Jonathan D Todd

List of Publications by Year
in descending order

70 papers	4,365 citations	117625 34 h-index	114465 63 g-index
75 all docs	75 docs citations	75 times ranked	3142 citing authors

#	Article	IF	Citations
1	The genome of Rhizobium leguminosarum has recognizable core and accessory components. Genome Biology, 2006, 7, R34.	9.6	489
2	Catabolism of dimethylsulphoniopropionate: microorganisms, enzymes and genes. Nature Reviews Microbiology, 2011, 9, 849-859.	28.6	314
3	Structural and Regulatory Genes Required to Make the Gas Dimethyl Sulfide in Bacteria. Science, 2007, 315, 666-669.	12.6	256
4	Dimethylsulfoniopropionate biosynthesis in marine bacteria and identification of the key gene in this process. Nature Microbiology, 2017, 2, 17009.	13.3	222
5	Molecular genetic analysis of a dimethylsulfoniopropionate lyase that liberates the climateâ€changing gas dimethylsulfide in several marine Î±â€proteobacteria and <i>Rhodobacter sphaeroides</i>. Environmental Microbiology, 2008, 10, 757-767.	3.8	156
6	The <i>dddP</i> gene, encoding a novel enzyme that converts dimethylsulfoniopropionate into dimethyl sulfide, is widespread in ocean metagenomes and marine bacteria and also occurs in some Ascomycete fungi. Environmental Microbiology, 2009, 11, 1376-1385.	3.8	145
7	Computational Reconstruction of Iron- and Manganese-Responsive Transcriptional Networks in Î±-Proteobacteria. PLoS Computational Biology, 2006, 2, e163.	3.2	138
8	Proliferation of hydrocarbon-degrading microbes at the bottom of the Mariana Trench. Microbiome, 2019, 7, 47.	11.1	128
9	Molecular dissection of bacterial acrylate catabolism â€“ unexpected links with dimethylsulfoniopropionate catabolism and dimethyl sulfide production. Environmental Microbiology, 2010, 12, 327-343.	3.8	116
10	DSYB catalyses the key step of dimethylsulfoniopropionate biosynthesis in many phytoplankton. Nature Microbiology, 2018, 3, 430-439.	13.3	116
11	RirA, an iron-responsive regulator in the symbiotic bacterium Rhizobium leguminosarum The GenBank accession number for the RirA sequence is CAC35510.. Microbiology (United Kingdom), 2002, 148, 4059-4071.	1.8	114
12	DddQ, a novel, cupinâ€containing, dimethylsulfoniopropionate lyase in marine roseobacters and in uncultured marine bacteria. Environmental Microbiology, 2011, 13, 427-438.	3.8	111
13	The abundant marine bacterium Pelagibacter simultaneously catabolizes dimethylsulfoniopropionate to the gases dimethyl sulfide and methanethiol. Nature Microbiology, 2016, 1, 16065.	13.3	110
14	The Fur-like protein Mur of Rhizobium leguminosarum is a Mn2+-responsive transcriptional regulator. Microbiology (United Kingdom), 2004, 150, 1447-1456.	1.8	105
15	Living without Fur: the subtlety and complexity of iron-responsive gene regulation in the symbiotic bacterium Rhizobium and other Î±-proteobacteria. BioMetals, 2007, 20, 501-511.	4.1	92
16	DddW, a third DMSP lyase in a model Roseobacter marine bacterium, <i>Ruegeria pomeroyi</i> DSS-3. ISME Journal, 2012, 6, 223-226.	9.8	88
17	A novel pathway producing dimethylsulphide in bacteria is widespread in soil environments. Nature Communications, 2015, 6, 6579.	12.8	82
18	DddY, a periplasmic dimethylsulfoniopropionate lyase found in taxonomically diverse species of Proteobacteria. ISME Journal, 2011, 5, 1191-1200.	9.8	78

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19	Biogenic production of DMSP and its degradation to DMSâ€"their roles in the global sulfur cycle. Science China Life Sciences, 2019, 62, 1296-1319.	4.9	68
20	Bacteria are important dimethylsulfoniopropionate producers in coastal sediments. Nature Microbiology, 2019, 4, 1815-1825.	13.3	67
21	Enzymatic breakage of dimethylsulfoniopropionate â€" a signature molecule for life at sea. Current Opinion in Chemical Biology, 2016, 31, 58-65.	6.1	62
22	Bacterial SBP56 identified as a Cu-dependent methanethiol oxidase widely distributed in the biosphere. ISME Journal, 2018, 12, 145-160.	9.8	62
23	Bacteria are important dimethylsulfoniopropionate producers in marine aphotic and high-pressure environments. Nature Communications, 2020, 11, 4658.	12.8	62
24	Fur is not the global regulator of iron uptake genes in Rhizobium leguminosarum. Microbiology (United Kingdom), 2003, 149, 1357-1365.	1.8	56
25	Methanethiol-dependent dimethylsulfide production in soil environments. ISME Journal, 2017, 11, 2379-2390.	9.8	54
26	The dddP gene of Roseovarius nubinhibens encodes a novel lyase that cleaves dimethylsulfoniopropionate into acrylate plus dimethyl sulfide. Microbiology (United Kingdom), 2010, 156, 1900-1906.	1.8	49
27	The Rhizobium leguminosarum regulator IrrA affects the transcription of a wide range of genes in response to Fe availability. Molecular Genetics and Genomics, 2006, 275, 564-577.	2.1	45
28	Evidence that the Rhizobium regulatory protein RirA binds to cis-acting iron-responsive operators (IROs) at promoters of some Fe-regulated genes. Microbiology (United Kingdom), 2004, 150, 4065-4074.	1.8	44
29	Heme-responsive DNA Binding by the Global Iron Regulator Irr from Rhizobium leguminosarum. Journal of Biological Chemistry, 2010, 285, 16023-16031.	3.4	44
30	The Ruegeria pomeroyi acuI Gene Has a Role in DMSP Catabolism and Resembles yhdH of E. coli and Other Bacteria in Conferring Resistance to Acrylate. PLoS ONE, 2012, 7, e35947.	2.5	43
31	Proteomic analysis reveals the wide-ranging effects of the novel, iron-responsive regulator RirA in Rhizobium leguminosarum bv. viciae. Molecular Genetics and Genomics, 2005, 273, 197-206.	2.1	40
32	Biochemical, Kinetic, and Spectroscopic Characterization of Ruegeria pomeroyi DddWâ€"A Mononuclear Iron-Dependent DMSP Lyase. PLoS ONE, 2015, 10, e0127288.	2.5	40
33	Identification of genes for dimethyl sulfide production in bacteria in the gut of Atlantic Herring (<i>Clupea harengus</i>). ISME Journal, 2010, 4, 144-146.	9.8	38
34	Biosynthesis of CdS Quantum Dots Mediated by Volatile Sulfur Compounds Released by Antarctic Pseudomonas fragi. Frontiers in Microbiology, 2019, 10, 1866.	3.5	38
35	A novel ATP dependent dimethylsulfoniopropionate lyase in bacteria that releases dimethyl sulfide and acryloyl-CoA. ELife, 2021, 10, .	6.0	38
36	Molecular diversity of bacterial production of the climate-changing gas, dimethyl sulphide, a molecule that impinges on local and global symbioses. Journal of Experimental Botany, 2008, 59, 1059-1067.	4.8	36

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37	Novel Insights Into Bacterial Dimethylsulfoniopropionate Catabolism in the East China Sea. Frontiers in Microbiology, 2018, 9, 3206.	3.5	35
38	The opportunistic coral pathogen <i>Aspergillus sydowii</i> contains <i>dddP</i> and makes dimethyl sulfide from dimethylsulfoniopropionate. ISME Journal, 2010, 4, 147-150.	9.8	33
39	Unusual Regulation of a Leaderless Operon Involved in the Catabolism of Dimethylsulfoniopropionate in Rhodobacter sphaeroides. PLoS ONE, 2011, 6, e15972.	2.5	33
40	The manganese-responsive repressor Mur of Rhizobium leguminosarum is a member of the Fur-superfamily that recognizes an unusual operator sequence. Microbiology (United Kingdom), 2005, 151, 4071-4078.	1.8	32
41	DMSP-Producing Bacteria Are More Abundant in the Surface Microlayer than Subsurface Seawater of the East China Sea. Microbial Ecology, 2020, 80, 350-365.	2.8	28
42	Sensing iron availability <i>via</i> the fragile [4Feâ€“4S] cluster of the bacterial transcriptional repressor RirA. Chemical Science, 2017, 8, 8451-8463.	7.4	27
43	Mechanisms of iron- and O2-sensing by the [4Fe-4S] cluster of the global iron regulator RirA. ELife, 2019, 8, .	6.0	27
44	Structural and Biochemical Insights into Dimethylsulfoniopropionate Cleavage by Cofactor-Bound DddK from the Prolific Marine Bacterium <i>Pelagibacter</i>. Biochemistry, 2017, 56, 2873-2885.	2.5	26
45	Manganese uptake in marine bacteria; the novel MntX transporter is widespread in Roseobacters, Vibrios, Alteromonadales and the SAR11 and SAR116 clades. ISME Journal, 2013, 7, 581-591.	9.8	23
46	Methanethiol and Dimethylsulfide Cycling in Stiffkey Saltmarsh. Frontiers in Microbiology, 2019, 10, 1040.	3.5	23
47	Mechanistic Insights into Dimethylsulfoniopropionate Lyase DddY, a New Member of the Cupin Superfamily. Journal of Molecular Biology, 2017, 429, 3850-3862.	4.2	22
48	Metagenomic Insights Into the Cycling of Dimethylsulfoniopropionate and Related Molecules in the Eastern China Marginal Seas. Frontiers in Microbiology, 2020, 11, 157.	3.5	22
49	Diversity of DMSP transport in marine bacteria, revealed by genetic analyses. Biogeochemistry, 2012, 110, 121-130.	3.5	21
50	DiTing: A Pipeline to Infer and Compare Biogeochemical Pathways From Metagenomic and Metatranscriptomic Data. Frontiers in Microbiology, 2021, 12, 698286.	3.5	21
51	Screening of Metagenomic and Genomic Libraries Reveals Three Classes of Bacterial Enzymes That Overcome the Toxicity of Acrylate. PLoS ONE, 2014, 9, e97660.	2.5	20
52	Multiple DMSP lyases in the Î³-proteobacterium Oceanimonas doudoroffii. Biogeochemistry, 2012, 110, 109-119.	3.5	18
53	Mechanistic insight into 3â€‘methylmercaptopropionate metabolism and kinetical regulation of demethylation pathway in marine dimethylsulfoniopropionateâ€‘catabolizing bacteria. Molecular Microbiology, 2019, 111, 1057-1073.	2.5	18
54	DMSP Production by Coral-Associated Bacteria. Frontiers in Marine Science, 2022, 9, .	2.5	17

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55	Phylogenetic diversity of the <i>dddP</i> gene for dimethylsulfoniopropionate-dependent dimethyl sulfide synthesis in mangrove soils. Canadian Journal of Microbiology, 2012, 58, 523-530.	1.7	16
56	Mechanistic insight into acrylate metabolism and detoxification in marine dimethylsulfoniopropionateâ€catabolizing bacteria. Molecular Microbiology, 2017, 105, 674-688.	2.5	16
57	The Production and Fate of Volatile Organosulfur Compounds in Sulfidic and Ferruginous Sediment. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 3390-3402.	3.0	14
58	Heme binding to the second, lowerâ€affinity site of the global iron regulator Irr from <i>Rhizobiumâ€ƒleguminosarum</i> promotes oligomerization. FEBS Journal, 2011, 278, 2011-2021.	4.7	13
59	Recumbent Stepper Submaximal Test response is reliable in adults with and without stroke. PLoS ONE, 2017, 12, e0172294.	2.5	13
60	Comparative Genomics and Mutational Analysis Reveals a Novel XoxF-Utilizing Methylotroph in the Roseobacter Group Isolated From the Marine Environment. Frontiers in Microbiology, 2018, 9, 766.	3.5	13
61	Structure-Function Analysis Indicates that an Active-Site Water Molecule Participates in Dimethylsulfoniopropionate Cleavage by DddK. Applied and Environmental Microbiology, 2019, 85, .	3.1	12
62	Bacterial Dimethylsulfoniopropionate Biosynthesis in the East China Sea. Microorganisms, 2021, 9, 657.	3.6	12
63	Spatiotemporal distribution of bacterial dimethylsulfoniopropionate producing and catabolic genes in the Changjiang Estuary. Environmental Microbiology, 2021, 23, 7073-7092.	3.8	11
64	The <i>dddP</i> gene, encoding a novel enzyme that converts dimethylsulfoniopropionate into dimethyl sulfide, is widespread in ocean metagenomes and marine bacteria and also occurs in some Ascomycete fungi. Environmental Microbiology, 2009, 11, 1624-1625.	3.8	9
65	Insights into methionine S-methylation in diverse organisms. Nature Communications, 2022, 13, .	12.8	9
66	A day in the life of marine sulfonates. Nature Microbiology, 2019, 4, 1610-1611.	13.3	7
67	Microbial Origins and Consequences of Dimethyl Sulfide. Microbe Magazine, 2012, 7, 181-185.	0.4	6
68	Molecular genetic analysis of a dimethylsulfoniopropionate lyase that liberates the climateâ€changing gas dimethylsulfide in several marine Î±â€proteobacteria and <i>Rhodobacter sphaeroides</i>. Environmental Microbiology, 2008, 10, 1099-1099.	3.8	5
69	Mechanistic insights into the key marine dimethylsulfoniopropionate synthesis enzyme DsyB/DSYB. , 2022, 1, 114-130.		5
70	Dimethylsulfoniopropionate Biosynthetic Bacteria in the Subseafloor Sediments of the South China Sea. Frontiers in Microbiology, 2021, 12, 731524.	3.5	4