

# Thomas Bell

## List of Publications by Year in descending order

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68  
papers

2,502  
citations

257357

24  
h-index

214721

47  
g-index

117  
all docs

117  
docs citations

117  
times ranked

3547  
citing authors

#	ARTICLE	IF	CITATIONS
1	An updated climatology of surface dimethylsulfide concentrations and emission fluxes in the global ocean. <i>Global Biogeochemical Cycles</i> , 2011, 25, n/a-n/a.	1.9	551
2	Global sea-to-air flux climatology for bromoform, dibromomethane and methyl iodide. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 8915-8934.	1.9	131
3	The North Atlantic Aerosol and Marine Ecosystem Study (NAAMES): Science Motive and Mission Overview. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	111
4	Substantial Seasonal Contribution of Observed Biogenic Sulfate Particles to Cloud Condensation Nuclei. <i>Scientific Reports</i> , 2018, 8, 3235.	1.6	103
5	Global oceanic emission of ammonia: Constraints from seawater and atmospheric observations. <i>Global Biogeochemical Cycles</i> , 2015, 29, 1165-1178.	1.9	96
6	Estimation of atmospheric nutrient inputs to the Atlantic Ocean from 50°N to 50°S based on large-scale field sampling: Iron and other dust-associated elements. <i>Global Biogeochemical Cycles</i> , 2013, 27, 755-767.	1.9	88
7	Air-sea dimethylsulfide (DMS) gas transfer in the North Atlantic: evidence for limited interfacial gas exchange at high wind speed. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 11073-11087.	1.9	84
8	Field observations of the ocean-atmosphere exchange of ammonia: Fundamental importance of temperature as revealed by a comparison of high and low latitudes. <i>Global Biogeochemical Cycles</i> , 2008, 22, .	1.9	83
9	Transcriptome analysis of the sulfate deficiency response in the marine microalga <i>Emiliana huxleyi</i> . <i>New Phytologist</i> , 2013, 199, 650-662.	3.5	71
10	Estimation of bubble-mediated air-sea gas exchange from concurrent DMS and CO <sub>2</sub> transfer velocities at intermediate-high wind speeds. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 9019-9033.	1.9	54
11	MEMENTO: a proposal to develop a database of marine nitrous oxide and methane measurements. <i>Environmental Chemistry</i> , 2009, 6, 195.	0.7	53
12	Can we trust empirical marine DMS parameterisations within projections of future climate?. <i>Biogeosciences</i> , 2010, 7, 1645-1656.	1.3	52
13	Dimethylsulfide gas transfer coefficients from algal blooms in the Southern Ocean. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 1783-1794.	1.9	47
14	Identification of senescence and death in <i>Emiliana huxleyi</i> and <i>Thalassiosira pseudonana</i> : Cell staining, chlorophyll alterations, and dimethylsulfoniopropionate (DMSP) metabolism. <i>Limnology and Oceanography</i> , 2012, 57, 305-317.	1.6	46
15	Air exposure of coral is a significant source of dimethylsulfide (DMS) to the atmosphere. <i>Scientific Reports</i> , 2016, 6, 36031.	1.6	40
16	Ammonia/ammonium dissociation coefficient in seawater: A significant numerical correction. <i>Environmental Chemistry</i> , 2007, 4, 183.	0.7	36
17	Parameterizing air-sea gas transfer velocity with dissipation. <i>Journal of Geophysical Research: Oceans</i> , 2017, 122, 3041-3056.	1.0	36
18	Seasonal Differences and Variability of Concentrations, Chemical Composition, and Cloud Condensation Nuclei of Marine Aerosol Over the North Atlantic. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD033145.	1.2	36

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19	Coupling between dimethylsulfide emissions and the ocean - atmosphere exchange of ammonia. <i>Environmental Chemistry</i> , 2008, 5, 259.	0.7	35
20	Exploiting satellite earth observation to quantify current global oceanic DMS flux and its future climate sensitivity. <i>Journal of Geophysical Research: Oceans</i> , 2014, 119, 7725-7740.	1.0	33
21	Flux of the biogenic volatiles isoprene and dimethyl sulfide from an oligotrophic lake. <i>Scientific Reports</i> , 2018, 8, 630.	1.6	32
22	Global ocean dimethyl sulfide climatology estimated from observations and an artificial neural network. <i>Biogeosciences</i> , 2020, 17, 5335-5354.	1.3	30
23	Seasonal Variations in Western North Atlantic Remote Marine Aerosol Properties. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 14240-14261.	1.2	29
24	Third revision of the global surface seawater dimethyl sulfide climatology (DMS-Rev3). <i>Earth System Science Data</i> , 2022, 14, 2963-2987.	3.7	28
25	Attribution of atmospheric sulfur dioxide over the English Channel to dimethyl sulfide and changing ship emissions. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 4771-4783.	1.9	27
26	A comparison of dimethylsulphide (DMS) data from the Atlantic Meridional Transect (AMT) programme with proposed algorithms for global surface DMS concentrations. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2006, 53, 1720-1735.	0.6	25
27	Overview and preliminary results of the Surface Ocean Aerosol Production (SOAP) campaign. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 13645-13667.	1.9	25
28	Global sea-surface iodide observations, 1967–2018. <i>Scientific Data</i> , 2019, 6, 286.	2.4	25
29	Technical Note: Ensuring consistent, global measurements of very short-lived halocarbon gases in the ocean and atmosphere. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 327-330.	1.9	22
30	Air–sea fluxes of CO <sub>2</sub> and CH <sub>4</sub> from the Penlee Point Atmospheric Observatory on the south-west coast of the UK. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 5745-5761.	1.9	22
31	Strong linkages between dimethylsulphoniopropionate (DMSP) and phytoplankton community physiology in a large subtropical and tropical Atlantic Ocean data set. <i>Global Biogeochemical Cycles</i> , 2010, 24, .	1.9	21
32	Global oceanic DMS data inter-comparability. <i>Biogeochemistry</i> , 2012, 110, 147-161.	1.7	21
33	Testing the relationship between the solar radiation dose and surface DMS concentrations using in situ data. <i>Biogeosciences</i> , 2009, 6, 1927-1934.	1.3	20
34	Comparison of two closed-path cavity-based spectrometers for measuring air–water CO <sub>2</sub> and CH <sub>4</sub> fluxes by eddy covariance. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 5509-5522.	1.2	20
35	Uncertainties in eddy covariance air–sea CO <sub>2</sub> flux measurements and implications for gas transfer velocity parameterisations. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 8089-8110.	1.9	20
36	Seasonal and geographical variability of nitryl chloride and its precursors in Northern Europe. <i>Atmospheric Science Letters</i> , 2018, 19, e844.	0.8	19

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37	Assessing the potential for dimethylsulfide enrichment at the sea surface and its influence on air-sea flux. <i>Ocean Science</i> , 2016, 12, 1033-1048.	1.3	18
38	Characterizing the Particle Composition and Cloud Condensation Nuclei from Shipping Emission in Western Europe. <i>Environmental Science &amp; Technology</i> , 2020, 54, 15604-15612.	4.6	18
39	Insights from year-long measurements of air-sea water CH <sub>4</sub> and CO <sub>2</sub> exchange in a coastal environment. <i>Biogeosciences</i> , 2019, 16, 961-978.	1.3	17
40	Using eddy covariance to measure the dependence of air-sea CO <sub>2</sub> exchange rate on friction velocity. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 4297-4315.	1.9	15
41	Sea spray fluxes from the southwest coast of the United Kingdom - dependence on wind speed and wave height. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 15271-15284.	1.9	15
42	Linking marine phytoplankton emissions, meteorological processes, and downwind particle properties with FLEXPART. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 831-851.	1.9	15
43	Gradient flux measurements of sea-air DMS transfer during the Surface Ocean Aerosol Production (SOAP) experiment. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 5861-5877.	1.9	14
44	Methanethiol, dimethyl sulfide and acetone over biologically productive waters in the southwest Pacific Ocean. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 3061-3078.	1.9	14
45	Natural variability in air-sea gas transfer efficiency of CO <sub>2</sub> . <i>Scientific Reports</i> , 2021, 11, 13584.	1.6	14
46	Near-Surface Stratification Due to Ice Melt Biases Arctic Air-Sea CO <sub>2</sub> Flux Estimates. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095266.	1.5	14
47	Surface ocean-lower atmosphere study: Scientific synthesis and contribution to Earth system science. <i>Anthropocene</i> , 2015, 12, 54-68.	1.6	13
48	Corrigendum to: Ammonia/ammonium dissociation coefficient in seawater: A significant numerical correction. <i>Environmental Chemistry</i> , 2008, 5, 258.	0.7	13
49	An interlaboratory comparison for the quantification of aqueous dimethylsulfide. <i>Limnology and Oceanography: Methods</i> , 2014, 12, 784-794.	1.0	12
50	Dissolved organic matter release by an axenic culture of <i>Emiliana huxleyi</i> . <i>Journal of the Marine Biological Association of the United Kingdom</i> , 2008, 88, 1343-1346.	0.4	11
51	Predictability of Seawater DMS During the North Atlantic Aerosol and Marine Ecosystem Study (NAAMES). <i>Frontiers in Marine Science</i> , 2021, 7, .	1.2	11
52	Spatial variability in DMSP-lyase activity along an Atlantic meridional transect. <i>Aquatic Sciences</i> , 2007, 69, 320-329.	0.6	10
53	Investigating the inter-relationships between water attenuated irradiance, primary production and DMS(P). <i>Biogeochemistry</i> , 2012, 110, 201-213.	1.7	9
54	Air-sea transfer of gas phase controlled compounds. <i>IOP Conference Series: Earth and Environmental Science</i> , 2016, 35, 012011.	0.2	9

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55	A measurement system for vertical seawater profiles close to the air-sea interface. <i>Ocean Science</i> , 2017, 13, 649-660.	1.3	9
56	Global Synthesis of Air-Sea CO <sub>2</sub> Transfer Velocity Estimates From Ship-Based Eddy Covariance Measurements. <i>Frontiers in Marine Science</i> , 0, 9, .	1.2	9
57	Development and validation of a shipboard system for measuring high-resolution vertical profiles of aqueous dimethylsulfide concentrations using chemical ionisation mass spectrometry. <i>Environmental Chemistry</i> , 2014, 11, 309.	0.7	8
58	Ozone deposition to a coastal sea: comparison of eddy covariance observations with reactive air-sea exchange models. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 6915-6931.	1.2	7
59	Impact of sea ice on air-sea CO <sub>2</sub> exchange – A critical review of polar eddy covariance studies. <i>Progress in Oceanography</i> , 2022, 201, 102741.	1.5	7
60	Air-sea exchange of acetone, acetaldehyde, DMS and isoprene at a UK coastal site. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 10111-10132.	1.9	5
61	Tidal mixing of estuarine and coastal waters in the western English Channel is a control on spatial and temporal variability in seawater CO <sub>2</sub> . <i>Biogeosciences</i> , 2022, 19, 1657-1674.	1.3	5
62	Characterization of Sea Surface Microlayer and Marine Aerosol Organic Composition Using STXM-NEXAFS Microscopy and FTIR Spectroscopy. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 1899-1913.	1.2	5
63	Automated, high frequency, on-line dimethyl sulfide measurements in natural waters using a novel microfluidic gas-liquid segmented flow method with chemiluminescence detection. <i>Talanta</i> , 2021, 221, 121595.	2.9	4
64	North Atlantic Ocean SST-gradient-driven variations in aerosol and cloud evolution along Lagrangian cold-air outbreak trajectories. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 2795-2815.	1.9	4
65	The relationship between ocean surface turbulence and air-sea gas transfer velocity: An in-situ evaluation. <i>IOP Conference Series: Earth and Environmental Science</i> , 2016, 35, 012005.	0.2	2
66	Perspectives and Integration in SOLAS Science. <i>Springer Earth System Sciences</i> , 2014, , 247-306.	0.1	2
67	Inorganic nitrogen and phosphorus in Western European aerosol and the significance of dry deposition flux into stratified shelf waters. <i>Atmospheric Environment</i> , 2021, 261, 118391.	1.9	1
68	Atmospheric Emissions from Ships. , 2020, , 11-55.		0