Grant M Zane

List of Publications by Year
in descending order

37 papers	1,489 citations	471509 17 h-index	395702 33 g-index
43 all docs	43 docs citations	43 times ranked	2197 citing authors

#	Article	IF	Citations
1	Mutant phenotypes for thousands of bacterial genes of unknown function. Nature, 2018, 557, 503-509.	27.8	433
2	Genetic basis for nitrate resistance in Desulfovibrio strains. Frontiers in Microbiology, 2014, 5, 153.	3.5	202
3	Effect of the Deletion of qmoABC and the Promoter-Distal Gene Encoding a Hypothetical Protein on Sulfate Reduction in Desulfovibrio vulgaris Hildenborough. Applied and Environmental Microbiology, 2010, 76, 5500-5509.	3.1	97
4	Filling gaps in bacterial amino acid biosynthesis pathways with high-throughput genetics. PLoS Genetics, 2018, 14, e1007147.	3.5	90
5	Erosion of functional independence early in the evolution of a microbial mutualism. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14822-14827.	7.1	63
6	Mechanisms of Chromium and Uranium Toxicity in Pseudomonas stutzeri RCH2 Grown under Anaerobic Nitrate-Reducing Conditions. Frontiers in Microbiology, 2017, 8, 1529.	3.5	45
7	Rex (Encoded by DVU_0916) in Desulfovibrio vulgaris Hildenborough Is a Repressor of Sulfate Adenylyl Transferase and Is Regulated by NADH. Journal of Bacteriology, 2015, 197, 29-39.	2.2	37
8	Functional Characterization of Crp/Fnr-Type Global Transcriptional Regulators in Desulfovibrio vulgaris Hildenborough. Applied and Environmental Microbiology, 2012, 78, 1168-1177.	3.1	32
9	Biofilm growth mode promotes maximum carrying capacity and community stability during product inhibition syntrophy. Frontiers in Microbiology, 2014, 5, 693.	3.5	32
10	Rapid Transposon Liquid Enrichment Sequencing (TnLE-seq) for Gene Fitness Evaluation in Underdeveloped Bacterial Systems. Applied and Environmental Microbiology, 2013, 79, 7510-7517.	3.1	28
11	Identification of a cyclic-di-GMP-modulating response regulator that impacts biofilm formation in a model sulfate reducing bacterium. Frontiers in Microbiology, 2014, 5, 382.	3.5	28
12	Adeno-Associated Virus (AAV) Gene Delivery: Dissecting Molecular Interactions upon Cell Entry. Viruses, 2021, 13, 1336.	3.3	28
13	Regulation of Nitrite Stress Response in Desulfovibrio vulgaris Hildenborough, a Model Sulfate-Reducing Bacterium. Journal of Bacteriology, 2015, 197, 3400-3408.	2.2	27
14	Fractionation of sulfur isotopes by Desulfovibrio vulgaris mutants lacking hydrogenases or type I tetraheme cytochrome c3. Frontiers in Microbiology, 2013, 4, 171.	3.5	26
15	Rapid selective sweep of pre-existing polymorphisms and slow fixation of new mutations in experimental evolution of Desulfovibrio vulgaris. ISME Journal, 2015, 9, 2360-2372.	9.8	24
16	Mechanism for microbial population collapse in a fluctuating resource environment. Molecular Systems Biology, 2017, 13, 919.	7.2	22
17	Ironâ€•and aluminiumâ€•induced depletion of molybdenum in acidic environments impedes the nitrogen cycle. Environmental Microbiology, 2019, 21, 152-163.	3.8	22
18	Novel Metal Cation Resistance Systems from Mutant Fitness Analysis of Denitrifying Pseudomonas stutzeri. Applied and Environmental Microbiology, 2016, 82, 6046-6056.	3.1	21

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19	Deletion of the Desulfovibrio vulgaris Carbon Monoxide Sensor Invokes Global Changes in Transcription. Journal of Bacteriology, 2012, 194, 5783-5793.	2.2	20
20	The Structure of an AAV5-AAVR Complex at 2.5 â„« Resolution: Implications for Cellular Entry and Immune Neutralization of AAV Gene Therapy Vectors. Viruses, 2020, 12, 1326.	3.3	20
21	Sulfur Isotope Fractionation during the Evolutionary Adaptation of a Sulfate-Reducing Bacterium. Applied and Environmental Microbiology, 2015, 81, 2676-2689.	3.1	18
22	Unintended Laboratory-Driven Evolution Reveals Genetic Requirements for Biofilm Formation by Desulfovibrio vulgaris Hildenborough. MBio, 2017, 8, .	4.1	18
23	Cr(VI) reduction and physiological toxicity are impacted by resource ratio in Desulfovibrio vulgaris. Applied Microbiology and Biotechnology, 2018, 102, 2839-2850.	3.6	18
24	Characterization of subsurface media from locations up- and down-gradient of a uranium-contaminated aquifer. Chemosphere, 2020, 255, 126951.	8.2	18
25	New Family of Tungstate-Responsive Transcriptional Regulators in Sulfate-Reducing Bacteria. Journal of Bacteriology, 2013, 195, 4466-4475.	2.2	16
26	Adaptation of Desulfovibrio alaskensis G20 to perchlorate, a specific inhibitor of sulfate reduction. Environmental Microbiology, 2019, 21, 1395-1406.	3.8	14
27	Key Metabolites and Mechanistic Changes for Salt Tolerance in an Experimentally Evolved Sulfate-Reducing Bacterium, Desulfovibrio vulgaris. MBio, 2017, 8, .	4.1	13
28	Towards a Rigorous Network of Protein-Protein Interactions of the Model Sulfate Reducer Desulfovibrio vulgaris Hildenborough. PLoS ONE, 2011, 6, e21470.	2.5	12
29	Deconstructing the Dissimilatory Sulfate Reduction Pathway: Isotope Fractionation of a Mutant Unable of Growth on Sulfate. Frontiers in Microbiology, 2018, 9, 3110.	3.5	11
30	Experimental evolution reveals nitrate tolerance mechanisms in Desulfovibrio vulgaris. ISME Journal, 2020, 14, 2862-2876.	9.8	10
31	Expression and Purification of Adeno-associated Virus Virus-like Particles in a Baculovirus System and AAVR Ectodomain Constructs in E. coli. Bio-protocol, 2020, 10, e3513.	0.4	9
32	Exploring the role of CheA3 in Desulfovibrio vulgaris Hildenborough motility. Frontiers in Microbiology, 2014, 5, 77.	3.5	7
33	Novel Mode of Molybdate Inhibition of Desulfovibrio vulgaris Hildenborough. Frontiers in Microbiology, 2020, 11, 610455.	3.5	7
34	Adeno-Associated Virus Receptor-Binding: Flexible Domains and Alternative Conformations through Cryo-Electron Tomography of Adeno-Associated Virus 2 (AAV2) and AAV5 Complexes. Journal of Virology, 2022, 96, .	3.4	7
35	Deletion Mutants, Archived Transposon Library, and Tagged Protein Constructs of the Model Sulfate-Reducing Bacterium Desulfovibrio vulgaris Hildenborough. Microbiology Resource Announcements, 2021, 10, .	0.6	6
36	LurR is a regulator of the central lactate oxidation pathway in sulfate-reducing Desulfovibrio species. PLoS ONE, 2019, 14, e0214960.	2.5	3

#	Article	IF	Citations
37	Biofilm Interaction Mapping and Analysis (BIMA) of Interspecific Interactions in Pseudomonas Co-culture Biofilms. Frontiers in Microbiology, 2021, 12, 757856.	3.5	1