# Martin Koenneke

## List of Publications by Year in descending order



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|---|---|---|---|
| 48 papers | 7,915 citations | 147801 31 h-index | 197818 49 g-index |
| 50 all docs | 50 docs citations | 50 times ranked | 6660 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Isolation of an autotrophic ammonia-oxidizing marine archaeon. Nature, 2005, 437, 543-546. | 27.8 | 2,489 |
| 2 | Nitrosopumilus maritimus genome reveals unique mechanisms for nitrification and autotrophy in globally distributed marine crenarchaea. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8818-8823. | 7.1 | 853 |
| 3 | Nitrososphaera viennensis , an ammonia oxidizing archaeon from soil. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8420-8425. | 7.1 | 810 |
| 4 | Cultivation of a thermophilic ammonia oxidizing archaeon synthesizing crenarchaeol. Environmental Microbiology, 2008, 10, 810-818. | 3.8 | 621 |
| 5 | Ammonia-oxidizing archaea use the most energy-efficient aerobic pathway for CO <sub>2</sub> fixation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8239-8244. | 7.1 | 396 |
| 6 | Production of oceanic nitrous oxide by ammonia-oxidizing archaea. Biogeosciences, 2012, 9, 2419-2429. | 3.3 | 195 |
| 7 | Nonequilibrium clumped isotope signals in microbial methane. Science, 2015, 348, 428-431. | 12.6 | 192 |
| 8 | Intact Membrane Lipids of â€œ Candidatus Nitrosopumilus maritimus,â€•a Cultivated Representative of the Cosmopolitan Mesophilic Group I Crenarchaeota. Applied and Environmental Microbiology, 2008, 74, 2433-2440. | 3.1 | 180 |
| 9 | Nitrosopumilus maritimus gen. nov., sp. nov., Nitrosopumilus cobalaminigenes sp. nov., Nitrosopumilus oxyclinae sp. nov., and Nitrosopumilus ureiphilus sp. nov., four marine ammonia-oxidizing archaea of the phylum Thaumarchaeota. International Journal of Systematic and Evolutionary Microbiology, 2017, 67, 5067-5079. | 1.7 | 159 |
| 10 | Effects of growth phase on the membrane lipid composition of the thaumarchaeon Nitrosopumilus maritimus and their implications for archaeal lipid distributions in the marine environment. Geochimica Et Cosmochimica Acta, 2014, 141, 579-597. | 3.9 | 154 |
| 11 | Influence of temperature, pH, and salinity on membrane lipid composition and TEX86 of marine planktonic thaumarchaeal isolates. Geochimica Et Cosmochimica Acta, 2015, 171, 238-255. | 3.9 | 137 |
| 12 | Reclassification of Desulfobacterium phenolicum as Desulfobacula phenolica comb. nov. and description of strain SaxT as Desulfotignum balticum gen. nov., sp. nov.. International Journal of Systematic and Evolutionary Microbiology, 2001, 51, 171-177. | 1.7 | 123 |
| 13 | Influence of ammonia oxidation rate on thaumarchaeal lipid composition and the TEX <sub>86</sub> temperature proxy. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7762-7767. | 7.1 | 121 |
| 14 | Chemotaxonomic characterisation of the thaumarchaeal lipidome. Environmental Microbiology, 2017, 19, 2681-2700. | 3.8 | 117 |
| 15 | Community structure and activity of sulfate-reducing bacteria in an intertidal surface sediment: a multi-method approach. Aquatic Microbial Ecology, 2002, 29, 211-226. | 1.8 | 111 |
| 16 | Cyanate and urea are substrates for nitrification by Thaumarchaeota in the marine environment. Nature Microbiology, 2019, 4, 234-243. | 13.3 | 103 |
| 17 | Mimicking the oxygen minimum zones: stimulating interaction of aerobic archaeal and anaerobic bacterial ammonia oxidizers in a laboratoryâ€scale model system. Environmental Microbiology, 2012, 14, 3146-3158. | 3.8 | 100 |
| 18 | Oxygen and nitrogen production by an ammonia-oxidizing archaeon. Science, 2022, 375, 97-100. | 12.6 | 91 |

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|---|---|---|---|
| 19 | Strangers in the archaeal world: osmostressâ€responsive biosynthesis of ectoine and hydroxyectoine by the marine thaumarchaeon Nitrosopumilus maritimus. Environmental Microbiology, 2016, 18, 1227-1248. | 3.8 | 66 |
| 20 | Identity and abundance of active sulfateâ€reducing bacteria in deep tidal flat sediments determined by directed cultivation and CARDâ€FISH analysis. Environmental Microbiology, 2008, 10, 2645-2658. | 3.8 | 65 |
| 21 | Microbial dormancy in the marine subsurface: Global endospore abundance and response to burial. Science Advances, 2019, 5, eaav1024. | 10.3 | 64 |
| 22 | Proteomic Response of Three Marine Ammonia-Oxidizing Archaea to Hydrogen Peroxide and Their Metabolic Interactions with a Heterotrophic Alphaproteobacterium. MSystems, 2019, 4, . | 3.8 | 57 |
| 23 | Respiratory quinones in <scp>A</scp>rchaea: phylogenetic distribution and application as biomarkers in the marine environment. Environmental Microbiology, 2016, 18, 692-707. | 3.8 | 55 |
| 24 | Carbon isotope fractionation by the marine ammonia-oxidizing archaeon Nitrosopumilus maritimus. Organic Geochemistry, 2012, 48, 21-24. | 1.8 | 50 |
| 25 | Experimental investigation on the controls of clumped isotopologue and hydrogen isotope ratios in microbial methane. Geochimica Et Cosmochimica Acta, 2018, 237, 339-356. | 3.9 | 48 |
| 26 | Stratification of archaeal membrane lipids in the ocean and implications for adaptation and chemotaxonomy of planktonic archaea. Environmental Microbiology, 2016, 18, 4324-4336. | 3.8 | 47 |
| 27 | Production rates of bacterial tetraether lipids and fatty acids in peatland under varying oxygen concentrations. Geochimica Et Cosmochimica Acta, 2017, 203, 103-116. | 3.9 | 43 |
| 28 | Physiological response to temperature changes of the marine, sulfate-reducing bacterium Desulfobacterium autotrophicum. FEMS Microbiology Ecology, 2002, 42, 409-417. | 2.7 | 39 |
| 29 | Deep pore water profiles reflect enhanced microbial activity towards tidal flat margins. Ocean Dynamics, 2009, 59, 371-383. | 2.2 | 39 |
| 30 | Isolation of Sulfate-Reducing Bacteria from Sediments Above the Deep-Subseafloor Aquifer. Frontiers in Microbiology, 2012, 3, 65. | 3.5 | 38 |
| 31 | Desulfoconvexum algidum gen. nov., sp. nov., a psychrophilic sulfate-reducing bacterium isolated from a permanently cold marine sediment. International Journal of Systematic and Evolutionary Microbiology, 2013, 63, 959-964. | 1.7 | 36 |
| 32 | Hydroxylamine released by nitrifying microorganisms is a precursor for HONO emission from drying soils. Scientific Reports, 2018, 8, 1877. | 3.3 | 35 |
| 33 | Effect of growth temperature on cellular fatty acids in sulphate-reducing bacteria. Environmental Microbiology, 2003, 5, 1064-1070. | 3.8 | 33 |
| 34 | From ether to acid: A plausible degradation pathway of glycerol dialkyl glycerol tetraethers. Geochimica Et Cosmochimica Acta, 2016, 183, 138-152. | 3.9 | 30 |
| 35 | Desulfopila inferna sp. nov., a sulfate-reducing bacterium isolated from the subsurface of a tidal sand-flat. International Journal of Systematic and Evolutionary Microbiology, 2010, 60, 1626-1630. | 1.7 | 29 |
| 36 | Malonic Semialdehyde Reductase from the Archaeon Nitrosopumilus maritimus Is Involved in the Autotrophic 3-Hydroxypropionate/4-Hydroxybutyrate Cycle. Applied and Environmental Microbiology, 2015, 81, 1700-1707. | 3.1 | 28 |

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|---|---|---|---|
| 37 | Lipid biosynthesis of Nitrosopumilus maritimus dissected by lipid specific radioisotope probing (lipid-RIP) under contrasting ammonium supply. Geochimica Et Cosmochimica Acta, 2018, 242, 51-63. | 3.9 | 26 |
| 38 | DNA Microarrays as Salivary Diagnostic Tools for Characterizing the Oral Cavityâ€™s Microbial Community. Advances in Dental Research, 2005, 18, 6-11. | 3.6 | 24 |
| 39 | Direct Cell Mass Measurements Expand the Role of Small Microorganisms in Nature. Applied and Environmental Microbiology, 2019, 85, . | 3.1 | 22 |
| 40 | Identification of isoprenoid glycosidic glycerol dibiphytanol diethers and indications for their biosynthetic origin. Organic Geochemistry, 2014, 69, 70-75. | 1.8 | 19 |
| 41 | Carbon recycling efficiency and phosphate turnover by marine nitrifying archaea. Science Advances, 2020, 6, eaba1799. | 10.3 | 19 |
| 42 | Assessing the carbon assimilation and production of benthic archaeal lipid biomarkers using lipid-RIP. Geochimica Et Cosmochimica Acta, 2019, 265, 431-442. | 3.9 | 11 |
| 43 | Desulfofrigussp. prevails in sulfate-reducing dilution cultures from sediments of the Benguela upwelling area. FEMS Microbiology Ecology, 2013, 84, 86-97. | 2.7 | 9 |
| 44 | Substrateâ€dependent incorporation of carbon and hydrogen for lipid biosynthesis by Methanosarcina barkeri. Environmental Microbiology Reports, 2020, 12, 555-567. | 2.4 | 9 |
| 45 | NmPin from the marine thaumarchaeote Nitrosopumilus maritimus is an active membrane associated prolyl isomerase. BMC Biology, 2016, 14, 53. | 3.8 | 8 |
| 46 | Convergent Evolution of a Promiscuous 3-Hydroxypropionyl-CoA Dehydratase/Crotonyl-CoA Hydratase in Crenarchaeota and Thaumarchaeota. MSphere, 2021, 6, . | 2.9 | 5 |
| 47 | (S)-3-Hydroxybutyryl-CoA Dehydrogenase From the Autotrophic 3-Hydroxypropionate/4-Hydroxybutyrate Cycle in Nitrosopumilus maritimus. Frontiers in Microbiology, 2021, 12, 712030. | 3.5 | 4 |
| 48 | Physiological response to temperature changes of the marine, sulfate-reducing bacterium Desulfobacterium autotrophicum. FEMS Microbiology Ecology, 2002, 42, 409-417. | 2.7 | 1 |