

Martin Breitenlechner

List of Publications by Year in descending order

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Version: 2024-02-01

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	Role of sulphuric acid, ammonia and galactic cosmic rays in atmospheric aerosol nucleation. <i>Nature</i> , 2011, 476, 429-433.	27.8	1,114
2	Molecular understanding of sulphuric acid–amine particle nucleation in the atmosphere. <i>Nature</i> , 2013, 502, 359-363.	27.8	774
3	The role of low-volatility organic compounds in initial particle growth in the atmosphere. <i>Nature</i> , 2016, 533, 527-531.	27.8	540
4	Ion-induced nucleation of pure biogenic particles. <i>Nature</i> , 2016, 533, 521-526.	27.8	528
5	Oxidation Products of Biogenic Emissions Contribute to Nucleation of Atmospheric Particles. <i>Science</i> , 2014, 344, 717-721.	12.6	456
6	Molecular understanding of atmospheric particle formation from sulfuric acid and large oxidized organic molecules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 17223-17228.	7.1	300
7	Global atmospheric particle formation from CERN CLOUD measurements. <i>Science</i> , 2016, 354, 1119-1124.	12.6	289
8	Neutral molecular cluster formation of sulfuric acid–dimethylamine observed in real time under atmospheric conditions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 15019-15024.	7.1	208
9	Causes and importance of new particle formation in the present-day and preindustrial atmospheres. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 8739-8760.	3.3	198
10	Multicomponent new particle formation from sulfuric acid, ammonia, and biogenic vapors. <i>Science Advances</i> , 2018, 4, eaau5363.	10.3	164
11	Detection of Plant Volatiles after Leaf Wounding and Darkening by Proton Transfer Reaction –Time-of-Flight–Mass Spectrometry (PTR-TOF). <i>PLoS ONE</i> , 2011, 6, e20419.	2.5	152
12	Rapid growth of organic aerosol nanoparticles over a wide tropospheric temperature range. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 9122-9127.	7.1	118
13	The effect of acid–base clustering and ions on the growth of atmospheric nano-particles. <i>Nature Communications</i> , 2016, 7, 11594.	12.8	116
14	PTR3: An Instrument for Studying the Lifecycle of Reactive Organic Carbon in the Atmosphere. <i>Analytical Chemistry</i> , 2017, 89, 5824-5831.	6.5	112
15	Reduced anthropogenic aerosol radiative forcing caused by biogenic new particle formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 12053-12058.	7.1	107
16	Experimental particle formation rates spanning tropospheric sulfuric acid and ammonia abundances, ion production rates, and temperatures. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 12,377.	3.3	71
17	Influence of temperature on the molecular composition of ions and charged clusters during pure biogenic nucleation. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 65-79.	4.9	56
18	Validity and limitations of simple reaction kinetics to calculate concentrations of organic compounds from ion counts in PTR-MS. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 6193-6208.	3.1	53

#	ARTICLE	IF	CITATIONS
19	Formation of Highly Oxygenated Organic Molecules from α -Pinene Ozonolysis: Chemical Characteristics, Mechanism, and Kinetic Model Development. ACS Earth and Space Chemistry, 2019, 3, 873-883.	2.7	52
20	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
21	Insight into Acid-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
22	First observation of a potential non-invasive breath gas biomarker for kidney function. Journal of Breath Research, 2013, 7, 017110.	3.0	38
23	Using collision-induced dissociation to constrain sensitivity of ammonia chemical ionization mass spectrometry (NH_4^+) Tj ETQo1 1 0.784314 rg 3T 1861-1870.	3.1	33
24	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
25	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
26	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
27	A versatile vacuum ultraviolet ion source for reduced pressure bipolar chemical ionization mass spectrometry. Atmospheric Measurement Techniques, 2022, 15, 1159-1169.	3.1	7
28	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
29	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
30	Role of organics in particle nucleation: From the lab to global model. , 2013, , .		1
31	Ternary H_2SO_4 - H_2O - NH_3 neutral and charged nucleation rates for a wide range of atmospheric conditions. , 2013, , .		0