John D Coates

List of Publications by Citations

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	Microorganisms pumping iron: anaerobic microbial iron oxidation and reduction. *Nature Reviews Microbiology*, **2006**, 4, 752-64	22.2	1079
106	Anaerobic benzene oxidation coupled to nitrate reduction in pure culture by two strains of Dechloromonas. *Nature*, **2001**, 411, 1039-43	50.4	422
105	Microbial perchlorate reduction: rocket-fueled metabolism. *Nature Reviews Microbiology*, **2004**, 2, 569-80	22.2	397
104	Ubiquity and diversity of dissimilatory (per)chlorate-reducing bacteria. *Applied and Environmental Microbiology*, **1999**, 65, 5234-41	4.8	386
103	Review: Direct and indirect electrical stimulation of microbial metabolism. *Environmental Science & Technology*, **2008**, 42, 3921-31	10.3	272
102	A novel ecological role of the Firmicutes identified in thermophilic microbial fuel cells. *ISME Journal* , **2008**, 2, 1146-56	11.9	266
101	Dissimilatory arsenate and sulfate reduction in Desulfotomaculum auripigmentum sp. nov. *Archives of Microbiology*, **1997**, 168, 380-8	3	230
100	Humics as an electron donor for anaerobic respiration. *Environmental Microbiology*, **1999**, 1, 89-98	5.2	221
99	Biogenic magnetite formation through anaerobic biooxidation of Fe(II). *Applied and Environmental Microbiology*, **2001**, 67, 2844-8	4.8	198
98	Reduction of (per)chlorate by a novel organism isolated from paper mill waste. *Environmental Microbiology*, **1999**, 1, 319-29	5.2	197
97	Electrochemical stimulation of microbial perchlorate reduction. *Environmental Science & Technology*, **2007**, 41, 1740-6	10.3	190
96	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
95	Anaerobic degradation of benzene, toluene, ethylbenzene, and xylene compounds by Dechloromonas strain RCB. *Applied and Environmental Microbiology*, **2005**, 71, 8649-55	4.8	160
94	Environmental factors that control microbial perchlorate reduction. *Applied and Environmental Microbiology*, **2002**, 68, 4425-30	4.8	140
93	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
92	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
91	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

90	Identification, characterization, and classification of genes encoding perchlorate reductase. *Journal of Bacteriology*, **2005**, 187, 5090-6	3.5	117
89	Anaerobic benzene biodegradation--a new era. *Research in Microbiology*, **2002**, 153, 621-8	4	113
88	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
87	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
86	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
85	Toward a mechanistic understanding of anaerobic nitrate-dependent iron oxidation: balancing electron uptake and detoxification. *Frontiers in Microbiology*, **2012**, 3, 57	5.7	69
84	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
83	Perchlorate on Mars: a chemical hazard and a resource for humans. *International Journal of Astrobiology*, **2013**, 12, 321-325	1.4	62
82	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
81	Inhibition of microbial sulfate reduction in a flow-through column system by (per)chlorate treatment. *Frontiers in Microbiology*, **2014**, 5, 315	5.7	57
80	Universal immunoprobe for (per)chlorate-reducing bacteria. *Applied and Environmental Microbiology*, **2002**, 68, 3108-13	4.8	54
79	Anoxic bioremediation of hydrocarbons. *Nature*, **1998**, 396, 730	50.4	52
78	Structure and evolution of chlorate reduction composite transposons. *MBio*, **2013**, 4,	7.8	49
77	Mechanisms of direct inhibition of the respiratory sulfate-reduction pathway by (per)chlorate and nitrate. *ISME Journal*, **2015**, 9, 1295-305	11.9	46
76	Perchlorate Reductase Is Distinguished by Active Site Aromatic Gate Residues. *Journal of Biological Chemistry*, **2016**, 291, 9190-202	5.4	46
75	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
74	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
73	Biological control of hog waste odor through stimulated microbial Fe(III) reduction. *Applied and Environmental Microbiology*, **2005**, 71, 4728-35	4.8	44

72	Hydrocarbon Bioremediative Potential of (Per)Chlorate-Reducing Bacteria. *Bioremediation Journal*, **1999**, 3, 323-334	2.3	40
71	Identification of a perchlorate reduction genomic island with novel regulatory and metabolic genes. *Applied and Environmental Microbiology*, **2011**, 77, 7401-4	4.8	38
70	Monofluorophosphate is a selective inhibitor of respiratory sulfate-reducing microorganisms. *Environmental Science & Technology*, **2015**, 49, 3727-36	10.3	36
69	Complete genome sequence of the anaerobic perchlorate-reducing bacterium Azospira suillum strain PS. *Journal of Bacteriology*, **2012**, 194, 2767-8	3.5	35
68	(Per)chlorate in Biology on Earth and Beyond. *Annual Review of Microbiology*, **2016**, 70, 435-57	17.5	35
67	Novel mechanism for scavenging of hypochlorite involving a periplasmic methionine-rich Peptide and methionine sulfoxide reductase. *MBio*, **2015**, 6, e00233-15	7.8	34
66	Widespread occurrence of (per)chlorate in the Solar System. *Earth and Planetary Science Letters*, **2015**, 430, 470-476	5.3	34
65	Control of sulfidogenesis through bio-oxidation of H2S coupled to (per)chlorate reduction. *Environmental Microbiology Reports*, **2014**, 6, 558-64	3.7	34
64	Isolation and Characterization of Two Novel (Per)Chlorate-Reducing Bacteria from Swine Waste Lagoons **2000**, 271-283		32
63	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
62	Localized Sulfate-Reducing Zones in a Coastal Plain Aquifer. *Ground Water*, **1999**, 37, 505-516	2.4	28
61	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
60	Reactive Transport Model of Sulfur Cycling as Impacted by Perchlorate and Nitrate Treatments. *Environmental Science & Technology*, **2016**, 50, 7010-8	10.3	25
59	Genome-resolved metagenomics identifies genetic mobility, metabolic interactions, and unexpected diversity in perchlorate-reducing communities. *ISME Journal*, **2018**, 12, 1568-1581	11.9	24
58	Mechanism of HS Oxidation by the Dissimilatory Perchlorate-Reducing Microorganism PS. *MBio*, **2017**, 8,	7.8	23
57	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
56	Transposon and deletion mutagenesis of genes involved in perchlorate reduction in Azospira suillum PS. *MBio*, **2013**, 5, e00769-13	7.8	22
55	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

54	The Perchlorate Reduction Genomic Island: Mechanisms and Pathways of Evolution by Horizontal Gene Transfer. *BMC Genomics*, **2015**, 16, 862	4.5	20
53	Isotopic insights into microbial sulfur cycling in oil reservoirs. *Frontiers in Microbiology*, **2014**, 5, 480	5.7	20
52	Behavioral response of dissimilatory perchlorate-reducing bacteria to different electron acceptors. *Applied Microbiology and Biotechnology*, **2009**, 84, 955-63	5.7	20
51	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
50	(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
49	Biotechnological Applications of Microbial (Per)chlorate Reduction. *Microorganisms*, **2017**, 5,	4.9	16
48	Bioelectrical redox cycling of anthraquinone-2,6-disulfonate coupled to perchlorate reduction. *Energy and Environmental Science*, **2012**, 5, 7970	35.4	15
47	The Microbiology of Perchlorate Reduction and its Bioremediative Application **2006**, 279-295		15
46	High-Throughput Screening To Identify Potent and Specific Inhibitors of Microbial Sulfate Reduction. *Environmental Science & Technology*, **2017**, 51, 7278-7285	10.3	14
45	A bioassay for the detection of perchlorate in the ppb range. *Environmental Science & Technology*, **2011**, 45, 2958-64	10.3	14
44	Specific inhibitors of respiratory sulfate reduction: towards a mechanistic understanding. *Microbiology (United Kingdom)*, **2019**, 165, 254-269	2.9	14
43	Genetic dissection of chlorate respiration in Pseudomonas stutzeri PDA reveals syntrophic (per)chlorate reduction. *Environmental Microbiology*, **2016**, 18, 3342-3354	5.2	14
42	Methane oxidation linked to chlorite dismutation. *Frontiers in Microbiology*, **2014**, 5, 275	5.7	12
41	Comprehensive Analysis of Changes in Crude Oil Chemical Composition during Biosouring and Treatments. *Environmental Science & Technology*, **2018**, 52, 1290-1300	10.3	10
40	Attenuating Sulfidogenesis in a Soured Continuous Flow Column System With Perchlorate Treatment. *Frontiers in Microbiology*, **2018**, 9, 1575	5.7	10
39	Synthetic and Evolutionary Construction of a Chlorate-Reducing Shewanella oneidensis MR-1. *MBio*, **2015**, 6, e00282-15	7.8	9
38	Adaptation of Desulfovibrio alaskensis G20 to perchlorate, a specific inhibitor of sulfate reduction. *Environmental Microbiology*, **2019**, 21, 1395-1406	5.2	8
37	Dissimilatory Sulfate Reduction Under High Pressure by G20. *Frontiers in Microbiology*, **2018**, 9, 1465	5.7	7

36	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
35	Microbial metal resistance and metabolism across dynamic landscapes: high-throughput environmental microbiology. *F1000Research*, **2017**, 6, 1026	3.6	6
34	Identification of a parasitic symbiosis between respiratory metabolisms in the biogeochemical chlorine cycle. *ISME Journal*, **2020**, 14, 1194-1206	11.9	5
33	Mitigating Sulfidogenesis With Simultaneous Perchlorate and Nitrate Treatments. *Frontiers in Microbiology*, **2018**, 9, 2305	5.7	5
32	The Biochemistry and Genetics of Microbial Perchlorate Reduction **2006**, 297-310		4
31	Anion transport as a target of adaption to perchlorate in sulfate-reducing communities. *ISME Journal*, **2020**, 14, 450-462	11.9	4
30	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
29	Microbial Sulfate Reduction and Perchlorate Inhibition in a Novel Mesoscale Tank Experiment. *Energy & Fuels*, **2018**, 32, 12049-12065	4.1	4
28	Resistance and Resilience of Sulfidogenic Communities in the Face of the Specific Inhibitor Perchlorate. *Frontiers in Microbiology*, **2019**, 10, 654	5.7	3
27	Accentuate the Positive: Dissimilatory Iron Reduction by Gram-Positive Bacteria **2014**, 173-P1		3
26	Surfaceomics and surface-enhanced Raman spectroscopy of environmental microbes: matching cofactors with redox-active surface proteins. *Proteomics*, **2013**, 13, 2761-5	4.8	3
25	Tungstate Control of Microbial Sulfidogenesis and Souring of the Engineered Environment. *Environmental Science & Technology*, **2020**, 54, 16119-16127	10.3	2
24	Genetic and phylogenetic analysis of dissimilatory iodate-reducing bacteria identifies potential niches across the world꞉ oceans. *ISME Journal*, **2021**,	11.9	2
23	Biofilm Feedbacks Alter Hydrological Characteristics of Fractured Rock Impacting Sulfidogenesis and Treatment. *Energy & Fuels*, **2019**, 33, 10476-10486	4.1	1
22	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
21	Enrichment and Isolation of Chloroxyanion-Respiring Hydrocarbon Oxidizers. *Springer Protocols*, **2016**, 165-176	0.3	1
20	Acidobacterium **2015**, 1-1		1
19	Acidobacteria phyl. nov. **2015**, 1-5		1

18	Anaerobic Respiratory Iron(II) Oxidation157-171		1
17	Perchlorate and Its Application in the Oil and Gas Industry **2019**, 109-128		1
16	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
15	Acanthopleuribacterales **2015**, 1-1		
14	Acidobacteriia **2015**, 1-1		
13	Acidobacteriaceae fam. nov. **2015**, 1-1		
12	Acanthopleuribacteraceae **2015**, 1-1		
11	Holophagaceae **2015**, 1-1		
10	Edaphobacter **2015**, 1-3		
9	Terriglobus **2015**, 1-2		
8	Acanthopleuribacter **2015**, 1-2		
7	Holophaga **2015**, 1-2		
6	Acidobacteriales **2015**, 1-1		
5	Holophagales **2015**, 1-1		
4	Geobacter **2015**, 1-6		
3	Bacteria that Respire Oxyanions of Chlorine **2015**, 1-5		
2	Holophagae **2015**, 1-1		
1	Geothrix **2015**, 1-2		