

Joel A Thornton

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

219
papers

13,314
citations

67
h-index

110
g-index

239
ext. papers

16,020
ext. citations

8.1
avg, IF

6.27
L-index

#	Paper	IF	Citations
219	A large source of low-volatility secondary organic aerosol. <i>Nature</i> , 2014 , 506, 476-9	50.4	1078
218	A large atomic chlorine source inferred from mid-continental reactive nitrogen chemistry. <i>Nature</i> , 2010 , 464, 271-4	50.4	471
217	Recent advances in understanding secondary organic aerosol: Implications for global climate forcing. <i>Reviews of Geophysics</i> , 2017 , 55, 509-559	23.1	359
216	An iodide-adduct high-resolution time-of-flight chemical-ionization mass spectrometer: application to atmospheric inorganic and organic compounds. <i>Environmental Science & Technology</i> , 2014 , 48, 6309-17	10.3	288
215	Highly Oxygenated Organic Molecules (HOM) from Gas-Phase Autoxidation Involving Peroxy Radicals: A Key Contributor to Atmospheric Aerosol. <i>Chemical Reviews</i> , 2019 , 119, 3472-3509	68.1	262
214	Tropospheric halogen chemistry: sources, cycling, and impacts. <i>Chemical Reviews</i> , 2015 , 115, 4035-62	68.1	250
213	Toward a general parameterization of $\text{N}(\text{O})_x$ reactivity on aqueous particles: the competing effects of particle liquid water, nitrate and chloride. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 8351-8363	6.8	241
212	A novel method for online analysis of gas and particle composition: description and evaluation of a Filter Inlet for Gases and AEROSols (FIGAERO). <i>Atmospheric Measurement Techniques</i> , 2014 , 7, 983-1001	4	234
211	Contribution of nitrated phenols to wood burning brown carbon light absorption in Detling, United Kingdom during winter time. <i>Environmental Science & Technology</i> , 2013 , 47, 6316-24	10.3	219
210	Atmospheric NO ₂ : in situ laser-induced fluorescence detection at parts per trillion mixing ratios. <i>Analytical Chemistry</i> , 2000 , 72, 528-39	7.8	211
209	A thermal dissociation laser-induced fluorescence instrument for in situ detection of NO ₂ , peroxy nitrates, alkyl nitrates, and HNO ₃ . <i>Journal of Geophysical Research</i> , 2002 , 107, ACH 4-1-ACH 4-14		209
208	Nitrate radicals and biogenic volatile organic compounds: oxidation, mechanisms, and organic aerosol. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 2103-2162	6.8	206
207	Highly functionalized organic nitrates in the southeast United States: Contribution to secondary organic aerosol and reactive nitrogen budgets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 1516-21	11.5	195
206	The formation of highly oxidized multifunctional products in the ozonolysis of cyclohexene. <i>Journal of the American Chemical Society</i> , 2014 , 136, 15596-606	16.4	187
205	N ₂ O ₅ hydrolysis on sub-micron organic aerosols: the effect of relative humidity, particle phase, and particle size. <i>Physical Chemistry Chemical Physics</i> , 2003 , 5, 4593	3.6	183
204	Quantifying atmospheric nitrate formation pathways based on a global model of the oxygen isotopic composition ($\delta^{17}\text{O}$) of atmospheric nitrate. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 5043-5056	6.8	181
203	N ₂ O ₅ reaction on submicron sea salt aerosol: kinetics, products, and the effect of surface active organics. <i>Journal of Physical Chemistry A</i> , 2005 , 109, 10004-12	2.8	178

202	Ozone production rates as a function of NO _x abundances and HO _x production rates in the Nashville urban plume. <i>Journal of Geophysical Research</i> , 2002 , 107, ACH 7-1		178
201	Insights into hydroxyl measurements and atmospheric oxidation in a California forest. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 8009-8020	6.8	175
200	The effect of varying levels of surfactant on the reactive uptake of N ₂ O ₅ to aqueous aerosol. <i>Atmospheric Chemistry and Physics</i> , 2006 , 6, 1635-1644	6.8	172
199	Reactive uptake of an isoprene-derived epoxydiol to submicron aerosol particles. <i>Environmental Science & Technology</i> , 2014 , 48, 11178-86	10.3	163
198	A field-deployable, chemical ionization time-of-flight mass spectrometer. <i>Atmospheric Measurement Techniques</i> , 2011 , 4, 1471-1479	4	162
197	Quantifying trace gas uptake to tropospheric aerosol: recent advances and remaining challenges. <i>Chemical Society Reviews</i> , 2012 , 41, 6555-81	58.5	156
196	Chlorine activation by N ₂ O ₅ : simultaneous, in situ detection of ClNO ₂ and N ₂ O ₅ by chemical ionization mass spectrometry. <i>Atmospheric Measurement Techniques</i> , 2009 , 2, 193-204	4	156
195	Nitryl chloride and molecular chlorine in the coastal marine boundary layer. <i>Environmental Science & Technology</i> , 2012 , 46, 10463-70	10.3	152
194	Kinetics of Surface-Bound Benzo[a]pyrene and Ozone on Solid Organic and Salt Aerosols. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 11626-11634	2.8	148
193	A large and ubiquitous source of atmospheric formic acid. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 6283-6304	6.8	141
192	Fine particle pH and the partitioning of nitric acid during winter in the northeastern United States. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 10,355	4.4	129
191	Monoterpenes are the largest source of summertime organic aerosol in the southeastern United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 2038-2043	11.5	117
190	Secondary organic aerosol reduced by mixture of atmospheric vapours. <i>Nature</i> , 2019 , 565, 587-593	50.4	113
189	The oxidation of oleate in submicron aqueous salt aerosols: evidence of a surface process. <i>Journal of Physical Chemistry A</i> , 2007 , 111, 1073-83	2.8	111
188	Molecular Composition and Volatility of Organic Aerosol in the Southeastern U.S.: Implications for IEPOX Derived SOA. <i>Environmental Science & Technology</i> , 2016 , 50, 2200-9	10.3	110
187	Direct observations of N ₂ O ₅ reactivity on ambient aerosol particles. <i>Geophysical Research Letters</i> , 2009 , 36,	4.9	109
186	The Chemistry of Atmosphere-Forest Exchange (CAFE) Model [Part 1: Model description and characterization. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 77-101	6.8	108
185	Heterogeneous OH oxidation of palmitic acid in single component and internally mixed aerosol particles: vaporization and the role of particle phase. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 5465-5476	6.8	104

184	On alkyl nitrates, O ₃ , and the missing NO _y . <i>Journal of Geophysical Research</i> , 2003 , 108,		100
183	The role of chlorine in global tropospheric chemistry. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 3981-4003	6.03	96
182	Observational insights into aerosol formation from isoprene. <i>Environmental Science & Technology</i> , 2013 , 47, 11403-13	10.3	95
181	Understanding the role of the ground surface in HONO vertical structure: High resolution vertical profiles during NACHTT-11. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 10,155-10,171	4.4	91
180	Constraining the sensitivity of iodide adduct chemical ionization mass spectrometry to multifunctional organic molecules using the collision limit and thermodynamic stability of iodide ion adducts. <i>Atmospheric Measurement Techniques</i> , 2016 , 9, 1505-1512	4	90
179	Organic nitrate aerosol formation via NO ₃ + biogenic volatile organic compounds in the southeastern United States. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 13377-13392	6.8	90
178	Effect of the Aerosol-Phase State on Secondary Organic Aerosol Formation from the Reactive Uptake of Isoprene-Derived Epoxydiols (IEPOX). <i>Environmental Science and Technology Letters</i> , 2018 , 5, 167-174	11	89
177	Formaldehyde production from isoprene oxidation across NO regimes. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 2597-2610	6.8	88
176	Phase partitioning and volatility of secondary organic aerosol components formed from α -pinene ozonolysis and OH oxidation: the importance of accretion products and other low volatility compounds. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 7765-7776	6.8	88
175	Closing the peroxy acetyl nitrate budget: observations of acyl peroxy nitrates (PAN, PPN, and MPAN) during BEARPEX 2007. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 7623-7641	6.8	87
174	Chemical feedbacks weaken the wintertime response of particulate sulfate and nitrate to emissions reductions over the eastern United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 8110-8115	11.5	86
173	Meteorology, Air Quality, and Health in London: The ClearFlo Project. <i>Bulletin of the American Meteorological Society</i> , 2015 , 96, 779-804	6.1	84
172	Ozone photochemistry in an oil and natural gas extraction region during winter: simulations of a snow-free season in the Uintah Basin, Utah. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 8955-8971	6.8	84
171	Effects of chemical complexity on the autoxidation mechanisms of endocyclic alkene ozonolysis products: from methylcyclohexenes toward understanding α -pinene. <i>Journal of Physical Chemistry A</i> , 2015 , 119, 4633-50	2.8	83
170	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. <i>Aerosol Science and Technology</i> , 2012 , 46, 1313-1327	3.4	82
169	Chlorine activation within urban or power plant plumes: Vertically resolved ClNO ₂ and Cl ₂ measurements from a tall tower in a polluted continental setting. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 8702-8715	4.4	81
168	Efficient Isoprene Secondary Organic Aerosol Formation from a Non-IEPOX Pathway. <i>Environmental Science & Technology</i> , 2016 , 50, 9872-80	10.3	80
167	Eddy covariance fluxes of acyl peroxy nitrates (PAN, PPN and MPAN) above a Ponderosa pine forest. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 615-634	6.8	80

166	Chemical Characterization of Secondary Organic Aerosol from Oxidation of Isoprene Hydroxyhydroperoxides. <i>Environmental Science & Technology</i> , 2016 , 50, 9889-99	10.3	77
165	Reactivity of stabilized Criegee intermediates (sCIs) from isoprene and monoterpene ozonolysis toward SO ₂ and organic acids. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 12143-12153	6.8	76
164	Semicontinuous measurements of gas/particle partitioning of organic acids in a ponderosa pine forest using a MOVI-HRToF-CIMS. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 1527-1546	6.8	76
163	Assessing known pathways for HO ₂ loss in aqueous atmospheric aerosols: Regional and global impacts on tropospheric oxidants. <i>Journal of Geophysical Research</i> , 2008 , 113, n/a-n/a		76
162	Lightning enhancement over major oceanic shipping lanes. <i>Geophysical Research Letters</i> , 2017 , 44, 9102-9111	9.11	75
161	Urban pollution greatly enhances formation of natural aerosols over the Amazon rainforest. <i>Nature Communications</i> , 2019 , 10, 1046	17.4	72
160	N ₂ O ₅ uptake coefficients and nocturnal NO ₂ removal rates determined from ambient wintertime measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 9331-9350	4.4	72
159	Total Peroxy Nitrates (PNs) in the atmosphere: the Thermal Dissociation-Laser Induced Fluorescence (TD-LIF) technique and comparisons to speciated PAN measurements. <i>Atmospheric Measurement Techniques</i> , 2010 , 3, 593-607	4	72
158	Increasing Isoprene Epoxydiol-to-Inorganic Sulfate Aerosol Ratio Results in Extensive Conversion of Inorganic Sulfate to Organosulfur Forms: Implications for Aerosol Physicochemical Properties. <i>Environmental Science & Technology</i> , 2019 , 53, 8682-8694	10.3	71
157	Observations of total alkyl nitrates during Texas Air Quality Study 2000: Implications for O ₃ and alkyl nitrate photochemistry. <i>Journal of Geophysical Research</i> , 2004 , 109,		71
156	Reactive uptake of N ₂ O ₅ to internally mixed inorganic and organic particles: the role of organic carbon oxidation state and inferred organic phase separations. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 5693-5707	6.8	70
155	Heterogeneous N ₂ O ₅ Uptake During Winter: Aircraft Measurements During the 2015 WINTER Campaign and Critical Evaluation of Current Parameterizations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 4345-4372	4.4	69
154	Heterogeneous Reactions of Isoprene-Derived Epoxides: Reaction Probabilities and Molar Secondary Organic Aerosol Yield Estimates. <i>Environmental Science and Technology Letters</i> , 2015 , 2, 38-42	11	67
153	An MCM modeling study of nitryl chloride (ClNO ₂) impacts on oxidation, ozone production and nitrogen oxide partitioning in polluted continental outflow. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 3789-3800	6.8	67
152	The Chemistry of Atmosphere-Forest Exchange (CAFE) Model Part 2: Application to BEARPEX-2007 observations. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 1269-1294	6.8	67
151	Ozone depletion events observed in the high latitude surface layer during the TOPSE aircraft program. <i>Journal of Geophysical Research</i> , 2003 , 108, TOP 4-1		67
150	Computational Study of Hydrogen Shifts and Ring-Opening Mechanisms in α -Pinene Ozonolysis Products. <i>Journal of Physical Chemistry A</i> , 2015 , 119, 11366-75	2.8	66
149	Modeling the Detection of Organic and Inorganic Compounds Using Iodide-Based Chemical Ionization. <i>Journal of Physical Chemistry A</i> , 2016 , 120, 576-87	2.8	65

148	Multiphase reactivity of gaseous hydroperoxide oligomers produced from isoprene ozonolysis in the presence of acidified aerosols. <i>Atmospheric Environment</i> , 2017 , 152, 314-322	5.3	64
147	Forest-atmosphere exchange of ozone: sensitivity to very reactive biogenic VOC emissions and implications for in-canopy photochemistry. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 7875-7891	6.8	64
146	Growth Kinetics and Size Distribution Dynamics of Viscous Secondary Organic Aerosol. <i>Environmental Science & Technology</i> , 2018 , 52, 1191-1199	10.3	63
145	Formation of Low-Volatility Organic Compounds in the Atmosphere: Recent Advancements and Insights. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 1503-1511	6.4	61
144	On the temperature dependence of organic reactivity, nitrogen oxides, ozone production, and the impact of emission controls in San Joaquin Valley, California. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 3373-3395	6.8	61
143	Nighttime chemical evolution of aerosol and trace gases in a power plant plume: Implications for secondary organic nitrate and organosulfate aerosol formation, NO ₃ radical chemistry, and N ₂ O ₅ heterogeneous hydrolysis. <i>Journal of Geophysical Research</i> , 2010 , 115,		58
142	Sources and Secondary Production of Organic Aerosols in the Northeastern United States during WINTER. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 7771-7796	4.4	57
141	Nitrogen, Aerosol Composition, and Halogens on a Tall Tower (NACHTT): Overview of a wintertime air chemistry field study in the front range urban corridor of Colorado. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 8067-8085	4.4	57
140	BAECC: A Field Campaign to Elucidate the Impact of Biogenic Aerosols on Clouds and Climate. <i>Bulletin of the American Meteorological Society</i> , 2016 , 97, 1909-1928	6.1	57
139	Direct N ₂ O ₅ reactivity measurements at a polluted coastal site. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 2959-2968	6.8	56
138	The Essential Role for Laboratory Studies in Atmospheric Chemistry. <i>Environmental Science & Technology</i> , 2017 , 51, 2519-2528	10.3	55
137	Measurements of HO ₂ uptake to aqueous aerosol: Mass accommodation coefficients and net reactive loss. <i>Journal of Geophysical Research</i> , 2005 , 110,		55
136	Ambient observations of dimers from terpene oxidation in the gas phase: Implications for new particle formation and growth. <i>Geophysical Research Letters</i> , 2017 , 44, 2958-2966	4.9	54
135	The primary and recycling sources of OH during the NACHTT-2011 campaign: HONO as an important OH primary source in the wintertime. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 6886-6896	4.4	53
134	Molecular composition and volatility of isoprene photochemical secondary organic aerosol under low- and high-NO conditions. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 159-174	6.8	53
133	Influence of trans-Pacific pollution transport on acyl peroxy nitrate abundances and speciation at Mount Bachelor Observatory during INTEX-B. <i>Atmospheric Chemistry and Physics</i> , 2007 , 7, 5309-5325	6.8	53
132	An experimental technique for the direct measurement of N ₂ O ₅ reactivity on ambient particles. <i>Atmospheric Measurement Techniques</i> , 2009 , 2, 231-242	4	50
131	Instrumentation and Measurement Strategy for the NOAA SENEX Aircraft Campaign as Part of the Southeast Atmosphere Study 2013. <i>Atmospheric Measurement Techniques</i> , 2016 , 9, 3063-3093	4	50

130	Comprehensive characterization of atmospheric organic carbon at a forested site. <i>Nature Geoscience</i> , 2017 , 10, 748-753	18.3	49
129	Phase partitioning of soluble trace gases with size-resolved aerosols in near-surface continental air over northern Colorado, USA, during winter. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 9414-9427	4.4	48
128	Comparisons of in situ and long path measurements of NO ₂ in urban plumes. <i>Journal of Geophysical Research</i> , 2003 , 108,		47
127	An extractive electrospray ionization time-of-flight mass spectrometer (EESI-TOF) for online measurement of atmospheric aerosol particles. <i>Atmospheric Measurement Techniques</i> , 2019 , 12, 4867-4886	4.4	46
126	An Odd Oxygen Framework for Wintertime Ammonium Nitrate Aerosol Pollution in Urban Areas: NO _x and VOC Control as Mitigation Strategies. <i>Geophysical Research Letters</i> , 2019 , 46, 4971-4979	4.9	45
125	Particulate Organic Matter Detection Using a Micro-Orifice Volatilization Impactor Coupled to a Chemical Ionization Mass Spectrometer (MOVI-CIMS). <i>Aerosol Science and Technology</i> , 2010 , 44, 61-74	3.4	44
124	Observations of elevated formaldehyde over a forest canopy suggest missing sources from rapid oxidation of arboreal hydrocarbons. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 8761-8781	6.8	44
123	Quantitative constraints on autoxidation and dimer formation from direct probing of monoterpene-derived peroxy radical chemistry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 12142-12147	11.5	44
122	Measurements of the sum of HO₂ and CH₃O₂NO₂ in the remote troposphere. <i>Atmospheric Chemistry and Physics</i> , 2004 , 4, 377-384	6.8	43
121	Anthropogenic enhancements to production of highly oxygenated molecules from autoxidation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 6641-6646	11.5	42
120	Constraining condensed-phase formation kinetics of secondary organic aerosol components from isoprene epoxydiols. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 1245-1254	6.8	40
119	The sea breeze/land breeze circulation in Los Angeles and its influence on nitryl chloride production in this region. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		40
118	Isomerization of Second-Generation Isoprene Peroxy Radicals: Epoxide Formation and Implications for Secondary Organic Aerosol Yields. <i>Environmental Science & Technology</i> , 2017 , 51, 4978-4987	10.3	39
117	Photochemical modeling of glyoxal at a rural site: observations and analysis from BEARPEX 2007. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 8883-8897	6.8	39
116	Enhanced formation of isoprene-derived organic aerosol in sulfur-rich power plant plumes during Southeast Nexus. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 11,137-11,153	4.4	38
115	Molecular identification of organic vapors driving atmospheric nanoparticle growth. <i>Nature Communications</i> , 2019 , 10, 4442	17.4	37
114	Ozone production chemistry in the presence of urban plumes. <i>Faraday Discussions</i> , 2016 , 189, 169-89	3.6	37
113	Analysis of secondary organic aerosol formation and aging using positive matrix factorization of high-resolution aerosol mass spectra: application to the dodecane low-NO_x system. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 11795-11817	6.8	35

112	Isothermal Evaporation of Pinene Ozonolysis SOA: Volatility, Phase State, and Oligomeric Composition. <i>ACS Earth and Space Chemistry</i> , 2018 , 2, 1058-1067	3.2	35
111	Reacto-Diffusive Length of N ₂ O ₅ in Aqueous Sulfate- and Chloride-Containing Aerosol Particles. <i>Journal of Physical Chemistry A</i> , 2016 , 120, 1039-45	2.8	34
110	Online molecular characterization of fine particulate matter in Port Angeles, WA: Evidence for a major impact from residential wood smoke. <i>Atmospheric Environment</i> , 2016 , 138, 99-107	5.3	33
109	Temperature dependent halogen activation by N ₂ O ₅ reactions on halide-doped ice surfaces. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 5237-5247	6.8	33
108	NO _x Lifetime and NO _y Partitioning During WINTER. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 9813-9827	4.4	32
107	Production of NO and ClNO through Nocturnal Processing of Biomass-Burning Aerosol. <i>Environmental Science & Technology</i> , 2018 , 52, 550-559	10.3	32
106	Nitrogen Oxides Emissions, Chemistry, Deposition, and Export Over the Northeast United States During the WINTER Aircraft Campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 12368-12378	4.4	32
105	Field intercomparison of the gas/particle partitioning of oxygenated organics during the Southern Oxidant and Aerosol Study (SOAS) in 2013. <i>Aerosol Science and Technology</i> , 2017 , 51, 30-56	3.4	31
104	Quantification of organic aerosol and brown carbon evolution in fresh wildfire plumes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 29469-29477	11.5	31
103	High upward fluxes of formic acid from a boreal forest canopy. <i>Geophysical Research Letters</i> , 2016 , 43, 9342-9351	4.9	27
102	HONO Emissions from Western U.S. Wildfires Provide Dominant Radical Source in Fresh Wildfire Smoke. <i>Environmental Science & Technology</i> , 2020 , 54, 5954-5963	10.3	26
101	Effects of gas-wall interactions on measurements of semivolatile compounds and small polar molecules. <i>Atmospheric Measurement Techniques</i> , 2019 , 12, 3137-3149	4	26
100	Interannual variability of long-range transport as seen at the Mt. Bachelor observatory. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 557-572	6.8	26
99	A model framework to retrieve thermodynamic and kinetic properties of organic aerosol from composition-resolved thermal desorption measurements. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 14757-14785	6.8	26
98	Flight Deployment of a High-Resolution Time-of-Flight Chemical Ionization Mass Spectrometer: Observations of Reactive Halogen and Nitrogen Oxide Species. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 7670	4.4	25
97	Chemical transformations in monoterpene-derived organic aerosol enhanced by inorganic composition. <i>Npj Climate and Atmospheric Science</i> , 2019 , 2,	8	25
96	Decadal changes in summertime reactive oxidized nitrogen and surface ozone over the Southeast United States. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 2341-2361	6.8	24
95	Identifying precursors and aqueous organic aerosol formation pathways during the SOAS campaign. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 14409-14420	6.8	24

94	ClNO ₂ Yields From Aircraft Measurements During the 2015 WINTER Campaign and Critical Evaluation of the Current Parameterization. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 12,994	4.4	24
93	Top-Down Estimates of NO _x and CO Emissions From Washington, D.C.-Baltimore During the WINTER Campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 7705-7724	4.4	24
92	Overview of the HI-SCALE Field Campaign: A New Perspective on Shallow Convective Clouds. <i>Bulletin of the American Meteorological Society</i> , 2019 , 100, 821-840	6.1	23
91	Semi-volatile and highly oxygenated gaseous and particulate organic compounds observed above a boreal forest canopy. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 11547-11562	6.8	23
90	Biomass Burning Markers and Residential Burning in the WINTER Aircraft Campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 1846-1861	4.4	22
89	Chamber-based insights into the factors controlling epoxydiol (IEPOX) secondary organic aerosol (SOA) yield, composition, and volatility. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 11253-11265	6.8	21
88	Airborne Observations of Reactive Inorganic Chlorine and Bromine Species in the Exhaust of Coal-Fired Power Plants. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 11225-11237	4.4	21
87	Anthropogenic control over wintertime oxidation of atmospheric pollutants. <i>Geophysical Research Letters</i> , 2019 , 46, 14826-14835	4.9	20
86	Reactive nitrogen partitioning and its relationship to winter ozone events in Utah. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 573-583	6.8	19
85	Predicting secondary organic aerosol phase state and viscosity and its effect on multiphase chemistry in a regional-scale air quality model. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 8201-8225	6.8	18
84	Daytime Oxidized Reactive Nitrogen Partitioning in Western U.S. Wildfire Smoke Plumes. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2020JD033484	4.4	18
83	Airborne and ground-based observations of ammonium-nitrate-dominated aerosols in a shallow boundary layer during intense winter pollution episodes in northern Utah. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 17259-17276	6.8	18
82	On the contribution of nocturnal heterogeneous reactive nitrogen chemistry to particulate matter formation during wintertime pollution events in Northern Utah. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 9287-9308	6.8	17
81	Photolysis Controls Atmospheric Budgets of Biogenic Secondary Organic Aerosol. <i>Environmental Science & Technology</i> , 2020 , 54, 3861-3870	10.3	17
80	Widespread Pollution From Secondary Sources of Organic Aerosols During Winter in the Northeastern United States. <i>Geophysical Research Letters</i> , 2019 , 46, 2974-2983	4.9	17
79	Molecular mechanism for rapid autoxidation in α -pinene ozonolysis. <i>Nature Communications</i> , 2021 , 12, 878	17.4	16
78	Wintertime Gas-Particle Partitioning and Speciation of Inorganic Chlorine in the Lower Troposphere Over the Northeast United States and Coastal Ocean. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 12,897	4.4	16
77	Insights into hydroxyl measurements and atmospheric oxidation in a California forest		15

76	Observations of atmosphere-biosphere exchange of total and speciated peroxy nitrates: nitrogen fluxes and biogenic sources of peroxy nitrates. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 9763-9773	6.8	14
75	Emissions of Reactive Nitrogen From Western U.S. Wildfires During Summer 2018. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2020JD032657	4.4	14
74	Estimating the saturation vapor pressures of isoprene oxidation products C ₅ H ₁₂ O ₆ and C ₅ H ₁₀ O ₆ using COSMO-RS. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 17589-17600	6.8	14
73	Wintertime Overnight NO _x Removal in a Southeastern United States Coal-fired Power Plant Plume: A Model for Understanding Winter NO _x Processing and its Implications. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 1412-1425	4.4	13
72	Emissions of Trace Organic Gases From Western U.S. Wildfires Based on WE-CAN Aircraft Measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2020JD033838	4.4	13
71	An electrospray chemical ionization source for real-time measurement of atmospheric organic and inorganic vapors. <i>Atmospheric Measurement Techniques</i> , 2017 , 10, 3609-3625	4	12
70	Performance of a new coaxial ion-molecule reaction region for low-pressure chemical ionization mass spectrometry with reduced instrument wall interactions. <i>Atmospheric Measurement Techniques</i> , 2019 , 12, 5829-5844	4	12
69	Observational Constraints on the Formation of Cl ₂ From the Reactive Uptake of ClNO ₂ on Aerosols in the Polluted Marine Boundary Layer. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 8851-8869	4.4	10
68	Evaluating Organic Aerosol Sources and Evolution with a Combined Molecular Composition and Volatility Framework Using the Filter Inlet for Gases and Aerosols (FIGAERO). <i>Accounts of Chemical Research</i> , 2020 , 53, 1415-1426	24.3	10
67	A Near-Explicit Mechanistic Evaluation of Isoprene Photochemical Secondary Organic Aerosol Formation and Evolution: Simulations of Multiple Chamber Experiments with and without Added NO _x . <i>ACS Earth and Space Chemistry</i> , 2020 , 4, 1161-1181	3.2	9
66	Thermalized Epoxide Formation in the Atmosphere. <i>Journal of Physical Chemistry A</i> , 2019 , 123, 10620-10630	6.3	9
65	NO reactive uptake kinetics and chlorine activation on authentic biomass-burning aerosol. <i>Environmental Sciences: Processes and Impacts</i> , 2019 , 21, 1684-1698	4.3	9
64	Variability and Time of Day Dependence of Ozone Photochemistry in Western Wildfire Plumes. <i>Environmental Science & Technology</i> , 2021 , 55, 10280-10290	10.3	9
63	Rates of Wintertime Atmospheric SO ₂ Oxidation based on Aircraft Observations during Clear-Sky Conditions over the Eastern United States. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 6630-6649	4.4	8
62	Resolving ambient organic aerosol formation and aging pathways with simultaneous molecular composition and volatility observations. <i>ACS Earth and Space Chemistry</i> , 2020 , 4, 391-402	3.2	8
61	Daily and intraseasonal relationships between lightning and NO ₂ over the Maritime Continent. <i>Geophysical Research Letters</i> , 2011 , 38, n/a-n/a	4.9	8
60	Nighttime and daytime dark oxidation chemistry in wildfire plumes: an observation and model analysis of FIREX-AQ aircraft data. <i>Atmospheric Chemistry and Physics</i> , 2021 , 21, 16293-16317	6.8	8
59	The influence of nitrogen oxides on the activation of bromide and chloride in salt aerosol		8

58	Toward a general parameterization of N_2O_5 reactivity on aqueous particles: the competing effects of particle liquid water, nitrate and chloride		8
57	Rapid cloud removal of dimethyl sulfide oxidation products limits SO and cloud condensation nuclei production in the marine atmosphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	7
56	Chemical transport models often underestimate inorganic aerosol acidity in remote regions of the atmosphere. <i>Communications Earth & Environment</i> , 2021 , 2,	6.1	7
55	Global tropospheric halogen (Cl, Br, I) chemistry and its impact on oxidants. <i>Atmospheric Chemistry and Physics</i> , 2021 , 21, 13973-13996	6.8	7
54	Formaldehyde production from isoprene oxidation across NO_x regimes		6
53	Phase partitioning and volatility of secondary organic aerosol components formed from α -pinene ozonolysis and OH oxidation: the importance of accretion products and other low volatility compounds		6
52	Instrumentation and Measurement Strategy for the NOAA SENEX Aircraft Campaign as Part of the Southeast Atmosphere Study 2013		6
51	Locally Enhanced Aerosols Over a Shipping Lane Produce Convective Invigoration but Weak Overall Indirect Effects in Cloud-Resolving Simulations. <i>Geophysical Research Letters</i> , 2018 , 45, 9305-9313	4.9	6
50	Gas to Particle Partitioning of Organic Acids in the Boreal Atmosphere. <i>ACS Earth and Space Chemistry</i> , 2019 , 3, 1279-1287	3.2	5
49	Long-term observational constraints of organic aerosol dependence on inorganic species in the southeast US. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 13091-13107	6.8	5
48	Organic nitrate aerosol formation via $\text{NO}_3 + \text{BVOC}$ in the Southeastern US		5
47	Heterogeneous Nitrate Production Mechanisms in Intense Haze Events in the North China Plain. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2021JD034688	4.4	5
46	Reaction Mechanisms Underlying Unfunctionalized Alkyl Nitrate Hydrolysis in Aqueous Aerosols. <i>ACS Earth and Space Chemistry</i> , 2021 , 5, 210-225	3.2	5
45	Molecular composition and volatility of multi-generation products formed from isoprene oxidation by nitrate radical. <i>Atmospheric Chemistry and Physics</i> , 2021 , 21, 10799-10824	6.8	5
44	A robust clustering algorithm for analysis of composition-dependent organic aerosol thermal desorption measurements. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 2489-2512	6.8	4
43	Comparison of Airborne Reactive Nitrogen Measurements During WINTER. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 10483-10502	4.4	4
42	A field-deployable, chemical ionization time-of-flight mass spectrometer: application to the measurement of gas-phase organic and inorganic acids 2011 ,		4
41	Chlorine activation by N_2O_5 : simultaneous, in situ detection of ClNO_2 and N_2O_5 by chemical ionization mass spectrometry		4

40	Empirical Insights Into the Fate of Ammonia in Western U.S. Wildfire Smoke Plumes. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2020JD033730	4.4	4
39	A Novel Framework to Study Trace Gas Transport in Deep Convective Clouds. <i>Journal of Advances in Modeling Earth Systems</i> , 2020 , 12, e2019MS001931	7.1	3
38	The CU Airborne Solar Occultation Flux Instrument: Performance Evaluation during BB-FLUX. <i>ACS Earth and Space Chemistry</i> ,	3.2	3
37	An MCM modeling study of nitryl chloride (ClNO ₂) impacts on oxidation, ozone production and nitrogen oxide partitioning in polluted continental outflow		3
36	Interannual variability of long-range transport as seen at the Mt. Bachelor Observatory		3
35	Quantifying atmospheric nitrate formation pathways based on a global model of the oxygen isotopic composition (¹⁷ O) of atmospheric nitrate		3
34	Constraining the sensitivity of iodide adduct chemical ionization mass spectrometry to multifunctional organic molecules using the collision limit and thermodynamic stability of iodide ion adducts		3
33	Nitrate radicals and biogenic volatile organic compounds: oxidation, mechanisms and organic aerosol 2016 ,		3
32	Chamber-based insights into the factors controlling IEPOX SOA yield, composition, and volatility 2019 ,		2
31	Novel Analysis to Quantify Plume Crosswind Heterogeneity Applied to Biomass Burning Smoke. <i>Environmental Science & Technology</i> , 2021 , 55, 15646-15657	10.3	2
30	Heterogeneous Nucleation Drives Particle Size Segregation in Sequential Ozone and Nitrate Radical Oxidation of Catechol. <i>Environmental Science & Technology</i> , 2021 , 55, 15637-15645	10.3	2
29	Forest-atmosphere exchange of ozone: sensitivity to very reactive biogenic VOC emissions and implications for in-canopy photochemistry		2
28	Photochemical modeling of glyoxal at a rural site: observations and analysis from BEARPEX 2007		2
27	Temperature dependent halogen activation by N ₂ O ₅ reactions on halide-doped ice surfaces		2
26	Semi-continuous measurements of gas/particle partitioning of organic acids in a ponderosa pine forest using a MOVI-HRToF-CIMS		2
25	Constraining condensed-phase formation kinetics of secondary organic aerosol components from isoprene epoxydiols		2
24	Eddy covariance fluxes of acyl peroxy nitrates (PAN, PPN, and MPAN) above a Ponderosa pine forest		2
23	The heterogeneous OH oxidation of palmitic acid in single component and internally mixed aerosol particles: vaporization, secondary chemistry, and the role of particle phase		2

22	Significant Decrease in Wet Deposition of Anthropogenic Chloride Across the Eastern United States, 1998-2018. <i>Geophysical Research Letters</i> , 2020 , 47, e2020GL090195	4.9	2
21	Analysis of secondary organic aerosol formation and aging using positive matrix factorization of high-resolution aerosol mass spectra: application to the dodecane low-NO _x system		2
20	Molecular composition and volatility of isoprene photochemical oxidation secondary organic aerosol under low and high NO _x conditions 2016 ,		2
19	Wintertime Formaldehyde: Airborne Observations and Source Apportionment Over the Eastern United States. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2020JD033518	4.4	2
18	A model framework to retrieve thermodynamic and kinetic properties of organic aerosol from composition-resolved thermal desorption measurements 2018 ,		2
17	Transport and chemistry of isoprene and its oxidation products in deep convective clouds. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2021 , 73, 1-21	3.3	2
16	Complexity in the evolution, composition, and spectroscopy of brown carbon in aircraft measurements of wildfire plumes. <i>Geophysical Research Letters</i> ,	4.9	2
15	Spatially Resolved Photochemistry Impacts Emissions Estimates in Fresh Wildfire Plumes. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL095443	4.9	1
14	Observations of elevated formaldehyde over a forest canopy suggest missing sources from rapid oxidation of arboreal hydrocarbons		1
13	On the temperature dependence of organic reactivity, nitrogen oxides, ozone production, and the impact of emission controls in San Joaquin Valley California		1
12	Reactive uptake of N ₂ O ₅ to internally mixed inorganic and organic particles: the role of organic carbon oxidation state and inferred organic phase separations		1
11	Closing the peroxy acetyl (PA) radical budget: observations of acyl peroxy nitrates (PAN, PPN, and MPAN) during BEARPEX 2007		1
10	An experimental technique for the direct measurement of N ₂ O ₅ reactivity on ambient particles		1
9	Total peroxy nitrates (BNs) in the atmosphere: the thermal dissociation-laser induced fluorescence (TD-LIF) technique and comparisons to speciated PAN measurements		1
8	Observations of atmosphere-biosphere exchange of total and speciated peroxy nitrates: nitrogen fluxes and biogenic sources of peroxy nitrates		1
7	Identifying precursors and aqueous organic aerosol formation pathways during the SOAS campaign 2016 ,		1
6	The role of chlorine in tropospheric chemistry 2018 ,		1
5	Observations and Modeling of NO _x Photochemistry and Fate in Fresh Wildfire Plumes. <i>ACS Earth and Space Chemistry</i> ,	3.2	1

4	Wildfire-driven changes in the abundance of gas-phase pollutants in the city of Boise, ID during summer 2018. <i>Atmospheric Pollution Research</i> , 2022 , 13, 101269	4.5	○
3	Global simulations of monoterpene-derived peroxy radical fates and the distributions of highly oxygenated organic molecules (HOMs) and accretion products. <i>Atmospheric Chemistry and Physics</i> , 2022 , 22, 5477-5494	6.8	○
2	A Four Carbon Organonitrate as a Significant Product of Secondary Isoprene Chemistry. <i>Geophysical Research Letters</i> , 2022 , 49,	4.9	○
1	Effects of oligomerization and decomposition on the nanoparticle growth: a model study. <i>Atmospheric Chemistry and Physics</i> , 2022 , 22, 155-171	6.8	