Timothy H Bertram

List of Publications by Year
in descending order

73 papers	4,404 citations	117625 34 h-index	114465 63 g-index
90 all docs	90 docs citations	90 times ranked	4176 citing authors

#	Article	IF	Citations
1	Efficient Production of Carbonyl Sulfide in the Lowâ€NO_x Oxidation of Dimethyl Sulfide. Geophysical Research Letters, 2022, 49, .	4.0	16
2	The Sea Spray Chemistry and Particle Evolution study (SeaSCAPE): overview and experimental methods. Environmental Sciences: Processes and Impacts, 2022, 24, 290-315.	3.5	11
3	Marine gas-phase sulfur emissions during an induced phytoplankton bloom. Atmospheric Chemistry and Physics, 2022, 22, 1601-1613.	4.9	11
4	Oceanic emissions of dimethyl sulfide and methanethiol and their contribution to sulfur dioxide production in the marine atmosphere. Atmospheric Chemistry and Physics, 2022, 22, 6309-6325.	4.9	15
5	Reactive Uptake of Hydroperoxymethyl Thioformate to Sodium Chloride and Sodium Iodide Aerosol Particles. Journal of Physical Chemistry A, 2022, 126, 4476-4481.	2.5	6
6	PM2.5 chemistry, organosulfates, and secondary organic aerosol during the 2017 Lake Michigan Ozone Study. Atmospheric Environment, 2021, 244, 117939.	4.1	31
7	Simultaneous Measurements of O₃ and HCOOH Vertical Fluxes Indicate Rapid Inâ€Canopy Terpene Chemistry Enhances O₃ Removal Over Mixed Temperate Forests. Geophysical Research Letters, 2021, 48, e2020GL090996.	4.0	11
8	A novel box for aerosol and droplet guarding and evacuation in respiratory infection (BADGER) for COVID-19 and future outbreaks. Scientific Reports, 2021, 11, 3179.	3.3	4
9	Connecting Landâ€“Atmosphere Interactions to Surface Heterogeneity in CHEESEHEAD19. Bulletin of the American Meteorological Society, 2021, 102, E421-E445.	3.3	40
10	Characterization of ground-based atmospheric pollution and meteorology sampling stations during the Lake Michigan Ozone Study 2017. Journal of the Air and Waste Management Association, 2021, 71, 866-889.	1.9	11
11	Overview of the Lake Michigan Ozone Study 2017. Bulletin of the American Meteorological Society, 2021, 102, E2207-E2225.	3.3	20
12	Strategies to minimize SARS-CoV-2 transmission in classroom settings: combined impacts of ventilation and mask effective filtration efficiency. Science and Technology for the Built Environment, 2021, 27, 1181-1203.	1.7	26
13	Acidity across the interface from the ocean surface to sea spray aerosol. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	73
14	Rapid cloud removal of dimethyl sulfide oxidation products limits SO ₂ and cloud condensation nuclei production in the marine atmosphere. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	28
15	The Wisconsin Oscillator: A Low-Cost Circuit for Powering Ion Guides, Funnels, and Traps. Journal of the American Society for Mass Spectrometry, 2021, 32, 2821-2826.	2.8	1
16	Atmospheric Benzothiazoles in a Coastal Marine Environment. Environmental Science & Technology, 2021, 55, 15705-15714.	10.0	9
17	S_N2 Reactions of N₂O₅ with Ions in Water: Microscopic Mechanisms, Intermediates, and Products. Journal of Physical Chemistry A, 2020, 124, 711-720.	2.5	8
18	Diel Profile of Hydroperoxymethyl Thioformate: Evidence for Surface Deposition and Multiphase Chemistry. Environmental Science & Technology, 2020, 54, 12521-12529.	10.0	21

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19	Reactive VOC Production from Photochemical and Heterogeneous Reactions Occurring at the Airâ€“Ocean Interface. Accounts of Chemical Research, 2020, 53, 1014-1023.	15.6	28
20	Organic Enrichment, Physical Phase State, and Surface Tension Depression of Nascent Coreâ€“Shell Sea Spray Aerosols during Two Phytoplankton Blooms. ACS Earth and Space Chemistry, 2020, 4, 650-660.	2.7	29
21	Simultaneous detection of ozone and nitrogen dioxide by oxygen anion chemical ionization mass spectrometry: a fast-time-response sensor suitable for eddy covariance measurements. Atmospheric Measurement Techniques, 2020, 13, 1887-1907.	3.1	13
22	HONO Emissions from Western U.S. Wildfires Provide Dominant Radical Source in Fresh Wildfire Smoke. Environmental Science & Technology, 2020, 54, 5954-5963.	10.0	51
23	Global airborne sampling reveals a previously unobserved dimethyl sulfide oxidation mechanism in the marine atmosphere. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4505-4510.	7.1	118
24	Production of Br₂from N₂O₅and Br^{â€“}in Salty and Surfactant-Coated Water Microjets. Journal of Physical Chemistry A, 2019, 123, 8942-8953.	2.5	11
25	Sensitivity of Ozone Production to NO_x and VOC Along the Lake Michigan Coastline. Journal of Geophysical Research D: Atmospheres, 2019, 124, 10989-11006.	3.3	43
26	Sulfate and Carboxylate Suppress the Formation of ClNO2 at Atmospheric Interfaces. ACS Earth and Space Chemistry, 2019, 3, 1987-1997.	2.7	18
27	The Role of Clouds in the Tropospheric NO_x Cycle: A New Modeling Approach for Cloud Chemistry and Its Global Implications. Geophysical Research Letters, 2019, 46, 4980-4990.	4.0	51
28	Sea spray aerosol chemical composition: elemental and molecular mimics for laboratory studies of heterogeneous and multiphase reactions. Chemical Society Reviews, 2018, 47, 2374-2400.	38.1	117
29	The sensitivity of benzene cluster cation chemical ionization mass spectrometry to select biogenic terpenes. Atmospheric Measurement Techniques, 2018, 11, 3251-3262.	3.1	12
30	The Impact of Divalent Cations on the Enrichment of Soluble Saccharides in Primary Sea Spray Aerosol. Atmosphere, 2018, 9, 476.	2.3	19
31	Establishing the impact of model surfactants on cloud condensation nuclei activity of sea spray aerosol mimics. Atmospheric Chemistry and Physics, 2018, 18, 10985-11005.	4.9	54
32	Control of Interfacial Cl₂ and N₂O₅ Reactivity by a Zwitterionic Phospholipid in Comparison with Ionic and Uncharged Surfactants. Journal of Physical Chemistry A, 2018, 122, 6593-6604.	2.5	12
33	Regional Similarities and NO x â€Related Increases in Biogenic Secondary Organic Aerosol in Summertime Southeastern United States. Journal of Geophysical Research D: Atmospheres, 2018, 123, 10620-10636.	3.3	14
34	N₂O₅at water surfaces: binding forces, charge separation, energy accommodation and atmospheric implications. Physical Chemistry Chemical Physics, 2018, 20, 17961-17976.	2.8	18
35	Airâ€Sea exchange of biogenic volatile organic compounds and the impact on aerosol particle size distributions. Geophysical Research Letters, 2017, 44, 3887-3896.	4.0	42
36	Reactions of N₂O₅ with Salty and Surfactant-Coated Glycerol: Interfacial Conversion of Br^{â€“} to Br₂ Mediated by Alkylammonium Cations. Journal of Physical Chemistry A, 2017, 121, 3708-3719.	2.5	18

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37	Molecular Diversity of Sea Spray Aerosol Particles: Impact of Ocean Biology on Particle Composition and Hygroscopicity. CheM, 2017, 2, 655-667.	11.7	111
38	Observational assessment of the role of nocturnal residual-layer chemistry in determining daytime surface particulate nitrateÂconcentrations. Atmospheric Chemistry and Physics, 2017, 17, 14747-14770.	4.9	45
39	A miniature Marine Aerosol Reference Tank (miniMART) as a compact breaking wave analogue. Atmospheric Measurement Techniques, 2016, 9, 4257-4267.	3.1	12
40	Revisiting benzene cluster cations for the chemical ionization of dimethyl sulfide and select volatile organic compounds. Atmospheric Measurement Techniques, 2016, 9, 1473-1484.	3.1	19
41	Phytoplankton blooms weakly influence the cloud forming ability of sea spray aerosol. Geophysical Research Letters, 2016, 43, 9975-9983.	4.0	52
42	Enrichment of Saccharides and Divalent Cations in Sea Spray Aerosol During Two Phytoplankton Blooms. Environmental Science & Technology, 2016, 50, 11511-11520.	10.0	90
43	Linking variations in sea spray aerosol particle hygroscopicity to composition during two microcosm experiments. Atmospheric Chemistry and Physics, 2016, 16, 9003-9018.	4.9	31
44	Sea spray aerosol as a unique source of ice nucleating particles. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5797-5803.	7.1	323
45	Characterization of a Quadrotor Unmanned Aircraft System for Aerosol-Particle-Concentration Measurements. Environmental Science & Technology, 2016, 50, 1376-1383.	10.0	82
46	Analysis of Organic Anionic Surfactants in Fine and Coarse Fractions of Freshly Emitted Sea Spray Aerosol. Environmental Science & Technology, 2016, 50, 2477-2486.	10.0	143
47	Bacteriaâ€driven production of alkyl nitrates in seawater. Geophysical Research Letters, 2015, 42, 597-604.	4.0	8
48	Volatility of Primary Organic Aerosol Emitted from Light Duty Gasoline Vehicles. Environmental Science & Technology, 2015, 49, 1569-1577.	10.0	21
49	Microbial Control of Sea Spray Aerosol Composition: A Tale of Two Blooms. ACS Central Science, 2015, 1, 124-131.	11.3	172
50	The Impact of Aerosol Particle Mixing State on the Hygroscopicity of Sea Spray Aerosol. ACS Central Science, 2015, 1, 132-141.	11.3	64
51	Role of Organic Coatings in Regulating N₂O₅ Reactive Uptake to Sea Spray Aerosol. Journal of Physical Chemistry A, 2015, 119, 11683-11692.	2.5	34
52	A controlling role for the airâ"sea interface in the chemical processing of reactive nitrogen in the coastal marine boundary layer. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3943-3948.	7.1	42
53	On the primary emission of formic acid from light duty gasoline vehicles and ocean-going vessels. Atmospheric Environment, 2014, 98, 426-433.	4.1	15
54	Direct aerosol chemical composition measurements to evaluate the physicochemical differences between controlled sea spray aerosol generation schemes. Atmospheric Measurement Techniques, 2014, 7, 3667-3683.	3.1	95

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55	Real-Time Emission Factor Measurements of Isocyanic Acid from Light Duty Gasoline Vehicles. Environmental Science & Technology, 2014, 48, 11405-11412.	10.0	38
56	On the Role of Particle Inorganic Mixing State in the Reactive Uptake of N₂O₅ to Ambient Aerosol Particles. Environmental Science & Technology, 2014, 48, 1618-1627.	10.0	58
57	Transition Metal Associations with Primary Biological Particles in Sea Spray Aerosol Generated in a Wave Channel. Environmental Science & Technology, 2014, 48, 1324-1333.	10.0	58
58	Observations of gas phase hydrochloric acid in the polluted marine boundary layer. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6897-6915.	3.3	44
59	Size-Dependent Changes in Sea Spray Aerosol Composition and Properties with Different Seawater Conditions. Environmental Science & Technology, 2013, 47, 5603-5612.	10.0	175
60	Size-Resolved Sea Spray Aerosol Particles Studied by Vibrational Sum Frequency Generation. Journal of Physical Chemistry A, 2013, 117, 6589-6601.	2.5	50
61	Inside versus Outside: Ion Redistribution in Nitric Acid Reacted Sea Spray Aerosol Particles as Determined by Single Particle Analysis. Journal of the American Chemical Society, 2013, 135, 14528-14531.	13.7	89
62	Impact of marine biogeochemistry on the chemical mixing state and cloud forming ability of nascent sea spray aerosol. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8553-8565.	3.3	84
63	Bringing the ocean into the laboratory to probe the chemical complexity of sea spray aerosol. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7550-7555.	7.1	439
64	On the export of reactive nitrogen from Asia: NO_x partitioning and effects on ozone. Atmospheric Chemistry and Physics, 2013, 13, 4617-4630.	4.9	17
65	A Marine Aerosol Reference Tank system as a breaking wave analogue for the production of foam and sea-spray aerosols. Atmospheric Measurement Techniques, 2013, 6, 1085-1094.	3.1	129
66	A Chemical Ionization High-Resolution Time-of-Flight Mass Spectrometer Coupled to a Micro Orifice Volatilization Impactor (MOVI-HRToF-CIMS) for Analysis of Gas and Particle-Phase Organic Species. Aerosol Science and Technology, 2012, 46, 1313-1327.	3.1	99
67	Nitryl Chloride and Molecular Chlorine in the Coastal Marine Boundary Layer. Environmental Science & Technology, 2012, 46, 10463-10470.	10.0	177
68	Direct observations of N₂O₅ reactivity on ambient aerosol particles. Geophysical Research Letters, 2009, 36, .	4.0	124
69	Role of convection in redistributing formaldehyde to the upper troposphere over North America and the North Atlantic during the summer 2004 INTEX campaign. Journal of Geophysical Research, 2008, 113, .	3.3	35
70	Direct Measurements of the Convective Recycling of the Upper Troposphere. Science, 2007, 315, 816-820.	12.6	114
71	Evaluation of space-based constraints on global nitrogen oxide emissions with regional aircraft measurements over and downwind of eastern North America. Journal of Geophysical Research, 2006, 111, .	3.3	181
72	Consistency of Ozone and Nitrogen Oxides Standards at Tropospherically Relevant Mixing Ratios. Journal of the Air and Waste Management Association, 2005, 55, 1473-1479.	1.9	15

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73	Satellite measurements of daily variations in soil NOxemissions. Geophysical Research Letters, 2005, 32, .	4.0	82