <i>Journal of Hazardous Materials</i> , 2009, 168, 163-167.	6.5	81
7	Effects of sludge thermal-alkaline pretreatment on cationic red X-GRL adsorption onto pyrolysis biochar of sewage sludge. <i>Journal of Hazardous Materials</i> , 2018, 343, 347-355.	6.5	71
8	Evaluation of the damage of cell wall and cell membrane for various extracellular polymeric substance extractions of activated sludge. <i>Journal of Biotechnology</i> , 2014, 188, 130-135.	1.9	68
9	Co-production of biohydrogen and biomethane from food waste and paper waste via recirculated two-phase anaerobic digestion process: Bioenergy yields and metabolic distribution. <i>Bioresource Technology</i> , 2019, 276, 325-334.	4.8	60
10	Effects of various pretreatments on biohydrogen production from sewage sludge. <i>Science Bulletin</i> , 2009, 54, 2038-2044.	4.3	55
11	Effects of temperature and total solid content on biohydrogen production from dark fermentation of rice straw: Performance and microbial community characteristics. <i>Chemosphere</i> , 2022, 286, 131655.	4.2	53
12	Bioenergy recovery from methanogenic co-digestion of food waste and sewage sludge by a high-solid anaerobic membrane bioreactor (AnMBR): mass balance and energy potential. <i>Bioresource Technology</i> , 2021, 326, 124754.	4.8	52
13	Consequences of sludge composition on combustion performance derived from thermogravimetry analysis. <i>Waste Management</i> , 2015, 35, 141-147.	3.7	51
14	Performance and microbial community variations of a upflow anaerobic sludge blanket (UASB) reactor for treating monosodium glutamate wastewater: Effects of organic loading rate. <i>Journal of Environmental Management</i> , 2020, 253, 109691.	3.8	50
15	New Integrated Self-Refluxing Rotating Biological Contactor for rural sewage treatment. <i>Journal of Cleaner Production</i> , 2019, 217, 324-334.	4.6	49
16	Biogas recovery from two-phase anaerobic digestion of food waste and paper waste: Optimization of paper waste addition. <i>Science of the Total Environment</i> , 2018, 634, 1222-1230.	3.9	47
17	Biogas production by two-stage thermophilic anaerobic co-digestion of food waste and paper waste: Effect of paper waste ratio. <i>Renewable Energy</i> , 2019, 132, 1301-1309.	4.3	47
18	New insights into the effect of thermal treatment on sludge dewaterability. <i>Science of the Total Environment</i> , 2019, 656, 1082-1090.	3.9	47

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19	Bioelectrochemical enhancement of the anaerobic digestion of thermal-alkaline pretreated sludge in microbial electrolysis cells. <i>Renewable Energy</i> , 2018, 115, 1177-1183.	4.3	46
20	Relationship of methane and electricity production in two-chamber microbial fuel cell using sewage sludge as substrate. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 16419-16425.	3.8	45
21	Effects of thermal and thermal-alkaline pretreatments on continuous anaerobic sludge digestion: Performance, energy balance and, enhancement mechanism. <i>Renewable Energy</i> , 2020, 147, 2409-2416.	4.3	45
22	Biohythane production and microbial characteristics of two alternating mesophilic and thermophilic two-stage anaerobic co-digesters fed with rice straw and pig manure. <i>Bioresource Technology</i> , 2021, 320, 124303.	4.8	45
23	Anaerobic treatment of glutamate-rich wastewater in a continuous UASB reactor: Effect of hydraulic retention time and methanogenic degradation pathway. <i>Chemosphere</i> , 2020, 245, 125672.	4.2	44
24	Comparison of two advanced anaerobic digestions of sewage sludge with high-temperature thermal pretreatment and low-temperature thermal-alkaline pretreatment. <i>Bioresource Technology</i> , 2020, 304, 122979.	4.8	42
25	Evaluation of electricity production from alkaline pretreated sludge using two-chamber microbial fuel cell. <i>Journal of Hazardous Materials</i> , 2013, 254-255, 57-63.	6.5	41
26	Evaluation of biohydrogen production from glucose and protein at neutral initial pH. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 6152-6160.	3.8	38
27	Enhanced anaerobic digestion of sewage sludge by thermal or alkaline-thermal pretreatments: Influence of hydraulic retention time reduction. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 2655-2667.	3.8	31
28	Temperature-phased anaerobic co-digestion of food waste and paper waste with and without recirculation: Biogas production and microbial structure. <i>Science of the Total Environment</i> , 2020, 724, 138168.	3.9	31
29	Improving two-stage thermophilic-mesophilic anaerobic co-digestion of swine manure and rice straw by digestate recirculation. <i>Chemosphere</i> , 2021, 274, 129787.	4.2	31
30	Evaluation of sludge reduction of three metabolic uncouplers in laboratory-scale anaerobic/anoxic/oxic process. <i>Bioresource Technology</i> , 2016, 221, 31-36.	4.8	25
31	Evaluation of the secondary structures of protein in the extracellular polymeric substances extracted from activated sludge by different methods. <i>Journal of Environmental Sciences</i> , 2019, 80, 128-136.	3.2	25
32	Evaluation of sludge reduction by an environmentally friendly chemical uncoupler in a pilot-scale anaerobic/anoxic/oxic process. <i>Bioprocess and Biosystems Engineering</i> , 2014, 37, 553-560.	1.7	24
33	Effects of low- and high-temperature thermal-alkaline pretreatments on anaerobic digestion of waste activated sludge. <i>Bioresource Technology</i> , 2021, 337, 125400.	4.8	24
34	Strategy of adjusting recirculation ratio for biohythane production via recirculated temperature-phased anaerobic digestion of food waste. <i>Energy</i> , 2019, 179, 1235-1245.	4.5	23
35	Effects of rice straw ratio on mesophilic and thermophilic anaerobic co-digestion of swine manure and rice straw mixture. <i>Energy</i> , 2022, 239, 122021.	4.5	23
36	Impact of alkali and heat pretreatment on the pathway of hydrogen production from sewage sludge. <i>Science Bulletin</i> , 2010, 55, 777-786.	1.7	16

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37	Electricity production and sludge reduction by integrating microbial fuel cells in anoxic-oxic process. <i>Waste Management</i> , 2017, 69, 346-352.	3.7	16
38	Deterioration mechanisms of sludge settleability in sludge reduction systems with metabolic uncouplers. <i>International Biodeterioration and Biodegradation</i> , 2017, 123, 296-303.	1.9	14
39	pH dependency of hydrogen fermentation from alkali-pretreated sludge. <i>Science Bulletin</i> , 2006, 51, 399-404.	1.7	13
40	Comparison and application of biofilter and suspended bioreactor in removing gaseous o-xylene. <i>Environmental Research</i> , 2020, 188, 109853.	3.7	13
41	Evaluation of the sludge reduction effectiveness of a metabolic uncoupler-tetrakis (hydroxymethyl) phosphonium sulfate in anaerobic/anoxic/oxic process. <i>Desalination and Water Treatment</i> , 2016, 57, 5772-5780.	1.0	12
42	Effects of wastewater treatment processes on the sludge reduction system with 2,4-dichlorophenol: Sequencing batch reactor and anaerobic-anoxic-oxic process. <i>Journal of Biotechnology</i> , 2017, 251, 99-105.	1.9	12
43	Effect of mixing ratio and total solids content on temperature-phased anaerobic codigestion of rice straw and pig manure: Biohythane production and microbial structure. <i>Bioresource Technology</i> , 2022, 344, 126173.	4.8	12
44	Dark co-fermentation of rice straw and pig manure for biohydrogen production: effects of different inoculum pretreatments and substrate mixing ratio. <i>Environmental Technology (United Kingdom)</i> , 2021, 42, 4539-4549.	1.2	10
45	Effects of substrate organic composition on mesophilic and thermophilic anaerobic co-digestion of food waste and paper waste. <i>Chemosphere</i> , 2022, 291, 132933.	4.2	9
46	Effects of return sludge alkaline treatment on sludge reduction in laboratory-scale anaerobic-anoxic-oxic process. <i>Journal of Biotechnology</i> , 2018, 285, 1-5.	1.9	7
47	Effects of air-prepared atmosphere on the Pb <sup>2+</sup> adsorption of sludge-based adsorbent. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 5757-5769.	2.9	4
48	Effects of mixing ratios on anaerobic co-digestion of swine manure and rice straw: methane production and kinetics. <i>Biomass Conversion and Biorefinery</i> , 0, , 1.	2.9	3
49	Effects of tetrakis (hydroxymethyl) phosphonium sulfate pretreatment on characteristics of sewage sludge. <i>Journal of Environmental Sciences</i> , 2019, 78, 174-182.	3.2	1
50	Study on sludge reduction of a new uncoupler in A <sup>2</sup> /O process. <i>WIT Transactions on Biomedicine and Health</i> , 2014, , .	0.0	0