

Jianzhong He

List of Publications by Year in descending order

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107
papers

5,759
citations

87888

38
h-index

82547

72
g-index

108
all docs

108
docs citations

108
times ranked

4516
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.	27.8	461
2	Effect of antibiotics in the environment on microbial populations. <i>Applied Microbiology and Biotechnology</i> , 2010, 87, 925-941.	3.6	358
3	Phthalates biodegradation in the environment. <i>Applied Microbiology and Biotechnology</i> , 2008, 80, 183-98.	3.6	336
4	Complete Detoxification of Vinyl Chloride by an Anaerobic Enrichment Culture and Identification of the Reductively Dechlorinating Population as a <i>Dehalococcoides</i> Species. <i>Applied and Environmental Microbiology</i> , 2003, 69, 996-1003.	3.1	324
5	Microbial Reductive Debromination of Polybrominated Diphenyl Ethers (PBDEs). <i>Environmental Science & Technology</i> , 2006, 40, 4429-4434.	10.0	308
6	Isolation and characterization of <i>Dehalococcoides</i> sp. strain FL2, a trichloroethene (TCE)- and 1,2-dichloroethene-respiring anaerobe. <i>Environmental Microbiology</i> , 2005, 7, 1442-1450.	3.8	237
7	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.	10.0	190
8	Influence of Vitamin B12 and Cocultures on the Growth of <i>Dehalococcoides</i> Isolates in Defined Medium. <i>Applied and Environmental Microbiology</i> , 2007, 73, 2847-2853.	3.1	182
9	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.	7.1	168
10	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.	11.3	150
11	Discrimination of Multiple <i>Dehalococcoides</i> Strains in a Trichloroethene Enrichment by Quantification of Their Reductive Dehalogenase Genes. <i>Applied and Environmental Microbiology</i> , 2006, 72, 5877-5883.	3.1	132
12	Reductive Debromination of Polybrominated Diphenyl Ethers by Anaerobic Bacteria from Soils and Sediments. <i>Applied and Environmental Microbiology</i> , 2010, 76, 794-802.	3.1	123
13	Isolation and Characterization of <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.	3.1	116
14	Reductive Dehalogenase Gene Expression as a Biomarker for Physiological Activity of <i>Dehalococcoides</i> spp. <i>Applied and Environmental Microbiology</i> , 2006, 72, 6161-6168.	3.1	100
15	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.	9.8	76
16	Characterization of a thermostable xylanase from a newly isolated <i>Kluyvera</i> species and its application for biobutanol production. <i>Bioresource Technology</i> , 2013, 135, 309-315.	9.6	72
17	Complete Debromination of Tetra- and Penta-Brominated Diphenyl Ethers by a Coculture Consisting of <i>Dehalococcoides</i> and <i>Desulfovibrio</i> Species. <i>Environmental Science & Technology</i> , 2011, 45, 8475-8482.	10.0	70
18	Microbial synergistic interactions for reductive dechlorination of polychlorinated biphenyls. <i>Science of the Total Environment</i> , 2019, 666, 368-376.	8.0	66

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19	A <i>D</i> esulfotobacterium sp. strain PR reductively dechlorinates both 1,1,1-trichloroethane and chloroform. <i>Environmental Microbiology</i> , 2014, 16, 3387-3397.	3.8	58
20	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.	3.1	58
21	Phylogenetically Distinct Bacteria Involve Extensive Dechlorination of Aroclor 1260 in Sediment-Free Cultures. <i>PLoS ONE</i> , 2013, 8, e59178.	2.5	57
22	Characterization of anaerobic consortia coupled lignin depolymerization with biomethane generation. <i>Bioresource Technology</i> , 2013, 139, 5-12.	9.6	56
23	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.	9.6	55
24	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.	10.0	55
25	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.	9.8	54
26	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.	3.1	51
27	A mesophilic <i>Clostridium</i> species that produces butanol from monosaccharides and hydrogen from polysaccharides. <i>Bioresource Technology</i> , 2011, 102, 9558-9563.	9.6	50
28	Fixed nitrogen removal mechanisms associated with sulfur cycling in tropical wetlands. <i>Water Research</i> , 2021, 189, 116619.	11.3	50
29	Enhanced direct fermentation from food waste to butanol and hydrogen by an amylolytic <i>Clostridium</i> . <i>Renewable Energy</i> , 2020, 153, 522-529.	8.9	47
30	Phospholipid Furan Fatty Acids and Ubiquinone-8: Lipid Biomarkers That May Protect <i>Dehalococcoides</i> Strains from Free Radicals. <i>Applied and Environmental Microbiology</i> , 2005, 71, 8426-8433.	3.1	45
31	Proliferation of antibiotic resistance genes in microbial consortia of sequencing batch reactors (SBRs) upon exposure to trace erythromycin or erythromycin-H ₂ O. <i>Water Research</i> , 2011, 45, 3098-3106.	11.3	44
32	Identification of antibiotic resistant bacteria community and a GeoChip based study of resistome in urban watersheds. <i>Water Research</i> , 2016, 106, 330-338.	11.3	44
33	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.	10.0	42
34	One-pot fermentation of agricultural residues to produce butanol and hydrogen by <i>Clostridium</i> strain BOH3. <i>Renewable Energy</i> , 2016, 85, 1127-1134.	8.9	42
35	Isolation of two new <i>D</i> ehalococcoides mccartyi strains with dissimilar dechlorination functions and their characterization by comparative genomics via microarray analysis. <i>Environmental Microbiology</i> , 2013, 15, 2293-2305.	3.8	41
36	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.	10.3	41

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37	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.	10.0	41
38	A <i>Dehalococcoides</i> -containing co-culture that dechlorinates tetrachloroethene to <i>trans</i> -1,2-dichloroethene. <i>ISME Journal</i> , 2010, 4, 88-97.	9.8	40
39	Strategy for the Rapid Dechlorination of Polychlorinated Biphenyls (PCBs) by <i>Dehalococcoides mccartyi</i> Strains. <i>Environmental Science & Technology</i> , 2018, 52, 13854-13862.	10.0	39
40	Characterization of a butanol-“acetone-producing <i>Clostridium</i> strain and identification of its solventogenic genes. <i>Bioresource Technology</i> , 2013, 135, 372-378.	9.6	38
41	Direct fermentation of xylan by <i>Clostridium</i> strain BOH3 for the production of butanol and hydrogen using optimized culture medium. <i>Bioresource Technology</i> , 2014, 154, 38-43.	9.6	37
42	Strategies for production of butanol and butyl-butyrates through lipase-catalyzed esterification. <i>Bioresource Technology</i> , 2016, 202, 214-219.	9.6	37
43	Reductive Debromination of Polybrominated Diphenyl Ethers - Microbes, Processes and Dehalogenases. <i>Frontiers in Microbiology</i> , 2018, 9, 1292.	3.5	37
44	Isolation and characterization of a novel <i>Dehalobacter</i> species strain TCP1 that reductively dechlorinates 2,4,6-trichlorophenol. <i>Biodegradation</i> , 2014, 25, 313-323.	3.0	35
45	Acclimatization of a mixed-animal manure inoculum to the anaerobic digestion of <i>Axonopus compressus</i> reveals the putative importance of <i>Mesotoga infera</i> and <i>Methanosaeta concilii</i> as elucidated by DGGE and Illumina MiSeq. <i>Bioresource Technology</i> , 2017, 245, 1148-1154.	9.6	34
46	Characterization and genome analysis of a butanol-“isopropanol-producing <i>Clostridium beijerinckii</i> strain BGS1. <i>Biotechnology for Biofuels</i> , 2018, 11, 280.	6.2	33
47	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.	10.0	32
48	Acceleration of polychlorinated biphenyls remediation in soil via sewage sludge amendment. <i>Journal of Hazardous Materials</i> , 2021, 420, 126630.	12.4	32
49	Abundance of organohalide respiring bacteria and their role in dehalogenating antimicrobials in wastewater treatment plants. <i>Water Research</i> , 2020, 181, 115893.	11.3	31
50	Evidence for Nitrogen Fixation by “ <i>Dehalococcoides ethenogenes</i> ” Strain 195. <i>Applied and Environmental Microbiology</i> , 2009, 75, 7551-7555.	3.1	30
51	Oligopeptides functionalized surface plasmon resonance biosensors for detecting thiacloprid and imidacloprid. <i>Biosensors and Bioelectronics</i> , 2012, 35, 271-276.	10.1	30
52	Offshore Marine Sediment Microbiota Breathe Structurally Distinct Organohalide Pollutants. <i>Environmental Science & Technology</i> , 2022, 56, 3065-3075.	10.0	30
53	Molecular techniques in the biotechnological fight against halogenated compounds in anoxic environments. <i>Microbial Biotechnology</i> , 2012, 5, 347-367.	4.2	29
54	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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55	Pentachlorophenol dechlorination by an acidogenic sludge. <i>Water Research</i> , 2008, 42, 3789-3798.	11.3	28
56	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.	3.8	27
57	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.	10.0	27
58	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.	3.6	25
59	Development and characteristics of rapidly formed hydrogen-producing granules in an acidic anaerobic sequencing batch reactor (AnSBR). <i>Biochemical Engineering Journal</i> , 2010, 49, 119-125.	3.6	24
60	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.	10.0	24
61	A Highly Efficient NADH-dependent Butanol Dehydrogenase from High-butanol-producing <i>Clostridium</i> sp. BOH3. <i>Bioenergy Research</i> , 2013, 6, 240-251.	3.9	23
62	Instability of dilative sand. <i>Geotechnical Research</i> , 2015, 2, 35-48.	1.4	23
63	<i>Dehalococcoides mccartyi</i> Strain GEO12 Has a Natural Tolerance to Chloroform Inhibition. <i>Environmental Science & Technology</i> , 2020, 54, 8750-8759.	10.0	23
64	Acidogenic sequencing batch reactor start-up procedures for induction of 2,4,6-trichlorophenol dechlorination. <i>Water Research</i> , 2008, 42, 1675-1683.	11.3	21
65	Influence of trace erythromycin and erythromycin-H ₂ O on carbon and nutrients removal and on resistance selection in sequencing batch reactors (SBRs). <i>Applied Microbiology and Biotechnology</i> , 2009, 85, 185-195.	3.6	21
66	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.	3.9	21
67	Anaerobic biodegradation of phenanthrene by a newly isolated nitrate-dependent <i>Achromobacter denitrificans</i> strain <i>scp>PheN1</scp></i> and exploration of the biotransformation processes by metabolite and genome analyses. <i>Environmental Microbiology</i> , 2021, 23, 908-923.	3.8	21
68	Optimization of bioaugmentation of the anaerobic digestion of <i>Axonopus compressus</i> cowgrass for the production of biomethane. <i>Journal of Cleaner Production</i> , 2020, 258, 120932.	9.3	20
69	Draft Genome Sequence of Butanol-Acetone-Producing <i>Clostridium beijerinckii</i> Strain G117. <i>Journal of Bacteriology</i> , 2012, 194, 5470-5471.	2.2	19
70	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.	3.1	19
71	Debromination of TetraBromoBisphenol-A (TBBPA) depicting the metabolic versatility of <i>Dehalococcoides</i> . <i>Journal of Hazardous Materials</i> , 2021, 419, 126408.	12.4	19
72	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.	2.5	19

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73	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.	3.3	18
74	Simultaneous saccharification and fermentation of hemicellulose to butanol by a non-sporulating <i>Clostridium</i> species. <i>Bioresource Technology</i> , 2016, 219, 430-438.	9.6	18
75	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, fiv235.	2.7	18
76	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.	3.3	18
77	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.	6.0	18
78	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.	8.0	18
79	Production of 2,3-Butanediol from Sucrose by a <i>Klebsiella</i> Species. <i>Bioenergy Research</i> , 2016, 9, 15-22.	3.9	17
80	Characterization of a xylanase-producing <i>Cellvibrio mixtus</i> strain J3-8 and its genome analysis. <i>Scientific Reports</i> , 2015, 5, 10521.	3.3	16
81	Enhanced biobutanol production from starch waste via orange peel doping. <i>Renewable Energy</i> , 2022, 193, 576-583.	8.9	16
82	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.	3.0	15
83	Development of a Fluorescence-Activated Cell Sorting Method Coupled with Whole Genome Amplification To Analyze Minority and Trace <i>Dehalococcoides</i> Genomes in Microbial Communities. <i>Environmental Science & Technology</i> , 2015, 49, 1585-1593.	10.0	14
84	Heterologous expression, characterization and application of a new β -xylosidase identified in solventogenic <i>Clostridium</i> sp. strain BOH3. <i>Process Biochemistry</i> , 2018, 67, 99-104.	3.7	14
85	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.	3.6	14
86	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, .	2.7	14
87	Microbial reductive dehalogenation of trihalomethanes by a <i>Dehalobacter</i> -containing co-culture. <i>Applied Microbiology and Biotechnology</i> , 2017, 101, 5481-5492.	3.6	12
88	Biological and fermentative production of hydrogen. , 2016, , 303-333.		11
89	Reductive Dechlorination of High Concentrations of Chloroethenes by a <i>Dehalococcoides mccartyi</i> Strain 11 G. <i>FEMS Microbiology Ecology</i> , 2018, 95, .	2.7	11
90	Growth of <i>Dehalococcoides mccartyi</i> species in an autotrophic consortium producing limited acetate. <i>Biodegradation</i> , 2018, 29, 487-498.	3.0	11

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91	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.	9.8	11
92	Two-step denaturing gradient gel electrophoresis (2S-DGGE), a gel-based strategy to capture full-length 16S rRNA gene sequences. <i>Applied Microbiology and Biotechnology</i> , 2012, 95, 1305-1312.	3.6	10
93	Production, Purification, and Characterization of α -Amylase from Solventogenic <i>Clostridium</i> sp. BOH3. <i>Bioenergy Research</i> , 2014, 7, 132-141.	3.9	10
94	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, .	2.7	10
95	Evaluation of Biodegradation Potential of Carbon Tetrachloride and Chlorophenols under Acidogenic Condition. <i>Journal of Environmental Engineering, ASCE</i> , 2008, 134, 177-183.	1.4	8
96	Separation of fluorescence-labelled terminal restriction fragment DNA on a two-dimensional gel (T α RFs α 2D) – an efficient approach for microbial consortium characterization. <i>Environmental Microbiology</i> , 2011, 13, 2565-2575.	3.8	8
97	Comparison of microbial communities in sequencing batch reactors (SBRs) exposed to trace erythromycin and erythromycin-H ₂ O. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 2667-2673.	3.6	8
98	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
99	Purification and Characterization of a GH11 Xylanase from Biobutanol-Producing <i>Clostridium beijerinckii</i> G117. <i>Applied Biochemistry and Biotechnology</i> , 2015, 175, 2832-2844.	2.9	6
100	<i>Clostridium</i> species strain BOH3 tolerates and transforms inhibitors from horticulture waste hydrolysates. <i>Applied Microbiology and Biotechnology</i> , 2017, 101, 6289-6297.	3.6	6
101	The Microbiology of Anaerobic PCB Dechlorination. , 2016, , 541-562.		5
102	Editorial: Organohalide Respiration: New Findings in Metabolic Mechanisms and Bioremediation Applications. <i>Frontiers in Microbiology</i> , 2019, 10, 526.	3.5	5
103	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, .	2.7	5
104	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.	3.3	5
105	DNA microarrays on ultraviolet-modified surfaces for speciation of bacteria. <i>Analytical Biochemistry</i> , 2014, 447, 156-161.	2.4	3
106	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.	3.1	3
107	Determination of Total Nitrogen in Environmental Samples: Validation by Comparison of Techniques and Intralaboratory Studies. <i>Analytical Letters</i> , 2009, 42, 948-957.	1.8	0