Xinning Zhang

List of Publications by Year
in descending order

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Version: 2024-02-01

29 papers	2,474 citations	471509 17 h-index	454955 30 g-index
33 all docs	33 docs citations	33 times ranked	3481 citing authors

#	Article	IF	Citations
1	Metagenomic and functional analysis of hindgut microbiota of a wood-feeding higher termite. Nature, 2007, 450, 560-565.	27.8	1,181
2	Large D/H variations in bacterial lipids reflect central metabolic pathways. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 12580-12586.	7.1	176
3	Global Nitrogen Cycle: Critical Enzymes, Organisms, and Processes for Nitrogen Budgets and Dynamics. Chemical Reviews, 2020, 120, 5308-5351.	47.7	167
4	Nitrogen isotope fractionation by alternative nitrogenases and past ocean anoxia. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4782-4787.	7.1	158
5	Possible contribution of alternative nitrogenases to nitrogen fixation by asymbiotic N2-fixing bacteria in soils. Soil Biology and Biochemistry, 2014, 69, 413-420.	8.8	104
6	Biological nitrogen fixation by alternative nitrogenases in terrestrial ecosystems: a review. Biogeochemistry, 2020, 149, 53-73.	3.5	79
7	The Siderophore Metabolome of Azotobacter vinelandii. Applied and Environmental Microbiology, 2016, 82, 27-39.	3.1	69
8	Molybdenum threshold for ecosystem scale alternative vanadium nitrogenase activity in boreal forests. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24682-24688.	7.1	60
9	Alternative nitrogenase activity in the environment and nitrogen cycle implications. Biogeochemistry, 2016, 127, 189-198.	3.5	56
10	Diversity and Activity of Alternative Nitrogenases in Sequenced Genomes and Coastal Environments. Frontiers in Microbiology, 2017, 8, 267.	3.5	56
11	Biological nitrogen fixation by alternative nitrogenases in boreal cyanolichens: importance of molybdenum availability and implications for current biological nitrogen fixation estimates. New Phytologist, 2017, 213, 680-689.	7.3	54
12	4D imaging reveals mechanisms of clay-carbon protection and release. Nature Communications, 2021, 12, 622.	12.8	39
13	Selenium controls transcription of paralogous formate dehydrogenase genes in the termite gut acetogen, Treponema primitia. Environmental Microbiology, 2010, 12, 2245-2258.	3.8	30
14	Localizing transcripts to single cells suggests an important role of uncultured deltaproteobacteria in the termite gut hydrogen economy. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16163-16168.	7.1	29
15	Carbon substrate reâ€orders relative growth of a bacterium using Moâ€, Vâ€, or Feâ€nitrogenase for nitrogen fixation. Environmental Microbiology, 2020, 22, 1397-1408.	3.8	25
16	Crochelins: Siderophores with an Unprecedented Ironâ€Chelating Moiety from the Nitrogenâ€Fixing Bacterium Azotobacter chroococcum. Angewandte Chemie - International Edition, 2018, 57, 536-541.	13.8	23
17	The role of oxygen in stimulating methane production in wetlands. Global Change Biology, 2021, 27, 5831-5847.	9.5	23
18	Fate of DTPA, EDTA, and EDDS in Hydroponic Media and Effects on Plant Mineral Nutrition. Journal of Plant Nutrition, 2007, 30, 1229-1246.	1.9	21

#	Article	IF	Citations
19	Genetic, structural, and functional diversity of low and high-affinity siderophores in strains of nitrogen fixingAzotobacter chroococcum. Metallomics, 2019, 11, 201-212.	2.4	21
20	Critical inundation level for methane emissions from wetlands. Environmental Research Letters, 2021, 16, 044038.	5.2	17
21	Genes for selenium dependent and independent formate dehydrogenase in the gut microbial communities of three lower, woodâ€feeding termites and a woodâ€feeding roach. Environmental Microbiology, 2011, 13, 307-323.	3.8	13
22	Evidence for Cascades of Perturbation and Adaptation in the Metabolic Genes of Higher Termite Gut Symbionts. MBio, 2012, 3, .	4.1	13
23	The purple nonâ€sulfur bacterium Rhodopseudomonas palustris produces novel petrobactinâ€related siderophores under aerobic and anaerobic conditions. Environmental Microbiology, 2018, 20, 1667-1676.	3.8	13
24	Crochelins: Siderophores with an Unprecedented Ironâ€Chelating Moiety from the Nitrogenâ€Fixing Bacterium Azotobacter chroococcum. Angewandte Chemie, 2018, 130, 545-550.	2.0	11
25	Effect of iron limitation on the isotopic composition of cellular and released fixed nitrogen in Azotobacter vinelandii. Geochimica Et Cosmochimica Acta, 2019, 244, 12-23.	3.9	9
26	Large Hydrogen Isotope Fractionation Distinguishes Nitrogenase-Derived Methane from Other Methane Sources. Applied and Environmental Microbiology, 2020, 86, .	3.1	8
27	Biohydrogen production relationship to biomass composition, growth, temperature and nitrogenase isoform in the anaerobic photoheterotrophic diazotroph Rhodopseudomonas palustris. International Journal of Hydrogen Energy, 2022, 47, 28399-28409.	7.1	3
28	Genome-Wide Effects of Selenium and Translational Uncoupling on Transcription in the Termite Gut Symbiont Treponema primitia. MBio, 2013, 4, e00869-13.	4.1	1
29	Ammonium sensitivity of biological nitrogen fixation by anaerobic diazotrophs in cultures and benthic marine sediments. Journal of Geophysical Research G: Biogeosciences, 0, , .	3.0	1