

# Carolin R LÃ¶scher

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3374645/publications.pdf>

Version: 2024-02-01

47  
papers

2,756  
citations

236925

25  
h-index

243625

44  
g-index

93  
all docs

93  
docs citations

93  
times ranked

3903  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Nitrogen cycling driven by organic matter export in the South Pacific oxygen minimum zone. <i>Nature Geoscience</i> , 2013, 6, 228-234.  | 12.9 | 295       |
| 2  | Production of oceanic nitrous oxide by ammonia-oxidizing archaea. <i>Biogeosciences</i> , 2012, 9, 2419-2429.  | 3.3  | 195       |
| 3  | The small unicellular diazotrophic symbiont, UCYN-A, is a key player in the marine nitrogen cycle. <i>Nature Microbiology</i> , 2016, 1, 16163.                                    | 13.3 | 194       |
| 4  | The ocean sampling day consortium. <i>GigaScience</i> , 2015, 4, 27.   | 6.4  | 185       |
| 5  | Toward the Integrated Marine Debris Observing System. <i>Frontiers in Marine Science</i> , 2019, 6, .  | 2.5  | 178       |
| 6  | Giant Hydrogen Sulfide Plume in the Oxygen Minimum Zone off Peru Supports Chemolithoautotrophy. <i>PLoS ONE</i> , 2013, 8, e68661.   | 2.5  | 158       |
| 7  | Facets of diazotrophy in the oxygen minimum zone waters off Peru. <i>ISME Journal</i> , 2014, 8, 2180-2192.  | 9.8  | 121       |
| 8  | Massive nitrous oxide emissions from the tropical South Pacific Ocean. <i>Nature Geoscience</i> , 2015, 8, 530-533.  | 12.9 | 113       |
| 9  | Aerobic Microbial Respiration In Oceanic Oxygen Minimum Zones. <i>PLoS ONE</i> , 2015, 10, e0133526.   | 2.5  | 99        |
| 10 | Occurrence of benthic microbial nitrogen fixation coupled to sulfate reduction in the seasonally hypoxic Eckernförde Bay, Baltic Sea. <i>Biogeosciences</i> , 2013, 10, 1243-1258. | 3.3  | 98        |
| 11 | Oxygen minimum zone cryptic sulfur cycling sustained by offshore transport of key sulfur oxidizing bacteria. <i>Nature Communications</i> , 2018, 9, 1729.                         | 12.8 | 93        |
| 12 | Nitrate-dependent iron oxidation limits iron transport in anoxic ocean regions. <i>Earth and Planetary Science Letters</i> , 2016, 454, 272-281.                                   | 4.4  | 83        |
| 13 | Toxic algal bloom induced by ocean acidification disrupts the pelagic food web. <i>Nature Climate Change</i> , 2018, 8, 1082-1086.   | 18.8 | 75        |
| 14 | Extreme N <sub>2</sub> O accumulation in the coastal oxygen minimum zone off Peru. <i>Biogeosciences</i> , 2016, 13, 827-840.  | 3.3  | 60        |
| 15 | Dead zone or oasis in the open ocean? Zooplankton distribution and migration in low-oxygen modewater eddies. <i>Biogeosciences</i> , 2016, 13, 1977-1989.                          | 3.3  | 53        |
| 16 | Microbial methanogenesis in the sulfate-reducing zone of sediments in the Eckernförde Bay, SW Baltic Sea. <i>Biogeosciences</i> , 2018, 15, 137-157.                               | 3.3  | 51        |
| 17 | Nitrogen fixation in sediments along a depth transect through the Peruvian oxygen minimum zone. <i>Biogeosciences</i> , 2016, 13, 4065-4080.                                       | 3.3  | 47        |
| 18 | N <sub>2</sub> fixation in eddies of the eastern tropical South Pacific Ocean. <i>Biogeosciences</i> , 2016, 13, 2889-2899.  | 3.3  | 45        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Baltic Sea methanogens compete with acetogens for electrons from metallic iron. ISME Journal, 2019, 13, 3011-3023.  | 9.8 | 45        |
| 20 | Upwelling and isolation in oxygen-depleted anticyclonic modewater eddies and implications for nitrate cycling. Biogeosciences, 2017, 14, 2167-2181.   | 3.3 | 42        |
| 21 | Regulation of nitrous oxide production in low-oxygen waters off the coast of Peru. Biogeosciences, 2020, 17, 2263-2287.   | 3.3 | 38        |
| 22 | Nitrous oxide dynamics in low oxygen regions of the Pacific: insights from the MEMENTO database. Biogeosciences, 2012, 9, 5007-5022.  | 3.3 | 37        |
| 23 | Marine ammonification and carbonic anhydrase activity induce rapid calcium carbonate precipitation. Geochimica Et Cosmochimica Acta, 2018, 243, 116-132.  | 3.9 | 36        |
| 24 | No nitrogen fixation in the Bay of Bengal?. Biogeosciences, 2020, 17, 851-864.  | 3.3 | 33        |
| 25 | Air-Sea Interactions of Natural Long-Lived Greenhouse Gases (CO <sub>2</sub> , N <sub>2</sub> O, CH <sub>4</sub> ) in a Changing Climate. Springer Earth System Sciences, 2014, , 113-169.                      | 0.2 | 29        |
| 26 | Hidden biosphere in an oxygen-deficient Atlantic open-ocean eddy: future implications of ocean deoxygenation on primary production in the eastern tropical North Atlantic. Biogeosciences, 2015, 12, 7467-7482. | 3.3 | 29        |
| 27 | Oxygen utilization and downward carbon flux in an oxygen-depleted eddy in the eastern tropical North Atlantic. Biogeosciences, 2016, 13, 5633-5647.   | 3.3 | 29        |
| 28 | Benthic phosphorus cycling in the Peruvian oxygen minimum zone. Biogeosciences, 2016, 13, 1367-1386.  | 3.3 | 27        |
| 29 | Water column biogeochemistry of oxygen minimum zones in the eastern tropical North Atlantic and eastern tropical South Pacific oceans. Biogeosciences, 2016, 13, 3585-3606.                                     | 3.3 | 27        |
| 30 | Changing nutrient stoichiometry affects phytoplankton production, DOP accumulation and dinitrogen fixation – a mesocosm experiment in the eastern tropical North Atlantic. Biogeosciences, 2016, 13, 781-794.   | 3.3 | 23        |
| 31 | Factors controlling plankton community production, export flux, and particulate matter stoichiometry in the coastal upwelling system off Peru. Biogeosciences, 2020, 17, 4831-4852.                             | 3.3 | 21        |
| 32 | Benthic Dinitrogen Fixation Traversing the Oxygen Minimum Zone Off Mauritania (NW Africa). Frontiers in Marine Science, 2017, 4, .  | 2.5 | 19        |
| 33 | Construction and Screening of Marine Metagenomic Libraries. Methods in Molecular Biology, 2010, 668, 51-65.   | 0.9 | 16        |
| 34 | Interspecies interactions mediated by conductive minerals in the sediments of the Iron rich Meromictic Lake La Cruz, Spain. , 2019, 38, 21-40.  |     | 16        |
| 35 | Influence of mesoscale eddies on the distribution of nitrous oxide in the eastern tropical South Pacific. Biogeosciences, 2016, 13, 1105-1118.  | 3.3 | 15        |
| 36 | Nitric oxide (NO) in the oxygen minimum zone off Peru. Deep-Sea Research Part II: Topical Studies in Oceanography, 2018, 156, 148-154.  | 1.4 | 12        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 37 | Mechanisms of P* Reduction in the Eastern Tropical South Pacific. <i>Frontiers in Marine Science</i> , 2017, 4, .  | 2.5  | 11        |
| 38 | Reviews and syntheses: Trends in primary production in the Bay of Bengal “ is it at a tipping point?. <i>Biogeosciences</i> , 2021, 18, 4953-4963.   | 3.3  | 10        |
| 39 | Climate-Biogeochemistry Interactions in the Tropical Ocean: Data Collection and Legacy. <i>Frontiers in Marine Science</i> , 2021, 8, .  | 2.5  | 8         |
| 40 | The regulation of oxygen to low concentrations in marine oxygen-minimum zones. <i>Journal of Marine Research</i> , 2019, 77, 297-324.  | 0.3  | 8         |
| 41 | Dissolved N:P ratio changes in the eastern tropical North Atlantic: effect on phytoplankton growth and community structure. <i>Marine Ecology - Progress Series</i> , 2016, 545, 49-62.  | 1.9  | 6         |
| 42 | Impact of increasing carbon dioxide on dinitrogen and carbon fixation rates under oligotrophic conditions and simulated upwelling. <i>Limnology and Oceanography</i> , 2021, 66, 2855-2867.  | 3.1  | 4         |
| 43 | Salinity as a key control on the diazotrophic community composition in the southern Baltic Sea. <i>Ocean Science</i> , 2022, 18, 401-417.  | 3.4  | 4         |
| 44 | Nitrogen loss processes in response to upwelling in a Peruvian coastal setting dominated by denitrification “ a mesocosm approach. <i>Biogeosciences</i> , 2021, 18, 4305-4320.  | 3.3  | 3         |
| 45 | High Diazotrophic Diversity but Low N <sub>2</sub> Fixation Activity in the Northern Benguela Upwelling System Confirming the Enigma of Nitrogen Fixation in Oxygen Minimum Zone Waters. <i>Frontiers in Marine Science</i> , 2022, 9, . | 2.5  | 3         |
| 46 | Nitrogenases in Oxygen Minimum Zone Waters. <i>Frontiers in Marine Science</i> , 0, 9, .   | 2.5  | 1         |
| 47 | Identification of oceanic hotspots for production of the neurotoxin <sup>12</sup> N-methylamino-L-alanine: a multidisciplinary ocean-prospecting study. <i>Lancet Planetary Health</i> , The, 2018, 2, S24.                              | 11.4 | 0         |