Karen Casciotti

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4926823/publications.pdf

Version: 2024-02-01

89	9,781	46984 47	45285 90
papers	citations	h-index	g-index

101	101	101	7224
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Bacterial Method for the Nitrogen Isotopic Analysis of Nitrate in Seawater and Freshwater. Analytical Chemistry, 2001, 73, 4145-4153.	3.2	1,493
2	Measurement of the Oxygen Isotopic Composition of Nitrate in Seawater and Freshwater Using the Denitrifier Method. Analytical Chemistry, 2002, 74, 4905-4912.	3.2	1,236
3	Revisiting Carbon Flux Through the Ocean's Twilight Zone. Science, 2007, 316, 567-570.	6.0	547
4	Isotopic Signature of N ₂ O Produced by Marine Ammonia-Oxidizing Archaea. Science, 2011, 333, 1282-1285.	6.0	369
5	Activity, abundance and diversity of nitrifying archaea and bacteria in the central California Current. Environmental Microbiology, 2010, 12, 1989-2006.	1.8	364
6	Linking Diversity and Stable Isotope Fractionation in Ammonia-Oxidizing Bacteria. Geomicrobiology Journal, 2003, 20, 335-353.	1.0	279
7	The GEOTRACES Intermediate Data Product 2017. Chemical Geology, 2018, 493, 210-223.	1.4	257
8	Technical Updates to the Bacterial Method for Nitrate Isotopic Analyses. Analytical Chemistry, 2011, 83, 1850-1856.	3.2	219
9	Oxygen Isotopes in Nitrite:Â Analysis, Calibration, and Equilibration. Analytical Chemistry, 2007, 79, 2427-2436.	3.2	211
10	Inverse kinetic isotope fractionation during bacterial nitrite oxidation. Geochimica Et Cosmochimica Acta, 2009, 73, 2061-2076.	1.6	211
11	Biogeochemical controls and isotopic signatures of nitrous oxide production by a marine ammonia-oxidizing bacterium. Biogeosciences, 2010, 7, 2695-2709.	1.3	196
12	Oxygen isotopic fractionation and exchange during bacterial nitrite oxidation. Limnology and Oceanography, 2010, 55, 1064-1074.	1.6	175
13	Enrichment and characterization of ammonia-oxidizing archaea from the open ocean: phylogeny, physiology and stable isotope fractionation. ISME Journal, 2011, 5, 1796-1808.	4.4	167
14	Dissimilatory Nitrite Reductase Genes from Autotrophic Ammonia-Oxidizing Bacteria. Applied and Environmental Microbiology, 2001, 67, 2213-2221.	1.4	156
15	Isotopic analyses of nitrate and nitrite from reference mixtures and application to Eastern Tropical North Pacific waters. Marine Chemistry, 2007, 107, 184-201.	0.9	148
16	Abiotic nitrous oxide emission from the hypersaline Don Juan Pond in Antarctica. Nature Geoscience, 2010, 3, 341-344.	5.4	146
17	Basinâ€scale inputs of cobalt, iron, and manganese from the Benguelaâ€Angola front to the South Atlantic Ocean. Limnology and Oceanography, 2012, 57, 989-1010.	1.6	134
18	Constraints on nitrogen cycling at the subtropical North Pacific Station ALOHA from isotopic measurements of nitrate and particulate nitrogen. Deep-Sea Research Part II: Topical Studies in Oceanography, 2008, 55, 1661-1672.	0.6	128

#	Article	IF	Citations
19	Stable Isotopes and Iron Oxide Mineral Products as Markers of Chemodenitrification.. Environmental Science & Technology, 2015, 49, 3444-3452.	4.6	125
20	Oxygen isotopic composition of nitrate and nitrite produced by nitrifying cocultures and natural marine assemblages. Limnology and Oceanography, 2012, 57, 1361-1375.	1.6	116
21	Differential contributions of archaeal ammonia oxidizer ecotypes to nitrification in coastal surface waters. ISME Journal, 2014, 8, 1704-1714.	4.4	108
22	Isotopic ratios of nitrite as tracers of the sources and age of oceanic nitrite. Nature Geoscience, 2013, 6, 308-313.	5.4	104
23	Nitrogen and Oxygen Isotopic Studies of the Marine Nitrogen Cycle. Annual Review of Marine Science, 2016, 8, 379-407.	5.1	99
24	Localization of Mn(II)-oxidizing activity and the putative multicopper oxidase, MnxG, to the exosporium of the marine Bacillus sp. strain SG-1. Archives of Microbiology, 2002, 178, 450-456.	1.0	94
25	Oxygen isotopic exchange and fractionation during bacterial ammonia oxidation. Limnology and Oceanography, 2010, 55, 753-762.	1.6	91
26	Low rates of nitrogen fixation in eastern tropical South Pacific surface waters. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4398-4403.	3.3	91
27	Implications of nitrate and nitrite isotopic measurements for the mechanisms of nitrogen cycling in the Peru oxygen deficient zone. Deep-Sea Research Part I: Oceanographic Research Papers, 2013, 80, 78-93.	0.6	90
28	Interlaboratory assessment of nitrous oxide isotopomer analysis by isotope ratio mass spectrometry and laser spectroscopy: current status and perspectives. Rapid Communications in Mass Spectrometry, 2014, 28, 1995-2007.	0.7	89
29	Phylogenetic analysis of nitric oxide reductase gene homologues from aerobic ammonia-oxidizing bacteria. FEMS Microbiology Ecology, 2005, 52, 197-205.	1.3	88
30	Measurements of nitrite production in and around the primary nitrite maximum in the central California Current. Biogeosciences, 2013, 10, 7395-7410.	1.3	87
31	Placing an upper limit on cryptic marine sulphur cycling. Nature, 2014, 513, 530-533.	13.7	86
32	Nitrogen cycling in the secondary nitrite maximum of the eastern tropical North Pacific off Costa Rica. Global Biogeochemical Cycles, 2015, 29, 2061-2081.	1.9	77
33	Denitrification likely catalyzed by endobionts in an allogromiid foraminifer. ISME Journal, 2012, 6, 951-960.	4.4	75
34	Potential importance of physiologically diverse benthic foraminifera in sedimentary nitrate storage and respiration. Journal of Geophysical Research, 2012, 117, .	3.3	74
35	Using dual-bacterial denitrification to improveÎ´15N determinations of nitrates containing mass-independent17O. Rapid Communications in Mass Spectrometry, 2004, 18, 245-250.	0.7	73
36	Insights into nutrient assimilation and export in naturally iron-fertilized waters of the Southern Ocean from nitrogen, carbon and oxygen isotopes. Deep-Sea Research Part II: Topical Studies in Oceanography, 2008, 55, 820-840.	0.6	68

#	Article	IF	Citations
37	Aspects of the marine nitrogen cycle of the Chukchi Sea shelf and Canada Basin. Deep-Sea Research Part II: Topical Studies in Oceanography, 2015, 118, 73-87.	0.6	66
38	Variable Nitrification Rates Across Environmental Gradients in Turbid, Nutrient-Rich Estuary Waters of San Francisco Bay. Estuaries and Coasts, 2016, 39, 1050-1071.	1.0	66
39	Dual isotope analyses indicate efficient processing of atmospheric nitrate by forested watersheds in the northeastern U.S.. Biogeochemistry, 2008, 90, 15-27.	1.7	62
40	Multiple metabolisms constrain the anaerobic nitrite budget in the Eastern Tropical South Pacific. Global Biogeochemical Cycles, 2017, 31, 258-271.	1.9	60
41	Hydrothermal impacts on trace element and isotope ocean biogeochemistry. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20160035.	1.6	59
42	Ammoniaâ€oxidizing bacteria are the primary N₂O producers in an ammoniaâ€oxidizing archaea dominated alkaline agricultural soil. Environmental Microbiology, 2018, 20, 2195-2206.	1.8	56
43	Stable Isotopes as Tracers of Anthropogenic Nitrogen Sources, Deposition, and Impacts. Elements, 2013, 9, 339-344.	0.5	55
44	Nitrate isotope distributions on the US GEOTRACES North Atlantic cross-basin section: Signals of polar nitrate sources and low latitude nitrogen cycling. Marine Chemistry, 2015, 177, 143-156.	0.9	55
45	Insights on the marine microbial nitrogen cycle from isotopic approaches to nitrification. Frontiers in Microbiology, 2012, 3, 356.	1.5	53
46	Oxygen isotopic exchange and fractionation during bacterial ammonia oxidation. Limnology and Oceanography, 2010, 55, 753-762.	1.6	53
47	Fully automated system for stable isotopic analyses of dissolved nitrous oxide at natural abundance levels. Limnology and Oceanography: Methods, 2010, 8, 54-66.	1.0	40
48	Nitrogen and oxygen isotopic fractionation during microbial nitrite reduction. Limnology and Oceanography, 2016, 61, 1134-1143.	1.6	38
49	Tropical Dominance of N₂ Fixation in the North Atlantic Ocean. Global Biogeochemical Cycles, 2017, 31, 1608-1623.	1.9	38
50	Water mass analysis of the 2013 US GEOTRACES eastern Pacific zonal transect (GP16). Marine Chemistry, 2018, 201, 6-19.	0.9	38
51	Abundance and Diversity of Archaeal Ammonia Oxidizers in a Coastal Groundwater System. Applied and Environmental Microbiology, 2010, 76, 7938-7948.	1.4	37
52	N₂O production in the eastern South Atlantic: Analysis of N₂O stable isotopic and concentration data. Global Biogeochemical Cycles, 2014, 28, 1262-1278.	1.9	37
53	Stable isotope analyses of NO2â^', NO3â^', and N2O in the hypersaline ponds and soils of the McMurdo Dry Valleys, Antarctica. Geochimica Et Cosmochimica Acta, 2014, 135, 87-101.	1.6	35
54	Dual nitrogen and oxygen isotope fractionation during anaerobic ammonium oxidation by anammox bacteria. ISME Journal, 2019, 13, 2426-2436.	4.4	35

#	Article	IF	Citations
55	Excess nitrate loads to coastal waters reduces nitrate removal efficiency: mechanism and implications for coastal eutrophication. Environmental Microbiology, 2013, 15, 1492-1504.	1.8	34
56	A Method for Determining the Nitrogen Isotopic Composition of Porphyrins. Analytical Chemistry, 2009, 81, 184-192.	3.2	33
57	Nitrous oxide cycling in the Eastern Tropical South Pacific as inferred from isotopic and isotopomeric data. Deep-Sea Research Part II: Topical Studies in Oceanography, 2018, 156, 155-167.	0.6	33
58	Novel strains isolated from a coastal aquifer suggest a predatory role for â€ƒflavobacteria. FEMS Microbiology Ecology, 2010, 73, no-no.	1.3	31
59	Assessment of Nitrogen and Oxygen Isotopic Fractionation During Nitrification and Its Expression in the Marine Environment. Methods in Enzymology, 2011, 486, 253-280.	0.4	31
60	Fully automated system for stable isotopic analyses of dissolved nitrous oxide at natural abundance levels. Limnology and Oceanography: Methods, 2010, 8, 54-66.	1.0	30
61	Nitrous Oxide Dynamics in a Braided River System, New Zealand. Journal of Environmental Quality, 2011, 40, 1532-1541.	1.0	29
62	Vertical modeling of the nitrogen cycle in the eastern tropical South Pacific oxygen deficient zone using highâ€resolution concentration and isotope measurements. Global Biogeochemical Cycles, 2016, 30, 1661-1681.	1.9	29
63	Nitrite isotopes as tracers of marine N cycle processes. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150295.	1.6	26
64	Differential N₂ O dynamics in two oxygen-deficient lake basins revealed by stable isotope and isotopomer distributions. Limnology and Oceanography, 2016, 61, 1735-1749.	1.6	26
65	Nitrogen and oxygen isotope measurements of nitrate along the US GEOTRACES Eastern Pacific Zonal Transect (GP16) yield insights into nitrate supply, remineralization, and water mass transport. Marine Chemistry, 2018, 201, 137-150.	0.9	26
66	Nitrification and Nitrous Oxide Production in the Offshore Waters of the Eastern Tropical South Pacific. Global Biogeochemical Cycles, 2021, 35, e2020GB006716.	1.9	25
67	Controls of nitrogen cycling evaluated along a wellâ€characterized climate gradient. Ecology, 2017, 98, 1117-1129.	1.5	24
68	Microbial N2O consumption in and above marine N2O production hotspots. ISME Journal, 2021, 15, 1434-1444.	4.4	24
69	Distribution of anaerobic ammonia-oxidizing bacteria in a subterranean estuary. Marine Chemistry, 2012, 136-137, 7-13.	0.9	23
70	Intense nitrogen cycling in permeable intertidal sediment revealed by a nitrous oxide hot spot. Global Biogeochemical Cycles, 2015, 29, 1584-1598.	1.9	23
71	Estimating fixed nitrogen loss and associated isotope effects using concentration and isotope measurements of NO3â€“, NO2â€“, and N2 from the Eastern Tropical South Pacific oxygen deficient zone. Deep-Sea Research Part II: Topical Studies in Oceanography, 2018, 156, 121-136.	0.6	22
72	Preliminary assessment of stable nitrogen and oxygen isotopic composition of USGS51 and USGS52 nitrous oxide reference gases and perspectives on calibration needs. Rapid Communications in Mass Spectrometry, 2018, 32, 1207-1214.	0.7	21

#	Article	IF	Citations
73	Supersaturated N2O in a perennially iceâ€covered Antarctic lake: Molecular and stable isotopic evidence for a biogeochemical relict. Limnology and Oceanography, 2008, 53, 2439-2450.	1.6	20
74	Paired N and O isotopic analysis of nitrate and nitrite in the Arabian Sea oxygen deficient zone. Deep-Sea Research Part I: Oceanographic Research Papers, 2017, 121, 121-131.	0.6	20
75	Method for the Analysis of Î´18O in Water. Analytical Chemistry, 2006, 78, 2377-2381.	3.2	19
76	Dissolved Organic Nitrogen Production and Consumption in Eastern Tropical South Pacific Surface Waters. Global Biogeochemical Cycles, 2018, 32, 769-783.	1.9	18
77	An N isotopic mass balance of the Eastern Tropical North Pacific oxygen deficient zone. Deep-Sea Research Part II: Topical Studies in Oceanography, 2018, 156, 137-147.	0.6	16
78	Quantifying Nitrous Oxide Cycling Regimes in the Eastern Tropical North Pacific Ocean With Isotopomer Analysis. Global Biogeochemical Cycles, 2021, 35, e2020GB006637.	1.9	14
79	Modeling oceanic nitrate and nitrite concentrations and isotopes using a 3-D inverse N cycle model. Biogeosciences, 2019, 16, 347-367.	1.3	10
80	Amperometric sensor for nanomolar nitrous oxide analysis. Analytica Chimica Acta, 2020, 1101, 135-140.	2.6	9
81	Protocols for Assessing Transformation Rates of Nitrous Oxide in the Water Column. Frontiers in Marine Science, 2021, 8, .	1.2	9
82	The Angola Gyre is a hotspot of dinitrogen fixation in the South Atlantic Ocean. Communications Earth & Environment, 2022, 3, .	2.6	9
83	Distribution of Concentration and Stable Isotopic Composition of N₂O in the Shelf and Slope of the Northern South China Sea: Implications for Production and Emission. Journal of Geophysical Research: Oceans, 2019, 124, 6218-6234.	1.0	8
84	Preparation and Analysis of Nitrogen-bearing Compounds in Water for Stable Isotope Ratio Measurement. , 2004, , 305-347.		7
85	Assessing Marine Nitrogen Cycle Rates and Process Sensitivities With a Global 3â€Ð Inverse Model. Global Biogeochemical Cycles, 2019, 33, 1026-1047.	1.9	7
86	Vertical stratification and stability of biogeochemical processes in the deep saline waters of Lake Vanda, Antarctica. Limnology and Oceanography, 2020, 65, 569-581.	1.6	7
87	Evidence for Microbial Mediated NO3â^' Cycling Within Floodplain Sediments During Groundwater Fluctuations. Frontiers in Earth Science, 2019, 7, .	0.8	6
88	Identifying the Sources and Drivers of Nitrous Oxide Accumulation in the Eddyâ€Influenced Eastern Tropical North Pacific Oxygenâ€Ðeficient Zone. Global Biogeochemical Cycles, 2022, 36, .	1.9	3
89	Abiotic Nitrous Oxide Production From Sediments and Brine of Don Juan Pond, Wright Valley Antarctica, at Mars Analog Temperatures (â^'40Â°C). Geophysical Research Letters, 2022, 49, .	1.5	2