Scott D Wankel

List of Publications by Year
in descending order

46 papers	2,609 citations	257450 24 h-index	243625 44 g-index
48 all docs	48 docs citations	48 times ranked	3907 citing authors

#	Article	IF	Citations
1	Dominance of sulfur-fueled iron oxide reduction in low-sulfate freshwater sediments. ISME Journal, 2015, 9, 2400-2412.	9.8	172
2	Isotopic overprinting of nitrification on denitrification as a ubiquitous and unifying feature of environmental nitrogen cycling. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6391-E6400.	7.1	154
3	Nitrification in the euphotic zone as evidenced by nitrate dual isotopic composition: Observations from Monterey Bay, California. Global Biogeochemical Cycles, 2007, 21, n/a-n/a.	4.9	138
4	Influence of ammonia oxidation rate on thaumarchaeal lipid composition and the TEX ₈₆ temperature proxy. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7762-7767.	7.1	121
5	Evidence for fungal and chemodenitrification based N2O flux from nitrogen impacted coastal sediments. Nature Communications, 2017, 8, 15595.	12.8	103
6	Constraining the role of iron in environmental nitrogen transformations: Dual stable isotope systematics of abiotic NO2âˆ’ reduction by Fe(II) and its production of N2O. Geochimica Et Cosmochimica Acta, 2016, 186, 1-12.	3.9	101
7	Influence of subsurface biosphere on geochemical fluxes from diffuse hydrothermal fluids. Nature Geoscience, 2011, 4, 461-468.	12.9	100
8	Spatial Variability in Nitrification Rates and Ammonia-Oxidizing Microbial Communities in the Agriculturally Impacted Elkhorn Slough Estuary, California. Applied and Environmental Microbiology, 2011, 77, 269-280.	3.1	98
9	Anaerobic methane oxidation in metalliferous hydrothermal sediments: influence on carbon flux and decoupling from sulfate reduction. Environmental Microbiology, 2012, 14, 2726-2740.	3.8	98
10	A dual nitrite isotopic investigation of chemodenitrification by mineral-associated Fe(II) and its production of nitrous oxide. Geochimica Et Cosmochimica Acta, 2017, 196, 388-402.	3.9	84
11	Using nitrate dual isotopic composition (<i>Î´</i>¹⁵N and <i>Î´</i>¹⁸O) as a tool for exploring sources and cycling of nitrate in an estuarine system: Elkhorn Slough, California. Journal of Geophysical Research, 2009, 114, .	3.3	78
12	Archaea dominate oxic subseafloor communities over multimillion-year time scales. Science Advances, 2019, 5, eaaw4108.	10.3	70
13	Rainfall limit of the N cycle on Earth. Global Biogeochemical Cycles, 2007, 21, .	4.9	64
14	Persistent organic matter in oxic subseafloor sediment. Nature Geoscience, 2019, 12, 126-131.	12.9	53
15	Quantifying population-specific growth in benthic bacterial communities under low oxygen using H218O. ISME Journal, 2019, 13, 1546-1559.	9.8	53
16	Dark biological superoxide production as a significant flux and sink of marine dissolved oxygen. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3433-3439.	7.1	51
17	Determination and application of the equilibrium oxygen isotope effect between water and sulfite. Geochimica Et Cosmochimica Acta, 2014, 125, 694-711.	3.9	47
18	Biogenic manganese oxides as reservoirs of organic carbon and proteins in terrestrial and marine environments. Geobiology, 2017, 15, 158-172.	2.4	47

#	Article	IF	Citations
19	Nitrogen cycling in the deep sedimentary biosphere: nitrate isotopes in porewaters underlying the oligotrophic North Atlantic. Biogeosciences, 2015, 12, 7483-7502.	3.3	41
20	Improved efficiency of the biological pump as a trigger for the Late Ordovician glaciation. Nature Geoscience, 2018, 11, 510-514.	12.9	36
21	Nitrite oxidation exceeds reduction and fixed nitrogen loss in anoxic Pacific waters. Marine Chemistry, 2020, 224, 103814.	2.3	33
22	Extracellular superoxide production by key microbes in the global ocean. Limnology and Oceanography, 2019, 64, 2679-2693.	3.1	32
23	Oxygen isotope analysis of bacterial and fungal manganese oxidation. Geobiology, 2018, 16, 399-411.	2.4	27
24	Ebullition of oxygen from seagrasses under supersaturated conditions. Limnology and Oceanography, 2020, 65, 314-324.	3.1	27
25	Rapid Mapping of Dissolved Methane and Carbon Dioxide in Coastal Ecosystems Using the ChemYak Autonomous Surface Vehicle. Environmental Science & Technology, 2018, 52, 13314-13324.	10.0	25
26	Discovery and quantification of anaerobic nitrogen metabolisms among oxygenated tropical Cuban stony corals. ISME Journal, 2021, 15, 1222-1235.	9.8	22
27	Multiple integrated metabolic strategies allow foraminiferan protists to thrive in anoxic marine sediments. Science Advances, 2021, 7, .	10.3	20
28	Oxygen Isotopes (Î´¹⁸O) Trace Photochemical Hydrocarbon Oxidation at the Sea Surface. Geophysical Research Letters, 2019, 46, 6745-6754.	4.0	18
29	Spatial Heterogeneity in Particleâ€Associated, Lightâ€Independent Superoxide Production Within Productive Coastal Waters. Journal of Geophysical Research: Oceans, 2020, 125, e2020JC016747.	2.6	14
30	Euphotic zone nitrification in the California Current Ecosystem. Limnology and Oceanography, 2020, 65, 790-806.	3.1	13
31	Ferromanganese crusts as recorders of marine dissolved oxygen. Earth and Planetary Science Letters, 2020, 533, 116057.	4.4	13
32	Substantial oxygen consumption by aerobic nitrite oxidation in oceanic oxygen minimum zones. Nature Communications, 2021, 12, 7043.	12.8	13
33	Isotopic Constraints on Nitrogen Transformation Rates in the Deep Sedimentary Marine Biosphere. Global Biogeochemical Cycles, 2018, 32, 1688-1702.	4.9	12
34	Development of a Handheld Submersible Chemiluminescent Sensor: Quantification of Superoxide at Coral Surfaces. Environmental Science & Technology, 2019, 53, 13850-13858.	10.0	12
35	An isotopic study of abiotic nitrite oxidation by ligand-bound manganese (III). Geochimica Et Cosmochimica Acta, 2021, 293, 365-378.	3.9	11
36	Recent Increases in Water Column Denitrification in the Seasonally Suboxic Bottom Waters of the Santa Barbara Basin. Geophysical Research Letters, 2019, 46, 6786-6795.	4.0	8

#	Article	IF	Citations
37	Spectroscopic Insights Into Ferromanganese Crust Formation and Diagenesis. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009074.	2.5	8
38	Impact of reactive surfaces on the abiotic reaction between nitrite and ferrous iron and associated nitrogen and oxygen isotope dynamics. Biogeosciences, 2020, 17, 4355-4374.	3.3	8
39	Isotopic signals in an agricultural watershed suggest denitrification is locally intensive in riparian areas but extensive in upland soils. Biogeochemistry, 2022, 158, 251-268.	3.5	8
40	Influence of<i>Î´</i>¹⁸O of water on measurements of<i>Î´</i>¹⁸O of nitrite and nitrate. Rapid Communications in Mass Spectrometry, 2021, 35, e8979.	1.5	5
41	Enzyme-catalyzed isotope equilibrium: A hypothesis to explain apparent N cycling phenomena in low oxygen environments. Marine Chemistry, 2022, 244, 104140.	2.3	5
42	The redox fate of hydrogen peroxide in the marine water column. Limnology and Oceanography, 2021, 66, 3828-3841.	3.1	4
43	The Isotopic Imprint of Life on an Evolving Planet. Space Science Reviews, 2020, 216, 1.	8.1	3
44	Nitrate sources and the effect of land cover on the isotopic composition of nitrate in the catchment of the RhÃ´ne River. Isotopes in Environmental and Health Studies, 2020, 56, 14-35.	1.0	3
45	The Abiotic Nitrite Oxidation by Ligand-Bound Manganese (III): The Chemical Mechanism. Aquatic Geochemistry, 2021, 27, 207.	1.3	1
46	Development of a Deep-Sea Submersible Chemiluminescent Analyzer for Sensing Short-Lived Reactive Chemicals. Sensors, 2022, 22, 1709.	3.8	1