M MÃ¼ller

List of Publications by Year
in descending order

54 papers	3,336 citations	159585 30 h-index	161849 54 g-index
75 all docs	75 docs citations	75 times ranked	4353 citing authors

#	Article	IF	Citations
1	High resolution PTR-TOF: Quantification and formula confirmation of VOC in real time. Journal of the American Society for Mass Spectrometry, 2010, 21, 1037-1044.	2.8	353
2	Airborne measurements of western U.S. wildfire emissions: Comparison with prescribed burning and air quality implications. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6108-6129.	3.3	184
3	Fossil versus contemporary sources of fine elemental and organic carbonaceous particulate matter during the DAURE campaign in Northeast Spain. Atmospheric Chemistry and Physics, 2011, 11, 12067-12084.	4.9	157
4	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
5	On-line breath analysis with PTR-TOF. Journal of Breath Research, 2009, 3, 027004.	3.0	147
6	The Arctic Summer Cloud Ocean Study (ASCOS): overview and experimental design. Atmospheric Chemistry and Physics, 2014, 14, 2823-2869.	4.9	140
7	Aerosol composition and sources in the central Arctic Ocean during ASCOS. Atmospheric Chemistry and Physics, 2011, 11, 10619-10636.	4.9	120
8	First eddy covariance flux measurements by PTR-TOF. Atmospheric Measurement Techniques, 2010, 3, 387-395.	3.1	117
9	Eddy covariance VOC emission and deposition fluxes above grassland using PTR-TOF. Atmospheric Chemistry and Physics, 2011, 11, 611-625.	4.9	104
10	Substantial Seasonal Contribution of Observed Biogenic Sulfate Particles to Cloud Condensation Nuclei. Scientific Reports, 2018, 8, 3235.	3.3	103
11	A new software tool for the analysis of high resolution PTR-TOF mass spectra. Chemometrics and Intelligent Laboratory Systems, 2013, 127, 158-165.	3.5	102
12	A compact PTR-ToF-MS instrument for airborne measurements of volatile organic compounds at high spatiotemporal resolution. Atmospheric Measurement Techniques, 2014, 7, 3763-3772.	3.1	95
13	OH chemistry of non-methane organic gases (NMOGs) emitted from laboratory and ambient biomass burning smoke: evaluating the influence of furans and oxygenated aromatics on ozone and secondary NMOG formation. Atmospheric Chemistry and Physics, 2019, 19, 14875-14899.	4.9	92
14	Alternative pathway for atmospheric particles growth. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6840-6844.	7.1	91
15	New insights into the column CH₂O/NO₂ ratio as an indicator of nearâ€surface ozone sensitivity. Journal of Geophysical Research D: Atmospheres, 2017, 122, 8885-8907.	3.3	87
16	Contrasting winter and summer VOC mixing ratios at a forest site in the Western Mediterranean Basin: the effect of local biogenic emissions. Atmospheric Chemistry and Physics, 2011, 11, 13161-13179.	4.9	85
17	In situ measurements and modeling of reactive trace gases in a small biomass burning plume. Atmospheric Chemistry and Physics, 2016, 16, 3813-3824.	4.9	81
18	Atmospheric benzene observations from oil and gas production in the Denverâ€Julesburg Basin in July and August 2014. Journal of Geophysical Research D: Atmospheres, 2016, 121, 11,055.	3.3	70

#	Article	IF	Citations
19	Atmospheric chemistry of 2-aminoethanol (MEA). Energy Procedia, 2011, 4, 2245-2252.	1.8	65
20	Vertical profiling of aerosol particles and trace gases over the central Arctic Ocean during summer. Atmospheric Chemistry and Physics, 2013, 13, 12405-12431.	4.9	58
21	A novel inlet system for online chemical analysis of semi-volatile submicron particulate matter. Atmospheric Measurement Techniques, 2015, 8, 1353-1360.	3.1	58
22	Study of OH-initiated degradation of 2-aminoethanol. Atmospheric Chemistry and Physics, 2012, 12, 1881-1901.	4.9	51
23	Volatile organic compounds in the western Mediterranean basin: urban and rural winter measurements during the DAURE campaign. Atmospheric Chemistry and Physics, 2013, 13, 4291-4306.	4.9	46
24	Development of a Proton-Transfer Reaction-Linear Ion Trap Mass Spectrometer for Quantitative Determination of Volatile Organic Compounds. Analytical Chemistry, 2008, 80, 8171-8177.	6.5	44
25	Emissions of C₆â€“C₈ aromatic compounds in the United States: Constraints from tall tower and aircraft measurements. Journal of Geophysical Research D: Atmospheres, 2015, 120, 826-842.	3.3	44
26	BVOC fluxes above mountain grassland. Biogeosciences, 2010, 7, 1413-1424.	3.3	43
27	Improved peak analysis of signals based on counting systems: Illustrated for proton-transfer-reaction time-of-flight mass spectrometry. International Journal of Mass Spectrometry, 2010, 295, 72-77.	1.5	39
28	Deposition fluxes of terpenes over grassland. Journal of Geophysical Research, 2011, 116, .	3.3	37
29	Analysis of high mass resolution PTR-TOF mass spectra from 1,3,5-trimethylbenzene (TMB) environmental chamber experiments. Atmospheric Chemistry and Physics, 2012, 12, 829-843.	4.9	37
30	Enhanced spectral analysis of C-TOF Aerosol Mass Spectrometer data: Iterative residual analysis and cumulative peak fitting. International Journal of Mass Spectrometry, 2011, 306, 1-8.	1.5	36
31	Lubricating Oil as a Major Constituent of Ship Exhaust Particles. Environmental Science and Technology Letters, 2017, 4, 54-58.	8.7	34
32	Direct Sampling and Analysis of Atmospheric Particulate Organic Matter by Proton-Transfer-Reaction Mass Spectrometry. Analytical Chemistry, 2017, 89, 10889-10897.	6.5	34
33	On the sources and sinks of atmospheric VOCs: an integrated analysis of recent aircraft campaigns over North America. Atmospheric Chemistry and Physics, 2019, 19, 9097-9123.	4.9	32
34	Validation of TES ammonia observations at the single pixel scale in the San Joaquin Valley during DISCOVERâ€AQ. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5140-5154.	3.3	31
35	Biotic, abiotic, and management controls on methanol exchange above a temperate mountain grassland. Journal of Geophysical Research, 2011, 116, .	3.3	28
36	Dynamic Simulation of Fixedâ€Bed Methanation Reactors. Chemie-Ingenieur-Technik, 2014, 86, 1198-1204.	0.8	28

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37	Validation of IASI Satellite Ammonia Observations at the Pixel Scale Using In Situ Vertical Profiles. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033475.	3.3	28
38	A novel method for producing NH4+ reagent ions in the hollow cathode glow discharge ion source of PTR-MS instruments. International Journal of Mass Spectrometry, 2020, 447, 116254.	1.5	25
39	MS/MS studies for the selective detection of isomeric biogenic VOCs using a Townsend Discharge Triple Quadrupole Tandem MS and a PTR-Linear Ion Trap MS. Atmospheric Measurement Techniques, 2009, 2, 703-712.	3.1	24
40	Detector aging induced mass discrimination and non-linearity effects in PTR-ToF-MS. International Journal of Mass Spectrometry, 2014, 365-366, 93-97.	1.5	19
41	Formaldehyde column density measurements as a suitable pathway to estimate nearâ€surface ozone tendencies from space. Journal of Geophysical Research D: Atmospheres, 2016, 121, 13088-13112.	3.3	19
42	Gas-to-particle partitioning of major biogenic oxidation products: a study on freshly formed and aged biogenic SOA. Atmospheric Chemistry and Physics, 2018, 18, 12969-12989.	4.9	18
43	Comparison of three aerosol chemical characterization techniques utilizing PTR-ToF-MS: a study on freshly formed and aged biogenic SOA. Atmospheric Measurement Techniques, 2018, 11, 1481-1500.	3.1	17
44	Introducing the extended volatility range proton-transfer-reaction mass spectrometer (EVR PTR-MS). Atmospheric Measurement Techniques, 2021, 14, 1355-1363.	3.1	17
45	Factors controlling marine aerosol size distributions and their climate effects over the northwest Atlantic Ocean region. Atmospheric Chemistry and Physics, 2021, 21, 1889-1916.	4.9	14
46	Theoretical and Experimental Study on the Reaction of tert-Butylamine with OH Radicals in the Atmosphere. Journal of Physical Chemistry A, 2018, 122, 4470-4480.	2.5	13
47	Ammonia Dry Deposition in an Alpine Ecosystem Traced to Agricultural Emission Hotpots. Environmental Science & Technology, 2021, 55, 7776-7785.	10.0	13
48	Bulk Organic Aerosol Analysis by Proton-Transfer-Reaction Mass Spectrometry: An Improved Methodology for the Determination of Total Organic Mass, O:C and H:C Elemental Ratios, and the Average Molecular Formula. Analytical Chemistry, 2019, 91, 12619-12624.	6.5	11
49	Eddy-covariance flux measurements in an Italian deciduous forest using PTR-ToF-MS, PTR-QMS and FIS. International Journal of Environmental Analytical Chemistry, 2018, 98, 758-788.	3.3	9
50	Airborne measurements of particulate organic matter by proton-transfer-reaction mass spectrometry (PTR-MS): a pilot study. Atmospheric Measurement Techniques, 2019, 12, 5947-5958.	3.1	9
51	Atmospheric Chemistry of N-Methylmethanimine (CH₃Nâ•CH₂): A Theoretical and Experimental Study. Journal of Physical Chemistry A, 2022, 126, 3247-3264.	2.5	6
52	Atmospheric Chemistry of 2-Amino-2-methyl-1-propanol: A Theoretical and Experimental Study of the OH-Initiated Degradation under Simulated Atmospheric Conditions. Journal of Physical Chemistry A, 2021, 125, 7502-7519.	2.5	5
53	Atmospheric Chemistry of tert-butylamine and AMP. Energy Procedia, 2017, 114, 1026-1032.	1.8	3
54	The role of a suburban forest in controlling vertical trace gas and OH reactivity distributions â€“ a case study for the Seoul metropolitan area. Faraday Discussions, 2021, 226, 537-550.	3.2	3