Martin Breitenlechner

List of Publications by Year
in descending order

31 papers	5,658 citations	279798 23 h-index	477307 29 g-index
35 all docs	35 docs citations	35 times ranked	4080 citing authors

#	Article	IF	Citations
1	A versatile vacuum ultraviolet ion source for reduced pressure bipolar chemical ionization mass spectrometry. Atmospheric Measurement Techniques, 2022, 15, 1159-1169.	3.1	7
2	Application of chemical derivatization techniques combined with chemical ionization mass spectrometry to detect stabilized Criegee intermediates and peroxy radicals in the gas phase. Atmospheric Measurement Techniques, 2021, 14, 2501-2513.	3.1	5
3	First eddy covariance flux measurements of semi-volatile organic compounds with the PTR3-TOF-MS. Atmospheric Measurement Techniques, 2021, 14, 8019-8039.	3.1	6
4	Dimensionality-reduction techniques for complex mass spectrometric datasets: application to laboratory atmospheric organic oxidation experiments. Atmospheric Chemistry and Physics, 2020, 20, 1021-1041.	4.9	19
5	Using collision-induced dissociation to constrain sensitivity of ammonia chemical ionization mass spectrometry (NH₄⁺) Tj ETQq1 1 0.784314 rg BT 1861-1870.	3.1	33
6	Formation of Highly Oxygenated Organic Molecules from Î±-Pinene Ozonolysis: Chemical Characteristics, Mechanism, and Kinetic Model Development. ACS Earth and Space Chemistry, 2019, 3, 873-883.	2.7	52
7	Mechanistic study of the formation of ring-retaining and ring-opening products from the oxidation of aromatic compounds under urban atmospheric conditions. Atmospheric Chemistry and Physics, 2019, 19, 15117-15129.	4.9	52
8	Validity and limitations of simple reaction kinetics to calculate concentrations of organic compounds from ion counts in PTR-MS. Atmospheric Measurement Techniques, 2019, 12, 6193-6208.	3.1	53
9	Influence of temperature on the molecular composition of ions and charged clusters during pure biogenic nucleation. Atmospheric Chemistry and Physics, 2018, 18, 65-79.	4.9	56
10	Multicomponent new particle formation from sulfuric acid, ammonia, and biogenic vapors. Science Advances, 2018, 4, eaau5363.	10.3	164
11	Rapid growth of organic aerosol nanoparticles over a wide tropospheric temperature range. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9122-9127.	7.1	118
12	Investigation of the oxidation of methyl vinyl ketone (MVK) by OH radicals in the atmospheric simulation chamber SAPHIR. Atmospheric Chemistry and Physics, 2018, 18, 8001-8016.	4.9	22
13	PTR3: An Instrument for Studying the Lifecycle of Reactive Organic Carbon in the Atmosphere. Analytical Chemistry, 2017, 89, 5824-5831.	6.5	112
14	Causes and importance of new particle formation in the presentâ€day and preindustrial atmospheres. Journal of Geophysical Research D: Atmospheres, 2017, 122, 8739-8760.	3.3	198
15	Technical note: Conversion of isoprene hydroxy hydroperoxides (ISOPOOHs) on metal environmental simulation chamber walls. Atmospheric Chemistry and Physics, 2017, 17, 4053-4062.	4.9	13
16	Experimental particle formation rates spanning tropospheric sulfuric acid and ammonia abundances, ion production rates, and temperatures. Journal of Geophysical Research D: Atmospheres, 2016, 121, 12,377.	3.3	71
17	The role of low-volatility organic compounds in initial particle growth in the atmosphere. Nature, 2016, 533, 527-531.	27.8	540
18	Ion-induced nucleation of pure biogenic particles. Nature, 2016, 533, 521-526.	27.8	528

#	Article	IF	Citations
19	Reduced anthropogenic aerosol radiative forcing caused by biogenic new particle formation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12053-12058.	7.1	107
20	Global atmospheric particle formation from CERN CLOUD measurements. Science, 2016, 354, 1119-1124.	12.6	289
21	The effect of acidâ€“base clustering and ions on the growth of atmospheric nano-particles. Nature Communications, 2016, 7, 11594.	12.8	116
22	Insight into Acidâ€“Base Nucleation Experiments by Comparison of the Chemical Composition of Positive, Negative, and Neutral Clusters. Environmental Science & Technology, 2014, 48, 13675-13684.	10.0	51
23	Oxidation Products of Biogenic Emissions Contribute to Nucleation of Atmospheric Particles. Science, 2014, 344, 717-721.	12.6	456
24	Neutral molecular cluster formation of sulfuric acidâ€“dimethylamine observed in real time under atmospheric conditions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15019-15024.	7.1	208
25	Molecular understanding of sulphuric acidâ€“amine particle nucleation in the atmosphere. Nature, 2013, 502, 359-363.	27.8	774
26	Ternary H[sub 2]SO[sub 4]-H[sub 2]O-NH[sub 3] neutral and charged nucleation rates for a wide range of atmospheric conditions. , 2013, , .		0
27	Role of organics in particle nucleation: From the lab to global model. , 2013, , .		1
28	First observation of a potential non-invasive breath gas biomarker for kidney function. Journal of Breath Research, 2013, 7, 017110.	3.0	38
29	Molecular understanding of atmospheric particle formation from sulfuric acid and large oxidized organic molecules. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17223-17228.	7.1	300
30	Role of sulphuric acid, ammonia and galactic cosmic rays in atmospheric aerosol nucleation. Nature, 2011, 476, 429-433.	27.8	1,114
31	Detection of Plant Volatiles after Leaf Wounding and Darkening by Proton Transfer Reaction â€œTime-of-Flightâ€•Mass Spectrometry (PTR-TOF). PLoS ONE, 2011, 6, e20419.	2.5	152