John D Coates

List of Publications by Year in Descending Order

107 papers	6,752 citations	37 h-index	82 g-index
141 ext. papers	8,102 ext. citations	8 avg, IF	5.77 L-index

#	Paper	IF	Citations
107	Isolation of a Dissimilatory Iodate-Reducing From a Freshwater Creek in the San Francisco Bay Area.. *Frontiers in Microbiology*, **2021**, 12, 804181	5.7	0
106	The diversity and evolution of microbial dissimilatory phosphite oxidation. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	4
105	Genetic and phylogenetic analysis of dissimilatory iodate-reducing bacteria identifies potential niches across the world’s oceans. *ISME Journal*, **2021**,	11.9	2
104	An uncharacterized clade in the DMSO reductase family of molybdenum oxidoreductases is a new type of chlorate reductase. *Environmental Microbiology Reports*, **2020**, 12, 534-539	3.7	1
103	Identification of a parasitic symbiosis between respiratory metabolisms in the biogeochemical chlorine cycle. *ISME Journal*, **2020**, 14, 1194-1206	11.9	5
102	Anion transport as a target of adaption to perchlorate in sulfate-reducing communities. *ISME Journal*, **2020**, 14, 450-462	11.9	4
101	Tungstate Control of Microbial Sulfidogenesis and Souring of the Engineered Environment. *Environmental Science & Technology*, **2020**, 54, 16119-16127	10.3	2
100	Biofilm Feedbacks Alter Hydrological Characteristics of Fractured Rock Impacting Sulfidogenesis and Treatment. *Energy & Fuels*, **2019**, 33, 10476-10486	4.1	1
99	Resistance and Resilience of Sulfidogenic Communities in the Face of the Specific Inhibitor Perchlorate. *Frontiers in Microbiology*, **2019**, 10, 654	5.7	3
98	Adaptation of Desulfovibrio alaskensis G20 to perchlorate, a specific inhibitor of sulfate reduction. *Environmental Microbiology*, **2019**, 21, 1395-1406	5.2	8
97	Perchlorate and Its Application in the Oil and Gas Industry **2019**, 109-128		1
96	Specific inhibitors of respiratory sulfate reduction: towards a mechanistic understanding. *Microbiology (United Kingdom)*, **2019**, 165, 254-269	2.9	14
95	Genome-resolved metagenomics identifies genetic mobility, metabolic interactions, and unexpected diversity in perchlorate-reducing communities. *ISME Journal*, **2018**, 12, 1568-1581	11.9	24
94	Comprehensive Analysis of Changes in Crude Oil Chemical Composition during Biosouring and Treatments. *Environmental Science & Technology*, **2018**, 52, 1290-1300	10.3	10
93	Dissimilatory Sulfate Reduction Under High Pressure by G20. *Frontiers in Microbiology*, **2018**, 9, 1465	5.7	7
92	Functional Redundancy in Perchlorate and Nitrate Electron Transport Chains and Rewiring Respiratory Pathways to Alter Terminal Electron Acceptor Preference. *Frontiers in Microbiology*, **2018**, 9, 376	5.7	6
91	Metagenomics-guided analysis of microbial chemolithoautotrophic phosphite oxidation yields evidence of a seventh natural CO fixation pathway. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E92-E101	11.5	61

90	Microbial Sulfate Reduction and Perchlorate Inhibition in a Novel Mesoscale Tank Experiment. *Energy & Fuels*, **2018**, 32, 12049-12065	4.1	4
89	Mitigating Sulfidogenesis With Simultaneous Perchlorate and Nitrate Treatments. *Frontiers in Microbiology*, **2018**, 9, 2305	5.7	5
88	Attenuating Sulfidogenesis in a Soured Continuous Flow Column System With Perchlorate Treatment. *Frontiers in Microbiology*, **2018**, 9, 1575	5.7	10
87	Mechanism of HS Oxidation by the Dissimilatory Perchlorate-Reducing Microorganism PS. *MBio*, **2017**, 8,	7.8	23
86	High-Throughput Screening To Identify Potent and Specific Inhibitors of Microbial Sulfate Reduction. *Environmental Science & Technology*, **2017**, 51, 7278-7285	10.3	14
85	Biotechnological Applications of Microbial (Per)chlorate Reduction. *Microorganisms*, **2017**, 5,	4.9	16
84	Microbial metal resistance and metabolism across dynamic landscapes: high-throughput environmental microbiology. *F1000Research*, **2017**, 6, 1026	3.6	6
83	Reactive Transport Model of Sulfur Cycling as Impacted by Perchlorate and Nitrate Treatments. *Environmental Science & Technology*, **2016**, 50, 7010-8	10.3	25
82	Enrichment and Isolation of Chloroxyanion-Respiring Hydrocarbon Oxidizers. *Springer Protocols*, **2016**, 165-176	0.3	1
81	Perchlorate Reductase Is Distinguished by Active Site Aromatic Gate Residues. *Journal of Biological Chemistry*, **2016**, 291, 9190-202	5.4	46
80	Genetic dissection of chlorate respiration in Pseudomonas stutzeri PDA reveals syntrophic (per)chlorate reduction. *Environmental Microbiology*, **2016**, 18, 3342-3354	5.2	14
79	Characterization of an anaerobic marine microbial community exposed to combined fluxes of perchlorate and salinity. *Applied Microbiology and Biotechnology*, **2016**, 100, 9719-9732	5.7	18
78	(Per)chlorate in Biology on Earth and Beyond. *Annual Review of Microbiology*, **2016**, 70, 435-57	17.5	35
77	Monofluorophosphate is a selective inhibitor of respiratory sulfate-reducing microorganisms. *Environmental Science & Technology*, **2015**, 49, 3727-36	10.3	36
76	Synthetic and Evolutionary Construction of a Chlorate-Reducing Shewanella oneidensis MR-1. *MBio*, **2015**, 6, e00282-15	7.8	9
75	Phenotypic and genotypic description of Sedimenticola selenatireducens strain CUZ, a marine (per)chlorate-respiring gammaproteobacterium, and its close relative the chlorate-respiring Sedimenticola strain NSS. *Applied and Environmental Microbiology*, **2015**, 81, 2717-26	4.8	21
74	Novel mechanism for scavenging of hypochlorite involving a periplasmic methionine-rich Peptide and methionine sulfoxide reductase. *MBio*, **2015**, 6, e00233-15	7.8	34
73	Widespread occurrence of (per)chlorate in the Solar System. *Earth and Planetary Science Letters*, **2015**, 430, 470-476	5.3	34

72	Mechanisms of direct inhibition of the respiratory sulfate-reduction pathway by (per)chlorate and nitrate. *ISME Journal*, **2015**, 9, 1295-305	11.9	46
71	Acanthopleuribacterales **2015**, 1-1		
70	Acidobacteriia **2015**, 1-1		
69	Acidobacteriaceae fam. nov. **2015**, 1-1		
68	Acanthopleuribacteraceae **2015**, 1-1		
67	Holophagaceae **2015**, 1-1		
66	Acidobacterium **2015**, 1-1		1
65	Edaphobacter **2015**, 1-3		
64	Terriglobus **2015**, 1-2		
63	Acanthopleuribacter **2015**, 1-2		
62	Holophaga **2015**, 1-2		
61	Acidobacteriales **2015**, 1-1		
60	Holophagales **2015**, 1-1		
59	Acidobacteria phyl. nov. **2015**, 1-5		1
58	Geobacter **2015**, 1-6		
57	Bacteria that Respire Oxyanions of Chlorine **2015**, 1-5		
56	Holophagae **2015**, 1-1		
55	Geothrix **2015**, 1-2		

54	The Perchlorate Reduction Genomic Island: Mechanisms and Pathways of Evolution by Horizontal Gene Transfer. *BMC Genomics*, **2015**, 16, 862	4.5	20
53	(Per)chlorate-reducing bacteria can utilize aerobic and anaerobic pathways of aromatic degradation with (per)chlorate as an electron acceptor. *MBio*, **2015**, 6,	7.8	17
52	Chlorate reduction in Shewanella algae ACDC is a recently acquired metabolism characterized by gene loss, suboptimal regulation and oxidative stress. *Molecular Microbiology*, **2014**, 94, 107-25	4.1	23
51	Accentuate the Positive: Dissimilatory Iron Reduction by Gram-Positive Bacteria **2014**, 173-P1		3
50	Isotopic insights into microbial sulfur cycling in oil reservoirs. *Frontiers in Microbiology*, **2014**, 5, 480	5.7	20
49	Methane oxidation linked to chlorite dismutation. *Frontiers in Microbiology*, **2014**, 5, 275	5.7	12
48	Inhibition of microbial sulfate reduction in a flow-through column system by (per)chlorate treatment. *Frontiers in Microbiology*, **2014**, 5, 315	5.7	57
47	Control of sulfidogenesis through bio-oxidation of H2S coupled to (per)chlorate reduction. *Environmental Microbiology Reports*, **2014**, 6, 558-64	3.7	34
46	Transposon and deletion mutagenesis of genes involved in perchlorate reduction in Azospira suillum PS. *MBio*, **2013**, 5, e00769-13	7.8	22
45	Surfaceomics and surface-enhanced Raman spectroscopy of environmental microbes: matching cofactors with redox-active surface proteins. *Proteomics*, **2013**, 13, 2761-5	4.8	3
44	Physiological and genetic description of dissimilatory perchlorate reduction by the novel marine bacterium Arcobacter sp. strain CAB. *MBio*, **2013**, 4, e00217-13	7.8	29
43	Fe(II) oxidation is an innate capability of nitrate-reducing bacteria that involves abiotic and biotic reactions. *Journal of Bacteriology*, **2013**, 195, 3260-8	3.5	107
42	Structure and evolution of chlorate reduction composite transposons. *MBio*, **2013**, 4,	7.8	49
41	Perchlorate on Mars: a chemical hazard and a resource for humans. *International Journal of Astrobiology*, **2013**, 12, 321-325	1.4	62
40	Bioelectrical redox cycling of anthraquinone-2,6-disulfonate coupled to perchlorate reduction. *Energy and Environmental Science*, **2012**, 5, 7970	35.4	15
39	Perchlorate and chlorate biogeochemistry in ice-covered lakes of the McMurdo Dry Valleys, Antarctica. *Geochimica Et Cosmochimica Acta*, **2012**, 98, 19-30	5.5	27
38	Toward a mechanistic understanding of anaerobic nitrate-dependent iron oxidation: balancing electron uptake and detoxification. *Frontiers in Microbiology*, **2012**, 3, 57	5.7	69
37	Complete genome sequence of the anaerobic perchlorate-reducing bacterium Azospira suillum strain PS. *Journal of Bacteriology*, **2012**, 194, 2767-8	3.5	35

36	Surface multiheme c-type cytochromes from Thermincola potens and implications for respiratory metal reduction by Gram-positive bacteria. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 1702-7	11.5	129
35	A bioassay for the detection of perchlorate in the ppb range. *Environmental Science & Technology*, **2011**, 45, 2958-64	10.3	14
34	Identification of a perchlorate reduction genomic island with novel regulatory and metabolic genes. *Applied and Environmental Microbiology*, **2011**, 77, 7401-4	4.8	38
33	Magnetospirillum bellicus sp. nov., a novel dissimilatory perchlorate-reducing alphaproteobacterium isolated from a bioelectrical reactor. *Applied and Environmental Microbiology* , **2010**, 76, 4730-7	4.8	46
32	Description of the novel perchlorate-reducing bacteria Dechlorobacter hydrogenophilus gen. nov., sp. nov.and Propionivibrio militaris, sp. nov. *Applied Microbiology and Biotechnology*, **2010**, 86, 335-43	5.7	44
31	Physiological and taxonomic description of the novel autotrophic, metal oxidizing bacterium, Pseudogulbenkiania sp. strain 2002. *Applied Microbiology and Biotechnology*, **2009**, 83, 555-65	5.7	67
30	Behavioral response of dissimilatory perchlorate-reducing bacteria to different electron acceptors. *Applied Microbiology and Biotechnology*, **2009**, 84, 955-63	5.7	20
29	A novel ecological role of the Firmicutes identified in thermophilic microbial fuel cells. *ISME Journal* , **2008**, 2, 1146-56	11.9	266
28	Review: Direct and indirect electrical stimulation of microbial metabolism. *Environmental Science & Technology*, **2008**, 42, 3921-31	10.3	272
27	Electrochemical stimulation of microbial perchlorate reduction. *Environmental Science & Technology*, **2007**, 41, 1740-6	10.3	190
26	The Biochemistry and Genetics of Microbial Perchlorate Reduction **2006**, 297-310		4
25	The Microbiology of Perchlorate Reduction and its Bioremediative Application **2006**, 279-295		15
24	Microorganisms pumping iron: anaerobic microbial iron oxidation and reduction. *Nature Reviews Microbiology*, **2006**, 4, 752-64	22.2	1079
23	Biological control of hog waste odor through stimulated microbial Fe(III) reduction. *Applied and Environmental Microbiology*, **2005**, 71, 4728-35	4.8	44
22	Identification, characterization, and classification of genes encoding perchlorate reductase. *Journal of Bacteriology*, **2005**, 187, 5090-6	3.5	117
21	Anaerobic degradation of benzene, toluene, ethylbenzene, and xylene compounds by Dechloromonas strain RCB. *Applied and Environmental Microbiology*, **2005**, 71, 8649-55	4.8	160
20	Metabolic primers for detection of (Per)chlorate-reducing bacteria in the environment and phylogenetic analysis of cld gene sequences. *Applied and Environmental Microbiology*, **2004**, 70, 5651-8	4.8	73
19	Microbial perchlorate reduction: rocket-fueled metabolism. *Nature Reviews Microbiology*, **2004**, 2, 569-80	22.2	397

18	Sequencing and transcriptional analysis of the chlorite dismutase gene of Dechloromonas agitata and its use as a metabolic probe. *Applied and Environmental Microbiology*, **2002**, 68, 4820-6	4.8	71
17	Universal immunoprobe for (per)chlorate-reducing bacteria. *Applied and Environmental Microbiology*, **2002**, 68, 3108-13	4.8	54
16	Environmental factors that control microbial perchlorate reduction. *Applied and Environmental Microbiology*, **2002**, 68, 4425-30	4.8	140
15	Diversity and ubiquity of bacteria capable of utilizing humic substances as electron donors for anaerobic respiration. *Applied and Environmental Microbiology*, **2002**, 68, 2445-52	4.8	162
14	Anaerobic benzene biodegradation--a new era. *Research in Microbiology*, **2002**, 153, 621-8	4	113
13	Anaerobic benzene oxidation coupled to nitrate reduction in pure culture by two strains of Dechloromonas. *Nature*, **2001**, 411, 1039-43	50.4	422
12	Biogenic magnetite formation through anaerobic biooxidation of Fe(II). *Applied and Environmental Microbiology*, **2001**, 67, 2844-8	4.8	198
11	Isolation and Characterization of Two Novel (Per)Chlorate-Reducing Bacteria from Swine Waste Lagoons **2000**, 271-283		32
10	Ubiquity and diversity of dissimilatory (per)chlorate-reducing bacteria. *Applied and Environmental Microbiology*, **1999**, 65, 5234-41	4.8	386
9	Hydrocarbon Bioremediative Potential of (Per)Chlorate-Reducing Bacteria. *Bioremediation Journal*, **1999**, 3, 323-334	2.3	40
8	Humics as an electron donor for anaerobic respiration. *Environmental Microbiology*, **1999**, 1, 89-98	5.2	221
7	Reduction of (per)chlorate by a novel organism isolated from paper mill waste. *Environmental Microbiology*, **1999**, 1, 319-29	5.2	197
6	Localized Sulfate-Reducing Zones in a Coastal Plain Aquifer. *Ground Water*, **1999**, 37, 505-516	2.4	28
5	Anoxic bioremediation of hydrocarbons. *Nature*, **1998**, 396, 730	50.4	52
4	Dissimilatory arsenate and sulfate reduction in Desulfotomaculum auripigmentum sp. nov. *Archives of Microbiology*, **1997**, 168, 380-8	3	230
3	Anaerobic Hydrocarbon Degradation in Petroleum-Contaminated Harbor Sediments under Sulfate-Reducing and Artificially Imposed Iron-Reducing Conditions. *Environmental Science & Technology*, **1996**, 30, 2784-2789	10.3	134
2	Desulfuromonas palmitatis sp. nov., a marine dissimilatory Fe(III) reducer that can oxidize long-chain fatty acids. *Archives of Microbiology*, **1995**, 164, 406-413	3	140
1	Anaerobic Respiratory Iron(II) Oxidation157-171		1