

# Hans K Carlson

## List of Publications by Year in descending order

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Version: 2024-02-01

41  
papers

2,184  
citations

361413

20  
h-index

315739

38  
g-index

53  
all docs

53  
docs citations

53  
times ranked

2678  
citing authors

#	ARTICLE	IF	CITATIONS
1	The diversity and evolution of microbial dissimilatory phosphite oxidation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	17
2	Mechanism Across Scales: A Holistic Modeling Framework Integrating Laboratory and Field Studies for Microbial Ecology. Frontiers in Microbiology, 2021, 12, 642422.	3.5	12
3	Functional genetics of human gut commensal <i>Bacteroides thetaiotaomicron</i> reveals metabolic requirements for growth across environments. Cell Reports, 2021, 34, 108789.	6.4	82
4	Editorial: Selective Controls on Microbial Energy Metabolisms: From the Microscale to the Macroscale. Frontiers in Microbiology, 2021, 12, 728705.	3.5	0
5	Genome-Wide Identification of Tomato Xylem Sap Fitness Factors for Three Plant-Pathogenic <i>Ralstonia</i> Species. MSystems, 2021, 6, e0122921.	3.8	7
6	Sulfate adenylyl transferase kinetics and mechanisms of metabolic inhibitors of microbial sulfate respiration. ISME Communications, 2021, 1, .	4.2	0
7	Tungstate Control of Microbial Sulfidogenesis and Souring of the Engineered Environment. Environmental Science & Technology, 2020, 54, 16119-16127.	10.0	6
8	Identification of a Novel Cobamide Remodeling Enzyme in the Beneficial Human Gut Bacterium <i>Akkermansia muciniphila</i> . MBio, 2020, 11, .	4.1	18
9	Selective carbon sources influence the end products of microbial nitrate respiration. ISME Journal, 2020, 14, 2034-2045.	9.8	61
10	Identification of a parasitic symbiosis between respiratory metabolisms in the biogeochemical chlorine cycle. ISME Journal, 2020, 14, 1194-1206.	9.8	15
11	Resistance and Resilience of Sulfidogenic Communities in the Face of the Specific Inhibitor Perchlorate. Frontiers in Microbiology, 2019, 10, 654.	3.5	4
12	Adaptation of <i>Desulfovibrio alaskensis</i> G20 to perchlorate, a specific inhibitor of sulfate reduction. Environmental Microbiology, 2019, 21, 1395-1406.	3.8	14
13	Mechanisms and Monitoring of Oil Reservoir Souring Control by Nitrate or Perchlorate Injection. , 2019, , 1-25.		4
14	Oxidative Pathways of Deoxyribose and Deoxyribonate Catabolism. MSystems, 2019, 4, .	3.8	34
15	Native Plasmid-Encoded Mercury Resistance Genes Are Functional and Demonstrate Natural Transformation in Environmental Bacterial Isolates. MSystems, 2019, 4, .	3.8	6
16	The selective pressures on the microbial community in a metal-contaminated aquifer. ISME Journal, 2019, 13, 937-949.	9.8	56
17	Magic Pools: Parallel Assessment of Transposon Delivery Vectors in Bacteria. MSystems, 2018, 3, .	3.8	31
18	Mitigating Sulfidogenesis With Simultaneous Perchlorate and Nitrate Treatments. Frontiers in Microbiology, 2018, 9, 2305.	3.5	13

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19	Mutant phenotypes for thousands of bacterial genes of unknown function. <i>Nature</i> , 2018, 557, 503-509.	27.8	433
20	Dissimilatory Sulfate Reduction Under High Pressure by <i>Desulfovibrio alaskensis</i> G20. <i>Frontiers in Microbiology</i> , 2018, 9, 1465.	3.5	15
21	Functional Redundancy in Perchlorate and Nitrate Electron Transport Chains and Rewiring Respiratory Pathways to Alter Terminal Electron Acceptor Preference. <i>Frontiers in Microbiology</i> , 2018, 9, 376.	3.5	20
22	High-Throughput Screening To Identify Potent and Specific Inhibitors of Microbial Sulfate Reduction. <i>Environmental Science &amp; Technology</i> , 2017, 51, 7278-7285.	10.0	27
23	Microbial metal resistance and metabolism across dynamic landscapes: high-throughput environmental microbiology. <i>F1000Research</i> , 2017, 6, 1026.	1.6	25
24	System-Wide Adaptations of <i>Desulfovibrio alaskensis</i> G20 to Phosphate-Limited Conditions. <i>PLoS ONE</i> , 2016, 11, e0168719.	2.5	15
25	Perchlorate Reductase Is Distinguished by Active Site Aromatic Gate Residues. <i>Journal of Biological Chemistry</i> , 2016, 291, 9190-9202.	3.4	71
26	Monofluorophosphate Is a Selective Inhibitor of Respiratory Sulfate-Reducing Microorganisms. <i>Environmental Science &amp; Technology</i> , 2015, 49, 3727-3736.	10.0	69
27	Synthetic and Evolutionary Construction of a Chlorate-Reducing <i>Shewanella oneidensis</i> MR-1. <i>MBio</i> , 2015, 6, e00282-15.	4.1	13
28	GEMM-I riboswitches from <i>Geobacter</i> sense the bacterial second messenger cyclic AMP-GMP. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 5383-5388.	7.1	119
29	Novel Mechanism for Scavenging of Hypochlorite Involving a Periplasmic Methionine-Rich Peptide and Methionine Sulfoxide Reductase. <i>MBio</i> , 2015, 6, e00233-15.	4.1	50
30	Mechanisms of direct inhibition of the respiratory sulfate-reduction pathway by (per)chlorate and nitrate. <i>ISME Journal</i> , 2015, 9, 1295-1305.	9.8	87
31	Inhibition of microbial sulfate reduction in a flow-through column system by (per)chlorate treatment. <i>Frontiers in Microbiology</i> , 2014, 5, 315.	3.5	103
32	Surfaceomics and surface-enhanced Raman spectroscopy of environmental microbes: Matching cofactors with redox-active surface proteins. <i>Proteomics</i> , 2013, 13, 2761-2765.	2.2	3
33	Fe(II) Oxidation Is an Innate Capability of Nitrate-Reducing Bacteria That Involves Abiotic and Biotic Reactions. <i>Journal of Bacteriology</i> , 2013, 195, 3260-3268.	2.2	144
34	Surface multiheme c-type cytochromes from <i>Thermincola potens</i> and implications for respiratory metal reduction by Gram-positive bacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 1702-1707.	7.1	178
35	Bioelectrical redox cycling of anthraquinone-2,6-disulfonate coupled to perchlorate reduction. <i>Energy and Environmental Science</i> , 2012, 5, 7970.	30.8	19
36	Toward a Mechanistic Understanding of Anaerobic Nitrate-Dependent Iron Oxidation: Balancing Electron Uptake and Detoxification. <i>Frontiers in Microbiology</i> , 2012, 3, 57.	3.5	86

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37	Identification of a Perchlorate Reduction Genomic Island with Novel Regulatory and Metabolic Genes. <i>Applied and Environmental Microbiology</i> , 2011, 77, 7401-7404.	3.1	57
38	Use of a semisynthetic epitope to probe histidine kinase activity and regulation. <i>Analytical Biochemistry</i> , 2010, 397, 139-143.	2.4	28
39	H <sup>2</sup> O regulation of c-di-GMP metabolism and biofilm formation in <i>Legionella pneumophila</i> . <i>Molecular Microbiology</i> , 2010, 77, 930-942.	2.5	108
40	H-NO <sup>2</sup> -mediated nitric oxide sensing modulates symbiotic colonization by <i>Vibrio fischeri</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 8375-8380.	7.1	100
41	Novel Syn Intramolecular Pathway in Base-Catalyzed 1,2-Elimination Reactions of $\beta^2$ -Acetoxy Esters. <i>Journal of Organic Chemistry</i> , 2007, 72, 793-798.	3.2	9