Hermann W Bange

List of Publications by Year
in descending order

104	5,677	81900	91884
papers	citations	39 h-index	69 g-index

167	167	167	5676
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Future ocean acidification will be amplified by hypoxia in coastal habitats. Marine Biology, 2013, 160, 1875-1888.	1.5	423
2	Marine hypoxia/anoxia as a source of CH₄ and N₂O. Biogeosciences, 2010, 7, 2159-2190.	3.3	311
3	Methane in the Baltic and North Seas and a reassessment of the marine emissions of methane. Global Biogeochemical Cycles, 1994, 8, 465-480.	4.9	301
4	The marine nitrogen cycle: recent discoveries, uncertainties and the potential relevance of climate change. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20130121.	4.0	240
5	Nitrous oxide in coastal waters. Global Biogeochemical Cycles, 1996, 10, 197-207.	4.9	219
6	Nitrous oxide and methane in European coastal waters. Estuarine, Coastal and Shelf Science, 2006, 70, 361-374.	2.1	195
7	Production of oceanic nitrous oxide by ammonia-oxidizing archaea. Biogeosciences, 2012, 9, 2419-2429.	3.3	195
8	Investigating hypoxia in aquatic environments: diverse approaches to addressing a complex phenomenon. Biogeosciences, 2014, 11, 1215-1259.	3.3	175
9	The Ocean's Vital Skin: Toward an Integrated Understanding of the Sea Surface Microlayer. Frontiers in Marine Science, 2017, 4, .	2.5	137
10	The nitrogen cycle in the Arabian Sea. Progress in Oceanography, 2005, 65, 145-158.	3.2	123
11	Global oceanic production of nitrous oxide. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 1245-1255.	4.0	123
12	Massive nitrous oxide emissions from the tropical South Pacific Ocean. Nature Geoscience, 2015, 8, 530-533.	12.9	113
13	A revised nitrogen budget for the Arabian Sea. Global Biogeochemical Cycles, 2000, 14, 1283-1297.	4.9	111
14	On the role of circulation and mixing in the ventilation of oxygen minimum zones with a focus on the eastern tropical North Atlantic. Biogeosciences, 2015, 12, 489-512.	3.3	109
15	On the role of mesoscale eddies for the biological productivity and biogeochemistry in the eastern tropical Pacific Ocean off Peru. Biogeosciences, 2013, 10, 7293-7306.	3.3	104
16	Origin and fate of the secondary nitrite maximum in the Arabian Sea. Biogeosciences, 2011, 8, 1565-1577.	3.3	87
17	Nitrous oxide in the North Atlantic Ocean. Biogeosciences, 2006, 3, 607-619.	3.3	77
18	Long-term trends at the Boknis Eck time series station (Baltic Sea), 1957â€“2013: does climate change counteract the decline in eutrophication?. Biogeosciences, 2014, 11, 6323-6339.	3.3	77

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19	New Directions: The importance of oceanic nitrous oxide emissions. Atmospheric Environment, 2006, 40, 198-199.	4.1	74
20	Biogeochemical ocean-atmosphere transfers in the Arabian Sea. Progress in Oceanography, 2005, 65, 116-144.	3.2	73
21	Dissolved methane during hypoxic events at the Boknis Eck time series station (EckernfÃ¶rde Bay, SW) Tj ETQq1 1 0.784314 rgBT /Ov	3.3	71
22	Effects of low oxygen concentrations on aerobic methane oxidation in seasonally hypoxic coastal waters. Biogeosciences, 2017, 14, 1631-1645.	3.3	66
23	A new method for continuous measurements of oceanic and atmospheric N₂O, CO and CO₂: performance of off-axis integrated cavity output spectroscopy (OA-ICOS) coupled to non-dispersive infrared detection (NDIR). Ocean Science, 2013, 9, 1071-1087.	3.4	64
24	Nitrous oxide emissions from the Arabian Sea: A synthesis. Atmospheric Chemistry and Physics, 2001, 1, 61-71.	4.9	62
25	Nâ€loss isotope effects in the Peru oxygen minimum zone studied using a mesoscale eddy as a natural tracer experiment. Global Biogeochemical Cycles, 2015, 29, 793-811.	4.9	60
26	Extreme N₂O accumulation in the coastal oxygen minimum zone off Peru. Biogeosciences, 2016, 13, 827-840.	3.3	60
27	N₂O production and consumption from stable isotopic and concentration data in the Peruvian coastal upwelling system. Global Biogeochemical Cycles, 2017, 31, 678-698.	4.9	59
28	Contrasting biogeochemistry of nitrogen in the Atlantic and Pacific Oxygen Minimum Zones. Biogeosciences, 2012, 9, 203-215.	3.3	58
29	Sulphur compounds, methane, and phytoplankton: interactions along a northâ€“south transit in the western Pacific Ocean. Biogeosciences, 2013, 10, 3297-3311.	3.3	58
30	Quantifying the impact of anthropogenic nitrogen deposition on oceanic nitrous oxide. Geophysical Research Letters, 2012, 39, .	4.0	57
31	Nitrous oxide cycling in the Arabian Sea. Journal of Geophysical Research, 2001, 106, 1053-1065.	3.3	56
32	Gaseous Nitrogen Compounds (NO, N2O, N2, NH3) in the Ocean. , 2008, , 51-94.		56
33	MEMENTO: a proposal to develop a database of marine nitrous oxide and methane measurements. Environmental Chemistry, 2009, 6, 195.	1.5	53
34	Microbial methanogenesis in the sulfate-reducing zone of sediments in the EckernfÃ¶rde Bay, SW Baltic Sea. Biogeosciences, 2018, 15, 137-157.	3.3	51
35	Estimation of the Atmospheric Flux of Nutrients and Trace Metals to the Eastern Tropical North Atlantic Ocean*. Journals of the Atmospheric Sciences, 2015, 72, 4029-4045.	1.7	49
36	Rates and regulation of nitrogen cycling in seasonally hypoxic sediments during winter (Boknis Eck,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 14-28.	2.1	47

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37	Observed El NiÃ±o conditions in the eastern tropical Pacific in October 2015. Ocean Science, 2016, 12, 861-873.	3.4	47
38	Nitrous oxide in the deep waters of the world's oceans. Global Biogeochemical Cycles, 1999, 13, 1127-1135.	4.9	45
39	N₂ fixation in eddies of the eastern tropical South Pacific Ocean. Biogeosciences, 2016, 13, 2889-2899.	3.3	45
40	Methane emissions from the upwelling area off Mauritania (NW Africa). Biogeosciences, 2008, 5, 1119-1125.	3.3	44
41	An intercomparison of oceanic methane and nitrous oxide measurements. Biogeosciences, 2018, 15, 5891-5907.	3.3	42
42	Nitrous oxide emissions from the Arabian Sea. Geophysical Research Letters, 1996, 23, 3175-3178.	4.0	40
43	Nitrogen cycling in shallow low-oxygen coastal waters off Peru from nitrite and nitrate nitrogen and oxygen isotopes. Biogeosciences, 2016, 13, 1453-1468.	3.3	39
44	Nitrous oxide (N₂O) and methane (CH₄) in rivers and estuaries of northwestern Borneo. Biogeosciences, 2019, 16, 4321-4335.	3.3	38
45	Regulation of nitrous oxide production in low-oxygen waters off the coast of Peru. Biogeosciences, 2020, 17, 2263-2287.	3.3	38
46	Nitrous oxide dynamics in low oxygen regions of the Pacific: insights from the MEMENTO database. Biogeosciences, 2012, 9, 5007-5022.	3.3	37
47	Nitrous oxide in the surface layer of the tropical North Atlantic Ocean along a west to east transect. Geophysical Research Letters, 2004, 31, .	4.0	35
48	Nutrient availability determines dimethyl sulfide and isoprene distribution in the eastern Atlantic Ocean. Geophysical Research Letters, 2014, 41, 3181-3188.	4.0	35
49	It's not a gas. Nature, 2000, 408, 301-302.	27.8	34
50	Methane in surface waters of the Arabian Sea. Geophysical Research Letters, 1998, 25, 3547-3550.	4.0	33
51	No nitrogen fixation in the Bay of Bengal?. Biogeosciences, 2020, 17, 851-864.	3.3	33
52	Sea-to-air and diapycnal nitrous oxide fluxes in the eastern tropical North Atlantic Ocean. Biogeosciences, 2012, 9, 957-964.	3.3	32
53	A Harmonized Nitrous Oxide (N2O) Ocean Observation Network for the 21st Century. Frontiers in Marine Science, 2019, 6, .	2.5	32
54	North Atlantic production of nitrous oxide in the context of changing atmospheric levels. Global Biogeochemical Cycles, 2009, 23, .	4.9	31

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55	Dimethylsulphide (DMS) emissions from the western Pacific Ocean: a potential marine source for stratospheric sulphur?. Atmospheric Chemistry and Physics, 2013, 13, 8427-8437.	4.9	31
56	Nitrous oxide measurements during EIFEX, the European Iron Fertilization Experiment in the subpolar South Atlantic Ocean. Geophysical Research Letters, 2005, 32, .	4.0	30
57	Nitrous oxide and methane in two tropical estuaries in a peat-dominated region of northwestern Borneo. Biogeosciences, 2016, 13, 2415-2428.	3.3	30
58	Air-Sea Interactions of Natural Long-Lived Greenhouse Gases (CO2, N2O, CH4) in a Changing Climate. Springer Earth System Sciences, 2014, , 113-169.	0.2	29
59	Soluble trace metals in aerosols over the tropical south-east Pacific offshore of Peru. Biogeosciences, 2016, 13, 817-825.	3.3	29
60	Environmental control on the variability of DMS and DMSP in the Mauritanian upwelling region. Biogeosciences, 2012, 9, 1041-1051.	3.3	27
61	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
62	High Resolution Measurements of Nitrous Oxide (N2O) in the Elbe Estuary. Frontiers in Marine Science, 2017, 4, .	2.5	26
63	Fate of terrestrial organic carbon and associated CO₂ and CO emissions from two Southeast Asian estuaries. Biogeosciences, 2016, 13, 691-705.	3.3	23
64	Distribution of N₂O in the Baltic Sea during transition from anoxic to oxic conditions. Biogeosciences, 2006, 3, 557-570.	3.3	22
65	Nitrogen processes in coastal and marine ecosystems. , 2011, , 147-176.		22
66	Photochemical production of methane in natural waters: implications for its present and past oceanic source. Chemosphere, 2005, 58, 177-183.	8.2	21
67	A time series of hydroxylamine (NH₂OH) in the southwestern Baltic Sea. Geophysical Research Letters, 2007, 34, .	4.0	20
68	Low oxygen eddies in the eastern tropical North Atlantic: Implications for N2O cycling. Scientific Reports, 2017, 7, 4806.	3.3	19
69	N₂O Emissions From the Northern Benguela Upwelling System. Geophysical Research Letters, 2019, 46, 3317-3326.	4.0	19
70	Nitrous oxide emissions from the upwelling area off Mauritania (NW Africa). Geophysical Research Letters, 2010, 37, .	4.0	18
71	Ideas and perspectives: A strategic assessment of methane and nitrous oxide measurements in the marine environment. Biogeosciences, 2020, 17, 5809-5828.	3.3	16
72	Seasonal signatures in SFG vibrational spectra of the sea surface nanolayer at Boknis Eck Time Series Station (SW Baltic Sea). Biogeosciences, 2013, 10, 5325-5334.	3.3	15

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73	Influence of mesoscale eddies on the distribution of nitrous oxide in the eastern tropical South Pacific. Biogeosciences, 2016, 13, 1105-1118.	3.3	15
74	Surface ocean-lower atmosphere study: Scientific synthesis and contribution to Earth system science. Anthropocene, 2015, 12, 54-68.	3.3	13
75	Investigating the effect of El NiÃ±o on nitrous oxide distribution in the eastern tropical South Pacific. Biogeosciences, 2019, 16, 2079-2093.	3.3	13
76	Nitrous oxide during the onset of the <scp>A</scp>tlantic cold tongue. Journal of Geophysical Research: Oceans, 2017, 122, 171-184.	2.6	12
77	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
78	Nitric oxide (NO) in the Bohai Sea and the Yellow Sea. Biogeosciences, 2019, 16, 4485-4496.	3.3	12
79	Nitrite removal improves hydroxylamine analysis in aqueous solution by conversion with iron(III). Environmental Chemistry, 2013, 10, 64.	1.5	11
80	Determination of dissolved nitric oxide in coastal waters of the Yellow Sea off Qingdao. Ocean Science, 2017, 13, 623-632.	3.4	11
81	Measurement of Air-Sea Methane Fluxes in the Baltic Sea Using the Eddy Covariance Method. Frontiers in Earth Science, 2019, 7, .	1.8	11
82	Hydroxylamine as a Potential Indicator of Nitrification in the Open Ocean. Geophysical Research Letters, 2019, 46, 2158-2166.	4.0	10
83	Airâ€“sea fluxes of greenhouse gases and oxygen in the northern Benguela Current region during upwelling events. Biogeosciences, 2019, 16, 4065-4084.	3.3	10
84	The FluxEngine airâ€“sea gas flux toolbox: simplified interface and extensions for in situ analyses and multiple sparingly soluble gases. Ocean Science, 2019, 15, 1707-1728.	3.4	10
85	Photoproduction of nitric oxide in seawater. Ocean Science, 2020, 16, 135-148.	3.4	10
86	The role of a changing Arctic Ocean and climate for the biogeochemical cycling of dimethyl sulphide and carbon monoxide. Ambio, 2022, 51, 411-422.	5.5	10
87	Greenhouse Gases in Cold Water Filaments in the Arabian Sea During the Southwest Monsoon. Die Naturwissenschaften, 1999, 86, 489-491.	1.6	9
88	Anthropogenic nitrogen inputs and impacts on oceanic N2O fluxes in the northern Indian Ocean: The need for an integrated observation and modelling approach. Deep-Sea Research Part II: Topical Studies in Oceanography, 2019, 166, 104-113.	1.4	9
89	A decade of methane measurements at the Boknis Eck Time Series Station in EckernfÃ¶rde Bay (southwestern Baltic Sea). Biogeosciences, 2020, 17, 3427-3438.	3.3	9
90	Environmental control of dimethylsulfoxide (DMSO) cycling under ocean acidification. Environmental Chemistry, 2016, 13, 330.	1.5	8

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91	A multi-year observation of nitrous oxide at the Boknis Eck Time Series Station in the EckernfÃ¶rde Bay (southwestern Baltic Sea). Biogeosciences, 2019, 16, 4097-4111.	3.3	7
92	Nitrous oxide and hydroxylamine measurements in the Southwest Indian Ocean. Journal of Marine Systems, 2020, 209, 103062.	2.1	6
93	Continuous Chemiluminescence Measurements of Dissolved Nitric Oxide (NO) and Nitrogen Dioxide (NO₂) in the Ocean Surface Layer of the East China Sea. Environmental Science & Technology, 2021, 55, 3668-3675.	10.0	6
94	A decade of dimethyl sulfide (DMS), dimethylsulfoniopropionate (DMSP) and dimethyl sulfoxide (DMSO) measurements in the southwestern Baltic Sea. Biogeosciences, 2021, 18, 2161-2179.	3.3	6
95	Nitrous oxide and methane in a changing Arctic Ocean. Ambio, 2022, 51, 398-410.	5.5	6
96	Interannual variation in summer N₂O concentration in the hypoxic region of the northern Gulf of Mexico, 1985â€“2007. Biogeosciences, 2013, 10, 6783-6792.	3.3	5
97	An improved method for the determination of dissolved nitric oxide (NO) in seawater samples. Ocean Science, 2015, 11, 937-946.	3.4	5
98	Gas exchange estimates in the Peruvian upwelling regime biased by multi-day near-surface stratification. Biogeosciences, 2019, 16, 2307-2328.	3.3	5
99	Nitrous oxide in the northern Gulf of Aqaba and the central Red Sea. Deep-Sea Research Part II: Topical Studies in Oceanography, 2019, 166, 90-103.	1.4	4
100	Corrigendum to "Dimethylsulphide (DMS) emissionsfrom the West Pacific Ocean: a potential marine source for stratospheric sulphur?" published in Atmos. Chem. Phys., 13, 8427â€“8437, 2013. Atmospheric Chemistry and Physics, 2013, 13, 8813-8814.	4.9	2
101	Perspectives and Integration in SOLAS Science. Springer Earth System Sciences, 2014, , 247-306.	0.2	2
102	Dimethylated sulfur compounds in the Peruvian upwelling system. Biogeosciences, 2022, 19, 701-714.	3.3	2
103	Nitrous oxide in the Indian Ocean. Geophysical Monograph Series, 2009, , 205-216.	0.1	1
104	Tiny But Powerful: How Tiny Amounts of Certain Gases Can Make a Big Difference in the Earthâ€™s Climate. Frontiers for Young Minds, 0, 9, .	0.8	0