

Siyan Zhao

List of Publications by Year in descending order

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72
papers

3,919
citations

159358

30
h-index

123241

61
g-index

73
all docs

73
docs citations

73
times ranked

2583
citing authors

#	ARTICLE	IF	CITATIONS
1	Detoxification of vinyl chloride to ethene coupled to growth of an anaerobic bacterium. <i>Nature</i> , 2003, 424, 62-65.	13.7	461
2	Complete Detoxification of Vinyl Chloride by an Anaerobic Enrichment Culture and Identification of the Reductively Dechlorinating Population as a Dehalococcoides Species. <i>Applied and Environmental Microbiology</i> , 2003, 69, 996-1003.	1.4	324
3	Microbial Reductive Debromination of Polybrominated Diphenyl Ethers (PBDEs). <i>Environmental Science & Technology</i> , 2006, 40, 4429-4434.	4.6	308
4	Isolation and characterization of Dehalococcoides sp. strain FL2, a trichloroethene (TCE)- and 1,2-dichloroethene-respiring anaerobe. <i>Environmental Microbiology</i> , 2005, 7, 1442-1450.	1.8	237
5	Acetate versus Hydrogen as Direct Electron Donors To Stimulate the Microbial Reductive Dechlorination Process at Chloroethene-Contaminated Sites. <i>Environmental Science & Technology</i> , 2002, 36, 3945-3952.	4.6	190
6	Influence of Vitamin B12 and Cocultures on the Growth of Dehalococcoides Isolates in Defined Medium. <i>Applied and Environmental Microbiology</i> , 2007, 73, 2847-2853.	1.4	182
7	Genomic characterization of three unique <i>Dehalococcoides</i> that respire on persistent polychlorinated biphenyls. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 12103-12108.	3.3	168
8	Complete nitrogen removal via simultaneous nitrification and denitrification by a novel phosphate accumulating <i>Thauera</i> sp. strain SND5. <i>Water Research</i> , 2020, 185, 116300.	5.3	150
9	Reductive Debromination of Polybrominated Diphenyl Ethers by Anaerobic Bacteria from Soils and Sediments. <i>Applied and Environmental Microbiology</i> , 2010, 76, 794-802.	1.4	123
10	Isolation and Characterization of a <i>Dehalococcoides</i> sp. Strain MB, Which Dechlorinates Tetrachloroethene to <i>trans</i> -1,2-Dichloroethene. <i>Applied and Environmental Microbiology</i> , 2009, 75, 5910-5918.	1.4	116
11	Identification and transcriptional analysis of <i>trans</i> -DCE-producing reductive dehalogenases in <i>Dehalococcoides</i> species. <i>ISME Journal</i> , 2010, 4, 1020-1030.	4.4	76
12	Microbial synergistic interactions for reductive dechlorination of polychlorinated biphenyls. <i>Science of the Total Environment</i> , 2019, 666, 368-376.	3.9	66
13	A <i>Desulfitobacterium</i> sp. strain PR reductively dechlorinates both 1,1,1-trichloroethane and chloroform. <i>Environmental Microbiology</i> , 2014, 16, 3387-3397.	1.8	58
14	Simultaneous Fermentation of Glucose and Xylose to Butanol by <i>Clostridium</i> sp. Strain BOH3. <i>Applied and Environmental Microbiology</i> , 2014, 80, 4771-4778.	1.4	58
15	Reducing cofactors contribute to the increase of butanol production by a wild-type <i>Clostridium</i> sp. strain BOH3. <i>Bioresource Technology</i> , 2014, 155, 220-228.	4.8	55
16	Insights into the Occurrence, Fate, and Impacts of Halogenated Flame Retardants in Municipal Wastewater Treatment Plants. <i>Environmental Science & Technology</i> , 2021, 55, 4205-4226.	4.6	55
17	Comparative genomics of two newly isolated <i>Dehalococcoides</i> strains and an enrichment using a genus microarray. <i>ISME Journal</i> , 2011, 5, 1014-1024.	4.4	54
18	Isolation of <i>Acetobacterium</i> sp. Strain AG, Which Reductively Debrominates Octa- and Pentabrominated Diphenyl Ether Technical Mixtures. <i>Applied and Environmental Microbiology</i> , 2013, 79, 1110-1117.	1.4	51

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19	Fixed nitrogen removal mechanisms associated with sulfur cycling in tropical wetlands. <i>Water Research</i> , 2021, 189, 116619.	5.3	50
20	Identification of antibiotic resistant bacteria community and a GeoChip based study of resistome in urban watersheds. <i>Water Research</i> , 2016, 106, 330-338.	5.3	44
21	Dechlorination of Commercial PCBs and Other Multiple Halogenated Compounds by a Sediment-Free Culture Containing <i>Dehalococcoides</i> and <i>Dehalobacter</i> . <i>Environmental Science & Technology</i> , 2013, 47, 130904143020001.	4.6	42
22	Isolation of two new <i>Dehalococcoides mccartyi</i> strains with dissimilar dechlorination functions and their characterization by comparative genomics via microarray analysis. <i>Environmental Microbiology</i> , 2013, 15, 2293-2305.	1.8	41
23	Unique genetic cassettes in a <i>Thermoanaerobacterium</i> contribute to simultaneous conversion of cellulose and monosugars into butanol. <i>Science Advances</i> , 2018, 4, e1701475.	4.7	41
24	Potential Role of Methanogens in Microbial Reductive Dechlorination of Organic Chlorinated Pollutants <i>In Situ</i> . <i>Environmental Science & Technology</i> , 2021, 55, 5917-5928.	4.6	41
25	Strategy for the Rapid Dechlorination of Polychlorinated Biphenyls (PCBs) by <i>Dehalococcoides mccartyi</i> Strains. <i>Environmental Science & Technology</i> , 2018, 52, 13854-13862.	4.6	39
26	Environmental occurrence and remediation of emerging organohalides: A review. <i>Environmental Pollution</i> , 2021, 290, 118060.	3.7	39
27	Strategies for production of butanol and butyl-butyrates through lipase-catalyzed esterification. <i>Bioresource Technology</i> , 2016, 202, 214-219.	4.8	37
28	Reductive Debromination of Polybrominated Diphenyl Ethers - Microbes, Processes and Dehalogenases. <i>Frontiers in Microbiology</i> , 2018, 9, 1292.	1.5	37
29	Characterization and genome analysis of a butanol- and isopropanol-producing <i>Clostridium beijerinckii</i> strain BGS1. <i>Biotechnology for Biofuels</i> , 2018, 11, 280.	6.2	33
30	Genomic Characterization of <i>Dehalococcoides mccartyi</i> Strain JNA That Reductively Dechlorinates Tetrachloroethene and Polychlorinated Biphenyls. <i>Environmental Science & Technology</i> , 2015, 49, 14319-14325.	4.6	32
31	Acceleration of polychlorinated biphenyls remediation in soil via sewage sludge amendment. <i>Journal of Hazardous Materials</i> , 2021, 420, 126630.	6.5	32
32	Abundance of organohalide respiring bacteria and their role in dehalogenating antimicrobials in wastewater treatment plants. <i>Water Research</i> , 2020, 181, 115893.	5.3	31
33	Oligopeptides functionalized surface plasmon resonance biosensors for detecting thiacloprid and imidacloprid. <i>Biosensors and Bioelectronics</i> , 2012, 35, 271-276.	5.3	30
34	Degradation of ofloxacin by a manganese-oxidizing bacterium <i>Pseudomonas</i> sp. F2 and its biogenic manganese oxides. <i>Bioresource Technology</i> , 2021, 328, 124826.	4.8	30
35	Offshore Marine Sediment Microbiota Breathe Structurally Distinct Organohalide Pollutants. <i>Environmental Science & Technology</i> , 2022, 56, 3065-3075.	4.6	30
36	Enhanced direct fermentation of cassava to butanol by <i>Clostridium</i> species strain BOH3 in cofactor-mediated medium. <i>Biotechnology for Biofuels</i> , 2015, 8, 166.	6.2	29

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37	Loss of the <i>ssrA</i> genome island led to partial debromination in the PBDE respiring <i>Dehalococcoides mccartyi</i> strain GY50. <i>Environmental Microbiology</i> , 2017, 19, 2906-2915.	1.8	27
38	Efficient and Complete Detoxification of Polybrominated Diphenyl Ethers in Sediments Achieved by Bioaugmentation with <i>Dehalococcoides</i> and Microbial Ecological Insights. <i>Environmental Science & Technology</i> , 2022, 56, 8008-8019.	4.6	27
39	Analysis of enhanced nitrogen removal mechanisms in a validation wastewater treatment plant containing anammox bacteria. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 1255-1265.	1.7	25
40	Dehalogenation of Polybrominated Diphenyl Ethers and Polychlorinated Biphenyls Catalyzed by a Reductive Dehalogenase in <i>Dehalococcoides mccartyi</i> Strain MB. <i>Environmental Science & Technology</i> , 2022, 56, 4039-4049.	4.6	24
41	A Highly Efficient NADH-dependent Butanol Dehydrogenase from High-butanol-producing <i>Clostridium</i> sp. BOH3. <i>Bioenergy Research</i> , 2013, 6, 240-251.	2.2	23
42	<i>Dehalococcoides mccartyi</i> Strain GEO12 Has a Natural Tolerance to Chloroform Inhibition. <i>Environmental Science & Technology</i> , 2020, 54, 8750-8759.	4.6	23
43	Production, Purification, and Characterization of a Xylooligosaccharides-forming Xylanase from High-butanol-producing Strain <i>Clostridium</i> sp. BOH3. <i>Bioenergy Research</i> , 2013, 6, 448-457.	2.2	21
44	Anaerobic biodegradation of phenanthrene by a newly isolated nitrate-dependent <i>Achromobacter denitrificans</i> strain <i>PheN1</i> and exploration of the biotransformation processes by metabolite and genome analyses. <i>Environmental Microbiology</i> , 2021, 23, 908-923.	1.8	21
45	Identification of Reductive Dehalogenases That Mediate Complete Debromination of Penta- and Tetrabrominated Diphenyl Ethers in <i>Dehalococcoides</i> spp.. <i>Applied and Environmental Microbiology</i> , 2021, 87, e0060221.	1.4	19
46	Debromination of TetraBromoBisphenol-A (TBBPA) depicting the metabolic versatility of <i>Dehalococcoides</i> . <i>Journal of Hazardous Materials</i> , 2021, 419, 126408.	6.5	19
47	Detoxification of 1,1,2-Trichloroethane to Ethene by <i>Desulfitobacterium</i> and Identification of Its Functional Reductase Gene. <i>PLoS ONE</i> , 2015, 10, e0119507.	1.1	19
48	A comparative genomics and reductive dehalogenase gene transcription study of two chloroethene-respiring bacteria, <i>Dehalococcoides mccartyi</i> strains MB and 11a. <i>Scientific Reports</i> , 2015, 5, 15204.	1.6	18
49	Simultaneous saccharification and fermentation of hemicellulose to butanol by a non-sporulating <i>Clostridium</i> species. <i>Bioresource Technology</i> , 2016, 219, 430-438.	4.8	18
50	Genomic characterization of <i>Dehalococcoides mccartyi</i> strain 11a5 reveals a circular extrachromosomal genetic element and a new tetrachloroethene reductive dehalogenase gene. <i>FEMS Microbiology Ecology</i> , 2017, 93, fiw235.	1.3	18
51	Direct conversion of xylan to butanol by a wild-type <i>Clostridium</i> species strain G117. <i>Biotechnology and Bioengineering</i> , 2016, 113, 1702-1710.	1.7	18
52	Anaerobic phenanthrene biodegradation with four kinds of electron acceptors enriched from the same mixed inoculum and exploration of metabolic pathways. <i>Frontiers of Environmental Science and Engineering</i> , 2019, 13, 1.	3.3	18
53	Partnering of anammox and denitrifying bacteria benefits anammox's recovery from starvation and complete nitrogen removal. <i>Science of the Total Environment</i> , 2022, 815, 152696.	3.9	18
54	Production of 2,3-Butanediol from Sucrose by a <i>Klebsiella</i> Species. <i>Bioenergy Research</i> , 2016, 9, 15-22.	2.2	17

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55	Production of isopropyl and butyl esters by <i>Clostridium</i> mono-culture and co-culture. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2020, 47, 543-550.	1.4	15
56	Aerobic acetone-butanol-isopropanol (ABI) fermentation through a co-culture of <i>Clostridium beijerinckii</i> G117 and recombinant <i>Bacillus subtilis</i> 1A1. <i>Metabolic Engineering Communications</i> , 2020, 11, e00137.	1.9	14
57	16S rRNA gene-based primer pair showed high specificity and quantification accuracy in detecting freshwater <i>Brocadiales</i> anammox bacteria. <i>FEMS Microbiology Ecology</i> , 2020, 96, .	1.3	14
58	Exploration of the biotransformation of phenanthrene degradation coupled with methanogenesis by metabolites and enzyme analyses. <i>Environmental Pollution</i> , 2022, 293, 118491.	3.7	14
59	Microbial reductive dehalogenation of trihalomethanes by a <i>Dehalobacter</i> -containing co-culture. <i>Applied Microbiology and Biotechnology</i> , 2017, 101, 5481-5492.	1.7	12
60	Reductive Dechlorination of High Concentrations of Chloroethenes by a <i>Dehalococcoides mccartyi</i> Strain 11 G. <i>FEMS Microbiology Ecology</i> , 2018, 95, .	1.3	11
61	Growth of <i>Dehalococcoides mccartyi</i> species in an autotrophic consortium producing limited acetate. <i>Biodegradation</i> , 2018, 29, 487-498.	1.5	11
62	Diversity of organohalide respiring bacteria and reductive dehalogenases that detoxify polybrominated diphenyl ethers in E-waste recycling sites. <i>ISME Journal</i> , 2022, 16, 2123-2131.	4.4	11
63	Production, Purification, and Characterization of α -Amylase from Solventogenic <i>Clostridium</i> sp. BOH3. <i>Bioenergy Research</i> , 2014, 7, 132-141.	2.2	10
64	Isolation, characterization and bioaugmentation of an acidotolerant 1,2-dichloroethane respiring <i>Desulfitobacterium</i> species from a low pH aquifer. <i>FEMS Microbiology Ecology</i> , 2019, 95, .	1.3	10
65	Draft Genome Sequence of Polychlorinated Biphenyl-Dechlorinating <i>Dehalococcoides mccartyi</i> Strain SG1, Which Carries a Circular Putative Plasmid. <i>Genome Announcements</i> , 2014, 2, .	0.8	6
66	<i>Clostridium</i> species strain BOH3 tolerates and transforms inhibitors from horticulture waste hydrolysates. <i>Applied Microbiology and Biotechnology</i> , 2017, 101, 6289-6297.	1.7	6
67	Editorial: Organohalide Respiration: New Findings in Metabolic Mechanisms and Bioremediation Applications. <i>Frontiers in Microbiology</i> , 2019, 10, 526.	1.5	5
68	Newly designed high-coverage degenerate primers for nitrogen removal mechanism analysis in a partial nitrification-anammox (PN/A) process. <i>FEMS Microbiology Ecology</i> , 2020, 96, .	1.3	5
69	Quantitative proteome profiles help reveal efficient xylose utilization mechanisms in solventogenic <i>Clostridium</i> sp. strain BOH3. <i>Biotechnology and Bioengineering</i> , 2017, 114, 1959-1969.	1.7	5
70	DNA microarrays on ultraviolet-modified surfaces for speciation of bacteria. <i>Analytical Biochemistry</i> , 2014, 447, 156-161.	1.1	3
71	Differentiating Closely Affiliated <i>Dehalococcoides</i> Lineages by a Novel Genetic Marker Identified via Computational Pangenome Analysis. <i>Applied and Environmental Microbiology</i> , 2022, 88, AEM0218121.	1.4	3
72	Microbial Debromination of Polybrominated Diphenyl Ethers by <i>Dehalococcoides</i> -Containing Enrichment Culture. <i>Frontiers in Microbiology</i> , 2021, 12, 806795.	1.5	1