Rainer M Volkamer

List of Publications by Year
in descending order

153 papers	14,818 citations	20817 60 h-index	24982 109 g-index
250 all docs	250 docs citations	250 times ranked	7977 citing authors

#	Article	IF	Citations
1	Secondary organic aerosol formation from anthropogenic air pollution: Rapid and higher than expected. Geophysical Research Letters, 2006, 33, .	4.0	1,027
2	Recent advances in understanding secondary organic aerosol: Implications for global climate forcing. Reviews of Geophysics, 2017, 55, 509-559.	23.0	548
3	Mexico City aerosol analysis during MILAGRO using high resolution aerosol mass spectrometry at the urban supersite (T0) â€" Part 1: Fine particle composition and organic source apportionment. Atmospheric Chemistry and Physics, 2009, 9, 6633-6653.	4.9	525
4	Development of a detailed chemical mechanism (MCMv3.1) for the atmospheric oxidation of aromatic hydrocarbons. Atmospheric Chemistry and Physics, 2005, 5, 641-664.	4.9	442
5	A missing sink for gasâ€phase glyoxal in Mexico City: Formation of secondary organic aerosol. Geophysical Research Letters, 2007, 34, .	4.0	415
6	An overview of the MILAGRO 2006 Campaign: Mexico City emissions and their transport and transformation. Atmospheric Chemistry and Physics, 2010, 10, 8697-8760.	4.9	349
7	Evaluation of nitrogen dioxide chemiluminescence monitors in a polluted urban environment. Atmospheric Chemistry and Physics, 2007, 7, 2691-2704.	4.9	343
8	Characterization of ambient aerosols in Mexico City during the MCMA-2003 campaign with Aerosol Mass Spectrometry: results from the CENICA Supersite. Atmospheric Chemistry and Physics, 2006, 6, 925-946.	4.9	341
9	Secondary Organic Aerosol Formation from Acetylene (C₂H₂): seed effect on SOA yields due to organic photochemistry in the aerosol aqueous phase. Atmospheric Chemistry and Physics, 2009, 9, 1907-1928.	4.9	329
10	Glyoxal processing by aerosol multiphase chemistry: towards a kinetic modeling framework of secondary organic aerosol formation in aqueous particles. Atmospheric Chemistry and Physics, 2010, 10, 8219-8244.	4.9	320
11	Temperature dependent absorption cross-sections of O2â€"O2 collision pairs between 340 and 630 nm and at atmospherically relevant pressure. Physical Chemistry Chemical Physics, 2013, 15, 15371.	2.8	305
12	Simultaneous global observations of glyoxal and formaldehyde from space. Geophysical Research Letters, 2006, 33, .	4.0	265
13	Primary and Secondary Glyoxal Formation from Aromatics:â€‰ Experimental Evidence for the Bicycloalkylâˆ'Radical Pathway from Benzene, Toluene, and p-Xylene. Journal of Physical Chemistry A, 2001, 105, 7865-7874.	2.5	263
14	Evaluation of recently-proposed secondary organic aerosol models for a case study in Mexico City. Atmospheric Chemistry and Physics, 2009, 9, 5681-5709.	4.9	261
15	Organic aerosol composition and sources in Pasadena, California, during the 2010 CalNex campaign. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9233-9257.	3.3	231
16	Global impacts of tropospheric halogens (Cl, Br, I) on oxidants and composition in GEOS-Chem. Atmospheric Chemistry and Physics, 2016, 16, 12239-12271.	4.9	231
17	Impacts of HONO sources on the photochemistry in Mexico City during the MCMA-2006/MILAGO Campaign. Atmospheric Chemistry and Physics, 2010, 10, 6551-6567.	4.9	222
18	High-resolution absorption cross-section of glyoxal in the UVâ€"vis and IR spectral ranges. Journal of Photochemistry and Photobiology A: Chemistry, 2005, 172, 35-46.	3.9	218

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19	DOAS measurement of glyoxal as an indicator for fast VOC chemistry in urban air. Geophysical Research Letters, 2005, 32, .	4.0	211
20	Atmospheric oxidation in the Mexico City Metropolitan Area (MCMA) during April 2003. Atmospheric Chemistry and Physics, 2006, 6, 2753-2765.	4.9	204
21	The 2010 California Research at the Nexus of Air Quality and Climate Change (CalNex) field study. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5830-5866.	3.3	199
22	Mexico city aerosol analysis during MILAGRO using high resolution aerosol mass spectrometry at the urban supersite (T0) â€" Part 2: Analysis of the biomass burning contribution and the non-fossil carbon fraction. Atmospheric Chemistry and Physics, 2010, 10, 5315-5341.	4.9	182
23	The influence of natural and anthropogenic secondary sources on the glyoxal global distribution. Atmospheric Chemistry and Physics, 2008, 8, 4965-4981.	4.9	174
24	Rapid growth of new atmospheric particles by nitric acid and ammonia condensation. Nature, 2020, 581, 184-189.	27.8	169
25	Distribution, magnitudes, reactivities, ratios and diurnal patterns of volatile organic compounds in the Valley of Mexico during the MCMA 2002 & 2003 field campaigns. Atmospheric Chemistry and Physics, 2007, 7, 329-353.	4.9	167
26	Simulation of semi-explicit mechanisms of SOA formation from glyoxal in aerosol in a 3-D model. Atmospheric Chemistry and Physics, 2014, 14, 6213-6239.	4.9	166
27	Multicomponent new particle formation from sulfuric acid, ammonia, and biogenic vapors. Science Advances, 2018, 4, eaau5363.	10.3	164
28	OH-initiated oxidation of benzene. Physical Chemistry Chemical Physics, 2002, 4, 1598-1610.	2.8	159
29	Characterizing ozone production in the Mexico City Metropolitan Area: a case study using a chemical transport model. Atmospheric Chemistry and Physics, 2007, 7, 1347-1366.	4.9	154
30	Intercomparison of the DOAS and LOPAP techniques for the detection of nitrous acid (HONO). Atmospheric Environment, 2006, 40, 3640-3652.	4.1	152
31	Intercomparison of four different in-situ techniques for ambient formaldehyde measurements in urban air. Atmospheric Chemistry and Physics, 2005, 5, 2881-2900.	4.9	148
32	Separation of emitted and photochemical formaldehyde in Mexico City using a statistical analysis and a new pair of gas-phase tracers. Atmospheric Chemistry and Physics, 2006, 6, 4545-4557.	4.9	146
33	Oxidative capacity of the Mexico City atmosphere â€" Part 1: A radical source perspective. Atmospheric Chemistry and Physics, 2010, 10, 6969-6991.	4.9	146
34	Characterization of Chromophoric Water-Soluble Organic Matter in Urban, Forest, and Marine Aerosols by HR-ToF-AMS Analysis and Excitationâ€"Emission Matrix Spectroscopy. Environmental Science & Technology, 2016, 50, 10351-10360.	10.0	139
35	Estimation of the mass absorption cross section of the organic carbon component of aerosols in the Mexico City Metropolitan Area. Atmospheric Chemistry and Physics, 2008, 8, 6665-6679.	4.9	137
36	Atmospheric Oxidation of Toluene in a Large-Volume Outdoor Photoreactor:Â In Situ Determination of Ring-Retaining Product Yields. Journal of Physical Chemistry A, 1998, 102, 10289-10299.	2.5	136

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37	Inherent calibration of a blue LED-CE-DOAS instrument to measure iodine oxide, glyoxal, methyl glyoxal, nitrogen dioxide, water vapour and aerosol extinction in open cavity mode. Atmospheric Measurement Techniques, 2010, 3, 1797-1814.	3.1	135
38	Ship-based detection of glyoxal over the remote tropical Pacific Ocean. Atmospheric Chemistry and Physics, 2010, 10, 11359-11371.	4.9	125
39	Iodine's impact on tropospheric oxidants: aÂglobal model study in GEOS-Chem. Atmospheric Chemistry and Physics, 2016, 16, 1161-1186.	4.9	116
40	Effective Henryâ€™s Law Partitioning and the Salting Constant of Glyoxal in Aerosols Containing Sulfate. Environmental Science & Technology, 2013, 47, 4236-4244.	10.0	115
41	Aircraft measurements of BrO, IO, glyoxal, NO₂, H₂O, O₂â€“O₂ and aerosol extinction profiles in the tropics: comparison with aircraft-/ship-based in situ and lidar measurements. Atmospheric Measurement Techniques, 2015, 8, 2121-2148.	3.1	107
42	Modeling the observed tropospheric BrO background: Importance of multiphase chemistry and implications for ozone, OH, and mercury. Journal of Geophysical Research D: Atmospheres, 2016, 121, 11,819.	3.3	106
43	Measurements of OH and HO₂ concentrations during the MCMA-2006 field campaign â€“ Part 2: Model comparison and radical budget. Atmospheric Chemistry and Physics, 2009, 9, 6655-6675.	4.9	105
44	Update of the HITRAN collision-induced absorption section. Icarus, 2019, 328, 160-175.	2.5	105
45	Measurements of OH and HO₂ concentrations during the MCMA-2006 field campaign â€“ Part 1: Deployment of the Indiana University laser-induced fluorescence instrument. Atmospheric Chemistry and Physics, 2009, 9, 1665-1685.	4.9	104
46	Rayleigh scattering cross-section measurements of nitrogen, argon, oxygen and air. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 147, 171-177.	2.3	101
47	Overview of the 2010 Carbonaceous Aerosols and Radiative Effects Study (CARES). Atmospheric Chemistry and Physics, 2012, 12, 7647-7687.	4.9	94
48	Role of iodine oxoacids in atmospheric aerosol nucleation. Science, 2021, 371, 589-595.	12.6	94
49	Active and widespread halogen chemistry in the tropical and subtropical free troposphere. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9281-9286.	7.1	91
50	Modeling the Multiday Evolution and Aging of Secondary Organic Aerosol During MILAGRO 2006. Environmental Science & Technology, 2011, 45, 3496-3503.	10.0	90
51	Detection of iodine monoxide in the tropical free troposphere. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2035-2040.	7.1	88
52	The CU Airborne MAX-DOAS instrument: vertical profiling of aerosol extinction and trace gases. Atmospheric Measurement Techniques, 2013, 6, 719-739.	3.1	86
53	Measurements of HNO₃ and N₂O₅ using ion drift-chemical ionization mass spectrometry during the MILAGRO/MCMA-2006 campaign. Atmospheric Chemistry and Physics, 2008, 8, 6823-6838.	4.9	83
54	Modelling constraints on the emission inventory and on vertical dispersion for CO and SO₂ in the Mexico City Metropolitan Area using Solar FTIR and zenith sky UV spectroscopy. Atmospheric Chemistry and Physics, 2007, 7, 781-801.	4.9	82

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55	Measurements of hydroxyl and hydroperoxy radicals during CalNexâ€LA: Model comparisons and radical budgets. Journal of Geophysical Research D: Atmospheres, 2016, 121, 4211-4232.	3.3	81
56	Measurements of Volatile Organic Compounds Using Proton Transfer Reaction â€" Mass Spectrometry during the MILAGRO 2006 Campaign. Atmospheric Chemistry and Physics, 2009, 9, 467-481.	4.9	79
57	MAX-DOAS detection of glyoxal during ICARTT 2004. Atmospheric Chemistry and Physics, 2007, 7, 1293-1303.	4.9	78
58	Correction of the oxygen interference with UV spectroscopic (DOAS) measurements of monocyclic aromatic hydrocarbons in the atmosphere. Atmospheric Environment, 1998, 32, 3731-3747.	4.1	77
59	Ozone response to emission changes: a modeling study during the MCMA-2006/MILAGRO Campaign. Atmospheric Chemistry and Physics, 2010, 10, 3827-3846.	4.9	73
60	Impact of primary formaldehyde on air pollution in the Mexico City Metropolitan Area. Atmospheric Chemistry and Physics, 2009, 9, 2607-2618.	4.9	70
61	Secondary organic aerosol formation from semiâ€•and intermediateâ€•volatility organic compounds and glyoxal: Relevance of O/C as a tracer for aqueous multiphase chemistry. Geophysical Research Letters, 2013, 40, 978-982.	4.0	69
62	Molecular understanding of new-particle formation from <i>Î±</i>-pinene between âˆ’50 and +25â€‰Â°C. Atmospheric Chemistry and Physics, 2020, 20, 9183-9207.	4.9	68
63	Photo-oxidation of Aromatic Hydrocarbons Produces Low-Volatility Organic Compounds. Environmental Science & Technology, 2020, 54, 7911-7921.	10.0	66
64	OH-initiated oxidation of benzene. Physical Chemistry Chemical Physics, 2002, 4, 4399-4411.	2.8	65
65	Oxidative capacity of the Mexico City atmosphere â€" Part 2: A RO_x radical cycling perspective. Atmospheric Chemistry and Physics, 2010, 10, 6993-7008.	4.9	64
66	Glyoxal and Methylglyoxal Setschenow Salting Constants in Sulfate, Nitrate, and Chloride Solutions: Measurements and Gibbs Energies. Environmental Science & Technology, 2015, 49, 11500-11508.	10.0	64
67	Formation of gas-phase carbonyls from heterogeneous oxidation of polyunsaturated fatty acids at the airâ€"water interface and of the sea surface microlayer. Atmospheric Chemistry and Physics, 2014, 14, 1371-1384.	4.9	62
68	Quantitative detection of iodine in the stratosphere. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1860-1866.	7.1	61
69	Enhanced growth rate of atmospheric particles from sulfuric acid. Atmospheric Chemistry and Physics, 2020, 20, 7359-7372.	4.9	58
70	The CU ground MAX-DOAS instrument: characterization of RMS noise limitations and first measurements near Pensacola, FL of BrO, IO, and CHOCHO. Atmospheric Measurement Techniques, 2011, 4, 2421-2439.	3.1	57
71	Global tropospheric halogen (Cl, Br, I) chemistry and its impact on oxidants. Atmospheric Chemistry and Physics, 2021, 21, 13973-13996.	4.9	57
72	Characterizing ozone production and response under different meteorological conditions in Mexico City. Atmospheric Chemistry and Physics, 2008, 8, 7571-7581.	4.9	55

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73	Potential of Aerosol Liquid Water to Facilitate Organic Aerosol Formation: Assessing Knowledge Gaps about Precursors and Partitioning. Environmental Science & Technology, 2017, 51, 3327-3335.	10.0	55
74	Injection of iodine to the stratosphere. Geophysical Research Letters, 2015, 42, 6852-6859.	4.0	52
75	Intercomparison of NO₂, O₄, O₃ and HCHO slant column measurements by MAX-DOAS and zenith-sky UVâ€“visible spectrometers during CINDI-2. Atmospheric Measurement Techniques, 2020, 13, 2169-2208.	3.1	52
76	Modeling the weekly cycle of NO_x and CO emissions and their impacts on O₃ in the Los Angelesâ€South Coast Air Basin during the CalNex 2010 field campaign. Journal of Geophysical Research D: Atmospheres, 2016, 121, 1340-1360.	3.3	51
77	First detection of ammonia (NH₃) in the Asian summer monsoon upper troposphere. Atmospheric Chemistry and Physics, 2016, 16, 14357-14369.	4.9	51
78	Global nitrous acid emissions and levels of regional oxidants enhanced by wildfires. Nature Geoscience, 2020, 13, 681-686.	12.9	51
79	Instrument intercomparison of glyoxal, methyl glyoxal and NO₂ under simulated atmospheric conditions. Atmospheric Measurement Techniques, 2015, 8, 1835-1862.	3.1	50
80	The Convective Transport of Active Species in the Tropics (CONTRAST) Experiment. Bulletin of the American Meteorological Society, 2017, 98, 106-128.	3.3	50
81	Dealkylation of Alkylbenzenes: A Significant Pathway in the Toluene,<i>o</i>-,<i>m</i>-,<i>p</i>-Xylene + OH Reaction. Journal of Physical Chemistry A, 2009, 113, 9658-9666.	2.5	49
82	Measurements of diurnal variations and eddy covariance (EC) fluxes of glyoxal in the tropical marine boundary layer: description of the Fast LED-CE-DOAS instrument. Atmospheric Measurement Techniques, 2014, 7, 3579-3595.	3.1	49
83	Molecular understanding of the suppression of new-particle formation by isoprene. Atmospheric Chemistry and Physics, 2020, 20, 11809-11821.	4.9	49
84	Observational constraints on glyoxal production from isoprene oxidation and its contribution to organic aerosol over the Southeast United States. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9849-9861.	3.3	48
85	Heterogeneous photochemistry of imidazole-2-carboxaldehyde: HO₂ radical formation and aerosol growth. Atmospheric Chemistry and Physics, 2016, 16, 11823-11836.	4.9	48
86	Aqueous phase oxidation of sulphur dioxide by ozone in cloud droplets. Atmospheric Chemistry and Physics, 2016, 16, 1693-1712.	4.9	47
87	Detailed comparisons of airborne formaldehyde measurements with box models during the 2006 INTEX-B and MILAGRO campaigns: potential evidence for significant impacts of unmeasured and multi-generation volatile organic carbon compounds. Atmospheric Chemistry and Physics, 2011, 11, 11867-11894.	4.9	46
88	UV photochemistry of carboxylic acids at the airâ€sea boundary: A relevant source of glyoxal and other oxygenated VOC in the marine atmosphere. Geophysical Research Letters, 2017, 44, 1079-1087.	4.0	44
89	Chemistry of Volatile Organic Compounds in the Los Angeles Basin: Formation of Oxygenated Compounds and Determination of Emission Ratios. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2298-2319.	3.3	43
90	The CU 2-D-MAX-DOAS instrument â€“ Part 1: Retrieval of 3-D distributions of NO₂ and azimuth-dependent OVOC ratios. Atmospheric Measurement Techniques, 2015, 8, 2371-2395.	3.1	39

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91	The driving factors of new particle formation and growth in the polluted boundary layer. Atmospheric Chemistry and Physics, 2021, 21, 14275-14291.	4.9	38
92	Technical note: Evaluation of standard ultraviolet absorption ozone monitors in a polluted urban environment. Atmospheric Chemistry and Physics, 2006, 6, 3163-3180.	4.9	37
93	Stratospheric Injection of Brominated Very Shortâ€Lived Substances: Aircraft Observations in the Western Pacific and Representation in Global Models. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5690-5719.	3.3	36
94	Effect of sea salt aerosol on tropospheric bromine chemistry. Atmospheric Chemistry and Physics, 2019, 19, 6497-6507.	4.9	36
95	Importance of reactive halogens in the tropical marine atmosphere: aÂregional modelling study using WRF-Chem. Atmospheric Chemistry and Physics, 2019, 19, 3161-3189.	4.9	36
96	Computational Study of the Effect of Glyoxalâ€"Sulfate Clustering on the Henryâ€™s Law Coefficient of Glyoxal. Journal of Physical Chemistry A, 2015, 119, 4509-4514.	2.5	35
97	Fast gas chromatography with luminol chemiluminescence detection for the simultaneous determination of nitrogen dioxide and peroxyacetyl nitrate in the atmosphere. Review of Scientific Instruments, 2004, 75, 4595-4605.	1.3	34
98	Implementation of a Markov Chain Monte Carlo method to inorganic aerosol modeling of observations from the MCMA-2003 campaign â€" PartÂII: Model application to the CENICA, Pedregal and Santa Ana sites. Atmospheric Chemistry and Physics, 2006, 6, 4889-4904.	4.9	34
99	Separation of Methane Emissions From Agricultural and Natural Gas Sources in the Colorado Front Range. Geophysical Research Letters, 2019, 46, 3990-3998.	4.0	34
100	The Twoâ€Column Aerosol Project: Phase Iâ€"Overview and impact of elevated aerosol layers on aerosol optical depth. Journal of Geophysical Research D: Atmospheres, 2016, 121, 336-361.	3.3	33
101	Mercury oxidation from bromine chemistry in the free troposphere over the southeasternÂUS. Atmospheric Chemistry and Physics, 2016, 16, 3743-3760.	4.9	33
102	BrO and inferred Br_{<i>y</i>} profiles over the western Pacific: relevance of inorganic bromine sources and a Br_{<i>y</i>} minimum in the aged tropical tropopause layer. Atmospheric Chemistry and Physics, 2017, 17, 15245-15270.	4.9	33
103	Parameterizing radiative transfer to convert MAX-DOAS dSCDs into near-surface box-averaged mixing ratios. Atmospheric Measurement Techniques, 2013, 6, 1521-1532.	3.1	32
104	Weakening of the weekend ozone effect over California's South Coast Air Basin. Geophysical Research Letters, 2015, 42, 9457-9464.	4.0	32
105	Formaldehyde in the Tropical Western Pacific: Chemical Sources and Sinks, Convective Transport, and Representation in CAMâ€Chem and the CCMI Models. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11201-11226.	3.3	32
106	Molecular Composition and Volatility of Nucleated Particles from Î±-Pinene Oxidation between âˆ'50 Â°C and +25 Â°C. Environmental Science & Technology, 2019, 53, 12357-12365.	10.0	32
107	MAX-DOAS measurements of HONO slant column densities during the MAD-CAT campaign: inter-comparison, sensitivity studies on spectral analysis settings, and error budget. Atmospheric Measurement Techniques, 2017, 10, 3719-3742.	3.1	31
108	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

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109	Biomass burning nitrogen dioxide emissions derived from space with TROPOMI: methodology and validation. Atmospheric Measurement Techniques, 2021, 14, 7929-7957.	3.1	27
110	Airborne MAXâ€ĐOAS measurements over California: Testing the NASA OMI tropospheric NO₂ product. Journal of Geophysical Research D: Atmospheres, 2013, 118, 7400-7413.	3.3	26
111	Ground-based direct-sun DOAS and airborne MAX-DOAS measurements of the collision-induced oxygen complex, O₂O₂, absorption with significant pressure and temperature differences. Atmospheric Measurement Techniques, 2015, 8, 793-809.	3.1	26
112	Synergistic HNO3â€“H2SO4â€“NH3 upper tropospheric particle formation. Nature, 2022, 605, 483-489.	27.8	26
113	Contribution of dissolved organic matter to submicron water-soluble organic aerosols in the marine boundary layer over the eastern equatorial Pacific. Atmospheric Chemistry and Physics, 2016, 16, 7695-7707.	4.9	24
114	Elevated aerosol layers modify the O2â€“O2 absorption measured by ground-based MAX-DOAS. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 176, 34-49.	2.3	22
115	The CU mobile Solar Occultation Flux instrument: structure functions and emission rates of NH₃, NO₂ and C₂H₆. Atmospheric Measurement Techniques, 2017, 10, 373-392.	3.1	22
116	MAX-DOAS observations from ground, ship, and research aircraft: maximizing signal-to-noise to measure 'weak' absorbers. , 2009, , .		20
117	Investigating differences in DOAS retrieval codes using MAD-CAT campaign data. Atmospheric Measurement Techniques, 2017, 10, 955-978.	3.1	20
118	Parameterization retrieval of trace gas volume mixing ratios from Airborne MAX-DOAS. Atmospheric Measurement Techniques, 2016, 9, 5655-5675.	3.1	19
119	Determination of the collision rate coefficient between charged iodic acid clusters and iodic acid using the appearance time method. Aerosol Science and Technology, 2021, 55, 231-242.	3.1	18
120	Inter-comparison of MAX-DOAS measurements of tropospheric HONO slant column densities and vertical profiles during the CINDI-2 campaign. Atmospheric Measurement Techniques, 2020, 13, 5087-5116.	3.1	18
121	Can COSMOTherm Predict a Salting in Effect?. Journal of Physical Chemistry A, 2017, 121, 6288-6295.	2.5	17
122	Model representations of aerosol layers transported from North America over the Atlantic Ocean during the Twoâ€Column Aerosol Project. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9814-9848.	3.3	15
123	Quantifying Carbon Monoxide Emissions on the Scale of Large Wildfires. Geophysical Research Letters, 2022, 49, .	4.0	14
124	Development of a digital mobile solar tracker. Atmospheric Measurement Techniques, 2016, 9, 963-972.	3.1	13
125	Erratum to â€œRayleigh scattering cross-section measurements of nitrogen, argon, oxygen and airâ€• J Quant Spectrosc Radiat Transf 147 (2014) 171â€“177. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 189, 281-282.	2.3	13
126	Measurement of iodine species and sulfuric acid using bromide chemical ionization mass spectrometers. Atmospheric Measurement Techniques, 2021, 14, 4187-4202.	3.1	13

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127	Halogen activation and radical cycling initiated by imidazole-2-carboxaldehyde photochemistry. Atmospheric Chemistry and Physics, 2019, 19, 10817-10828.	4.9	12
128	Iodine chemistry in the chemistryâ€“climate model SOCOL-AERv2-I. Geoscientific Model Development, 2021, 14, 6623-6645.	3.6	12
129	Chemical composition of nanoparticles from <i>Î±</i>-pinene nucleation and the influence of isoprene and relative humidity at low temperature. Atmospheric Chemistry and Physics, 2021, 21, 17099-17114.	4.9	12
130	Molecular characterization of ultrafine particles using extractive electrospray time-of-flight mass spectrometry. Environmental Science Atmospheres, 2021, 1, 434-448.	2.4	10
131	Characterisation of African biomass burning plumes and impacts on the atmospheric composition over the south-west Indian Ocean. Atmospheric Chemistry and Physics, 2020, 20, 14821-14845.	4.9	10
132	An assessment of the radiative effects of ice supersaturation based on in situ observations. Geophysical Research Letters, 2016, 43, 11,039.	4.0	8
133	Simulating the Weekly Cycle of NO x â€VOCâ€HO x â€O 3 Photochemical System in the South Coast of California During CalNexâ€2010 Campaign. Journal of Geophysical Research D: Atmospheres, 2019, 124, 3532-3555.	3.3	8
134	Remote Sensing of Glyoxal by Differential Optical Absorption Spectroscopy (DOAS): Advancements in Simulation Chamber and Field Experiments. , 2006, , 129-141.		8
135	The CU 2-D-MAX-DOAS instrument â€“ Part 2: Raman scattering probability measurements and retrieval of aerosol optical properties. Atmospheric Measurement Techniques, 2016, 9, 3893-3910.	3.1	8
136	Modelling the gasâ€“particle partitioning and water uptake of isoprene-derived secondary organic aerosol at high and low relative humidity. Atmospheric Chemistry and Physics, 2022, 22, 215-244.	4.9	8
137	Survival of newly formed particles in haze conditions. Environmental Science Atmospheres, 2022, 2, 491-499.	2.4	8
138	The CU Airborne Solar Occultation Flux Instrument: Performance Evaluation during BB-FLUX. ACS Earth and Space Chemistry, 2022, 6, 582-596.	2.7	7
139	Carbon Monoxide in Optically Thick Wildfire Smoke: Evaluating TROPOMI Using CU Airborne SOF Column Observations. ACS Earth and Space Chemistry, 2022, 6, 1799-1812.	2.7	6
140	O2â€“O2 CIA in the gas phase: Cross-section of weak bands, and continuum absorption between 297â€“500Ânm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 279, 108063.	2.3	5
141	Field observational constraints on the controllers in glyoxal (CHOCHO) reactive uptake to aerosol. Atmospheric Chemistry and Physics, 2022, 22, 805-821.	4.9	5
142	Ozone depletion due to dust release of iodine in the free troposphere. Science Advances, 2021, 7, eabj6544.	10.3	5
143	Origin of water-soluble organic aerosols at the MaÃ¯do high-altitude observatory, RÃ©union Island, in the tropical Indian Ocean. Atmospheric Chemistry and Physics, 2021, 21, 17017-17029.	4.9	4
144	A Comparison of Multitemporal Airborne Laser Scanning Data and the Fuel Characteristics Classification System for Estimating Fuel Load and Consumption. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	3.0	3

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145	Implications of the Inâ€Situ Measured Mass Absorption Cross Section of Organic Aerosols in Mexico City on the Atmospheric Energy Balance, Satellite Retrievals, and Photochemistry. , 2009, , .		2
146	Light emitting diode cavity enhanced differential optical absorption spectroscopy (LED-CE-DOAS): a novel technique for monitoring atmospheric trace gases. , 2009, , .		2
147	A Tribute to Mario Molina. Journal of Physical Chemistry A, 2015, 119, 4277-4278.	2.5	2
148	Wildfire Smoke Observations in the Western U.S. from the Airborne Wyoming Cloud Lidar during the BB-FLUX Project. Part I: Data Description and Methodology. Journal of Atmospheric and Oceanic Technology, 2022, , .	1.3	2
149	Maximizing Degrees of Freedom in MAX-DOAS Retrievals of BrO from Remote Tropical Marine Mountaintops. , 2017, , .		1
150	Measurements of the Absorption Cross Section of ¹³CHO¹³CHO at Visible Wavelengths and Application to DOAS Retrievals. Journal of Physical Chemistry A, 2015, 119, 4651-4657.	2.5	0
151	New Measurements of the Rate Constants of the Reactions of Pentenal, Hexenal, Heptenal, and Nonenal with Ozone, OH Radicals, and Br Atoms. , 2017, , .		0
152	Novel Pathways to Form Secondary Organic Aerosols: Glyoxal SOA in WRF/Chem. Springer Proceedings in Complexity, 2014, , 149-154.	0.3	0
153	Emission Fluxes from Agricultural Sources and Biomass Burning using the CU Airborne SOF Instrument. , 2017, , .		0