James P Shapleigh

List of Publications by Year
in descending order

64 papers	2,642 citations	159585 30 h-index	206112 48 g-index
68 all docs	68 docs citations	68 times ranked	2311 citing authors

#	Article	IF	Citations
1	Linking meta-omics to the kinetics of denitrification intermediates reveals pH-dependent causes of N2O emissions and nitrite accumulation in soil. ISME Journal, 2022, 16, 26-37.	9.8	40
2	The anammox coupled partial-denitrification process in an integrated granular sludge and fixed-biofilm reactor developed for mainstream wastewater treatment: Performance and community structure. Water Research, 2022, 210, 117964.	11.3	52
3	Performance characteristics and community analysis of a single-stage partial nitritation, anammox and denitratation (SPANADA) integrated process for treating low C/N ratio wastewater. Chemical Engineering Journal, 2022, 433, 134452.	12.7	10
4	Community Organization and Metagenomics of Bacterial Assemblages Across Local Scale pH Gradients in Northern Forest Soils. Microbial Ecology, 2021, 81, 758-769.	2.8	10
5	Soil Organic Matter, Soil Structure, and Bacterial Community Structure in a Post-Agricultural Landscape. Frontiers in Earth Science, 2021, 9, .	1.8	9
6	Competition for electrons favours <scp>N₂O</scp> reduction in denitrifying <i>Bradyrhizobium</i> isolates. Environmental Microbiology, 2021, 23, 2244-2259.	3.8	24
7	Phenolic acid-degrading <i>Paraburkholderia</i> prime decomposition in forest soil. ISME Communications, 2021, 1, .	4.2	17
8	Long-term effects of acetylene on denitrifying N2O production: Biomass performance and microbial community. Journal of Water Process Engineering, 2021, 42, 102137.	5.6	9
9	Metagenomics and metatranscriptomics uncover the microbial community associated with high S0 production in a denitrifying desulfurization granular sludge reactor. Water Research, 2021, 203, 117505.	11.3	12
10	Metagenomics reveals microbial community differences lead to differential nitrate production in anammox reactors with differing nitrogen loading rates. Water Research, 2020, 169, 115279.	11.3	62
11	Application of acidic conditions and inert-gas sparging to achieve high-efficiency nitrous oxide recovery during nitrite denitrification. Water Research, 2020, 182, 116001.	11.3	20
12	Metagenomics revealed the phase-related characteristics during rapid development of halotolerant aerobic granular sludge. Environment International, 2020, 137, 105548.	10.0	21
13	Bacteriophage-mediated extracellular DNA release is important for the structural stability of aerobic granular sludge. Science of the Total Environment, 2020, 726, 138392.	8.0	5
14	Using metagenomics to reveal landscape scale patterns of denitrifiers in a montane forest ecosystem. Soil Biology and Biochemistry, 2019, 138, 107585.	8.8	16
15	Multi-omics reveal various potential antimonate reductases from phylogenetically diverse microorganisms. Applied Microbiology and Biotechnology, 2019, 103, 9119-9129.	3.6	20
16	Metagenomic analysis reveals distinct patterns of denitrification gene abundance across soil moisture, nitrate gradients. Environmental Microbiology, 2019, 21, 1255-1266.	3.8	49
17	Metagenomic Evidence for a Methylocystis Species Capable of Bioremediation of Diverse Heavy Metals. Frontiers in Microbiology, 2019, 9, 3297.	3.5	19
18	Plant-Microbe Interactions Drive Denitrification Rates, Dissolved Nitrogen Removal, and the Abundance of Denitrification Genes in Stormwater Control Measures. Environmental Science & Technology, 2018, 52, 9320-9329.	10.0	57

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19	Salinity-Aided Selection of Progressive Onset Denitrifiers as a Means of Providing Nitrite for Anammox. Environmental Science & Technology, 2018, 52, 10665-10672.	10.0	64
20	Modularity of nitrogenâ€oxide reducing soil bacteria: linking phenotype to genotype. Environmental Microbiology, 2017, 19, 2507-2519.	3.8	69
21	The Role of Denitrification in Stormwater Detention Basin Treatment of Nitrogen. Environmental Science & Technology, 2017, 51, 7928-7935.	10.0	52
22	Reduction of nitrate to nitrite by microbes under oxic conditions. Soil Biology and Biochemistry, 2016, 100, 1-8.	8.8	39
23	Development, assessment and evaluation of a biopile for hydrocarbons soil remediation. International Biodeterioration and Biodegradation, 2015, 98, 66-72.	3.9	17
24	Metatranscriptomic Analyses of Plankton Communities Inhabiting Surface and Subpycnocline Waters of the Chesapeake Bay during Oxic-Anoxic-Oxic Transitions. Applied and Environmental Microbiology, 2014, 80, 328-338.	3.1	47
25	Role of <i>norEF</i> in Denitrification, Elucidated by Physiological Experiments with Rhodobacter sphaeroides. Journal of Bacteriology, 2014, 196, 2190-2200.	2.2	10
26	A Novel Protein Protects Bacterial Iron-Dependent Metabolism from Nitric Oxide. Journal of Bacteriology, 2013, 195, 4702-4708.	2.2	46
27	Denitrifying Prokaryotes. , 2013, , 405-425.		54
28	Oxygen control of nitrogen oxide respiration, focusing on Î±-proteobacteria. Biochemical Society Transactions, 2011, 39, 179-183.	3.4	28
29	Physiological Roles for Two Periplasmic Nitrate Reductases in Rhodobacter sphaeroides 2.4.3 (ATCC) Tj ETQq1 1 0.784314 rgBT /Over	2.2	30
30	Identification, Functional Studies, and Genomic Comparisons of New Members of the NnrR Regulon in <i>Rhodobacter sphaeroides</i>. Journal of Bacteriology, 2010, 192, 903-911.	2.2	17
31	Mechanisms of oxygen inhibition of nirK expression in Rhodobacter sphaeroides. Microbiology (United Kingdom), 2010, 156, 3158-3165.	1.8	6
32	Dissimilatory and Assimilatory Nitrate Reduction in the Purple Photosynthetic Bacteria. Advances in Photosynthesis and Respiration, 2009, , 623-642.	1.0	10
33	Transcription and activities of NO_x reductases in <i>Agrobacterium tumefaciens</i>: the influence of nitrate, nitrite and oxygen availability. Environmental Microbiology, 2008, 10, 3070-3081.	3.8	95
34	<i>Agrobacterium tumefaciens</i> C58 Uses ActR and FnrN To Control <i>nirK</i> and <i>nor</i> Expression. Journal of Bacteriology, 2008, 190, 78-86.	2.2	25
35	Selenite-reducing capacity of the copper-containing nitrite reductase ofRhizobium sullae. FEMS Microbiology Letters, 2007, 269, 124-130.	1.8	65
36	The Denitrifying Prokaryotes. , 2006, , 769-792.		69

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37	ENDOR of NO-Ligated Cytochromecâ€˜. Journal of the American Chemical Society, 2006, 128, 5021-5032.	13.7	18
38	EPRâˆ'ENDOR of the Cu(I)NO Complex of Nitrite Reductase. Journal of the American Chemical Society, 2006, 128, 13102-13111.	13.7	48
39	Assessing the Impact of Denitrifier-Produced Nitric Oxide on Other Bacteria. Applied and Environmental Microbiology, 2006, 72, 2200-2205.	3.1	40
40	Electron transfer to nitrite reductase of Rhodobacter sphaeroides 2.4.3: examination of cytochromes c 2 and c Y. Microbiology (United Kingdom), 2006, 152, 1479-1488.	1.8	7
41	Expression of Nitrite and Nitric Oxide Reductases in Free-Living and Plant-Associated Agrobacterium tumefaciens C58 Cells. Applied and Environmental Microbiology, 2005, 71, 4427-4436.	3.1	36
42	Regulation and Function of Cytochrome <i>c</i> â€² in <i>Rhodobacter sphaeroides</i> 2.4.3. Journal of Bacteriology, 2005, 187, 4077-4085.	2.2	27
43	ENDOR Investigation of the Liganding Environment of Mixed-Spin Ferric Cytochromecâ€˜. Journal of the American Chemical Society, 2005, 127, 9485-9494.	13.7	18
44	Denitrification Genes Regulate Brucella Virulence in Mice. Journal of Bacteriology, 2004, 186, 6025-6031.	2.2	44
45	Site-directed mutagenesis of NnrR: a transcriptional regulator of nitrite and nitric oxide reductase inRhodobacter sphaeroides. FEMS Microbiology Letters, 2003, 229, 173-178.	1.8	17
46	Spectroscopic Studies of the Met182Thr Mutant of Nitrite Reductase:Â Role of the Axial Ligand in the Geometric and Electronic Structure of Blue and Green Copper Sites. Journal of the American Chemical Society, 2003, 125, 14784-14792.	13.7	55
47	Use of a Green Fluorescent Protein-Based Reporter Fusion for Detection of Nitric Oxide Produced by Denitrifiers. Applied and Environmental Microbiology, 2003, 69, 3938-3944.	3.1	23
48	Involvement of the PrrB/PrrA Two-Component System in Nitrite Respiration in Rhodobacter sphaeroides 2.4.3: Evidence for Transcriptional Regulation. Journal of Bacteriology, 2002, 184, 3521-3529.	2.2	45
49	Taxis Response of Various Denitrifying Bacteria to Nitrate and Nitrite. Applied and Environmental Microbiology, 2002, 68, 2140-2147.	3.1	38
50	Study of Specific Binding of Maltose Binding Protein to Pyrrole-Derived Bipyridinium Film by Quartz Crystal Microbalance. Langmuir, 2002, 18, 4892-4897.	3.5	7
51	Characterization of a member of the NnrR regulon in Rhodobacter sphaeroides 2.4.3 encoding a haemâ€“copper protein The GenBank accession number for nnrS is U62403.. Microbiology (United) Tj ETQq1 1 0.784314 rg BT /Overlo	1.8	39
52	The home stretch, a first analysis of the nearly completed genome of Rhodobacter sphaeroides 2.4.1. Photosynthesis Research, 2001, 70, 19-41.	2.9	129
53	Characterization of nirV and a gene encoding a novel pseudoazurin in Rhodobacter sphaeroides 2.4.3 The GenBank accession number for the sequence determined in this work is AF339883.. Microbiology (United Kingdom), 2001, 147, 2505-2515.	1.8	38
54	Electrocatalytic Reduction ofS-Nitrosoglutathione at Electrodes Modified with an Electropolymerized Film of a Pyrrole-Derived Viologen System and Their Application to CellularS-Nitrosoglutathione Determinations. Analytical Biochemistry, 1998, 263, 102-112.	2.4	6

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55	FT-IR analysis of membranes of Rhodobacter sphaeroides 2.4.3 grown under microaerobic and denitrifying conditions. Biochimica Et Biophysica Acta - Bioenergetics, 1998, 1409, 99-105.	1.0	5
56	Spectroscopic, Kinetic, and Electrochemical Characterization of Heterologously Expressed Wild-Type and Mutant Forms of Copper-Containing Nitrite Reductase fromRhodobacter sphaeroides2.4.3â€. Biochemistry, 1998, 37, 6086-6094.	2.5	107
57	Electronic Structural Information from Q-Band ENDOR on the Type 1 and Type 2 Copper Liganding Environment in Wild-Type and Mutant Forms of Copper-Containing Nitrite Reductaseâ€. Biochemistry, 1998, 37, 6095-6105.	2.5	66
58	A pH-Dependent Polarity Change at the Binuclear Center of Reduced CytochromecOxidase Detected by FTIR Difference Spectroscopy of the CO Adductâ€. Biochemistry, 1996, 35, 9446-9450.	2.5	47
59	Requirement of Nitric Oxide for Induction of Genes Whose Products Are Involved in Nitric Oxide Metabolism in Rhodobacter sphaeroides 2.4.3. Journal of Biological Chemistry, 1996, 271, 24382-24388.	3.4	78
60	Deletion of the gene encoding cytochromeb562fromRhodobacter sphaeroides. FEMS Microbiology Letters, 1994, 120, 105-110.	1.8	4
61	A Novel Cytochrome c Oxidase from Rhodobacter sphaeroides That Lacks CuA. Biochemistry, 1994, 33, 3113-3119.	2.5	147
62	Insight into the active-site structure and function of cytochrome oxidase by analysis of site-directed mutants of bacterial cytochromeaa 3 and cytochromebo. Journal of Bioenergetics and Biomembranes, 1993, 25, 121-136.	2.3	266
63	Cloning, sequencing and deletion from the chromosome of the gene encoding subunit I of the aa3-type cytochrome c oxidase of Rhodobacter sphaeroides. Molecular Microbiology, 1992, 6, 635-642.	2.5	78
64	Respiration-linked proton flux in Wolinella succinogenes during reduction of N-oxides. Archives of Biochemistry and Biophysics, 1986, 244, 713-718.	3.0	7