

Joel A Thornton

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/4836608/joel-a-thornton-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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	Effects of oligomerization and decomposition on the nanoparticle growth: a model study. <i>Atmospheric Chemistry and Physics</i> , 2022 , 22, 155-171	6.8	
218	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	0
217	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	0
216	A Four Carbon Organonitrate as a Significant Product of Secondary Isoprene Chemistry. <i>Geophysical Research Letters</i> , 2022 , 49,	4.9	0
215	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
214	Novel Analysis to Quantify Plume Crosswind Heterogeneity Applied to Biomass Burning Smoke. <i>Environmental Science & Technology</i> , 2021 , 55, 15646-15657	10.3	2
213	Spatially Resolved Photochemistry Impacts Emissions Estimates in Fresh Wildfire Plumes. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL095443	4.9	1
212	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
211	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
210	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
209	Chemical transport models often underestimate inorganic aerosol acidity in remote regions of the atmosphere. <i>Communications Earth & Environment</i> , 2021 , 2,	6.1	7
208	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
207	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
206	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
205	Reaction Mechanisms Underlying Unfunctionalized Alkyl Nitrate Hydrolysis in Aqueous Aerosols. <i>ACS Earth and Space Chemistry</i> , 2021 , 5, 210-225	3.2	5
204	Molecular mechanism for rapid autoxidation in α -pinene ozonolysis. <i>Nature Communications</i> , 2021 , 12, 878	17.4	16
203	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

202	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
201	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
200	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
199	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
198	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
197	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
196	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
195	A Near-Explicit Mechanistic Evaluation of Isoprene Photochemical Secondary Organic Aerosol Formation and Evolution: Simulations of Multiple Chamber Experiments with and without Added NOx. <i>ACS Earth and Space Chemistry</i> , 2020 , 4, 1161-1181	3.2	9
194	Photolysis Controls Atmospheric Budgets of Biogenic Secondary Organic Aerosol. <i>Environmental Science & Technology</i> , 2020 , 54, 3861-3870	10.3	17
193	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
192	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
191	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
190	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
189	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
188	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
187	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
186	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
185	Chamber-based insights into the factors controlling IEPOX SOA yield, composition, and volatility 2019 ,		2

184	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
183	Molecular identification of organic vapors driving atmospheric nanoparticle growth. <i>Nature Communications</i> , 2019 , 10, 4442	17.4	37
182	Secondary organic aerosol reduced by mixture of atmospheric vapours. <i>Nature</i> , 2019 , 565, 587-593	50.4	113
181	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
180	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
179	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
178	The role of chlorine in global tropospheric chemistry. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 3981-4003	6.0	96
177	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
176	Urban pollution greatly enhances formation of natural aerosols over the Amazon rainforest. <i>Nature Communications</i> , 2019 , 10, 1046	17.4	72
175	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
174	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
173	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
172	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
171	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
170	Comparison of Airborne Reactive Nitrogen Measurements During WINTER. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 10483-10502	4.4	4
169	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	46
168	Thermalized Epoxide Formation in the Atmosphere. <i>Journal of Physical Chemistry A</i> , 2019 , 123, 10620-10630	6.3	9
167	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

166	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
165	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
164	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
163	Anthropogenic control over wintertime oxidation of atmospheric pollutants. <i>Geophysical Research Letters</i> , 2019 , 46, 14826-14835	4.9	20
162	Chemical transformations in monoterpene-derived organic aerosol enhanced by inorganic composition. <i>Npj Climate and Atmospheric Science</i> , 2019 , 2,	8	25
161	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
160	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
159	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
158	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
157	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
156	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
155	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
154	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
153	NO _x Lifetime and NO _y Partitioning During WINTER. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 9813-9827	4.4	32
152	Growth Kinetics and Size Distribution Dynamics of Viscous Secondary Organic Aerosol. <i>Environmental Science & Technology</i> , 2018 , 52, 1191-1199	10.3	63
151	Production of NO and ClNO through Nocturnal Processing of Biomass-Burning Aerosol. <i>Environmental Science & Technology</i> , 2018 , 52, 550-559	10.3	32
150	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
149	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

148	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
147	The role of chlorine in tropospheric chemistry 2018 ,		1
146	A model framework to retrieve thermodynamic and kinetic properties of organic aerosol from composition-resolved thermal desorption measurements 2018 ,		2
145	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
144	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
143	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
142	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, 12,368	4.4	32
141	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
140	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
139	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
138	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
137	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
136	The Essential Role for Laboratory Studies in Atmospheric Chemistry. <i>Environmental Science & Technology</i> , 2017 , 51, 2519-2528	10.3	55
135	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
134	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
133	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
132	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
131	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

130	Comprehensive characterization of atmospheric organic carbon at a forested site. <i>Nature Geoscience</i> , 2017 , 10, 748-753	18.3	49
129	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
128	Lightning enhancement over major oceanic shipping lanes. <i>Geophysical Research Letters</i> , 2017 , 44, 9102-9111	2.1	75
127	Molecular composition and volatility of isoprene photochemical oxidation secondary organic aerosol under low- and high-NO _x conditions. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 159-174	6.8	53
126	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
125	Recent advances in understanding secondary organic aerosol: Implications for global climate forcing. <i>Reviews of Geophysics</i> , 2017 , 55, 509-559	23.1	359
124	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
123	Efficient Isoprene Secondary Organic Aerosol Formation from a Non-IEPOX Pathway. <i>Environmental Science & Technology</i> , 2016 , 50, 9872-80	10.3	80
122	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
121	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
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	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
118	Formaldehyde production from isoprene oxidation across NO regimes. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 2597-2610	6.8	88
117	High upward fluxes of formic acid from a boreal forest canopy. <i>Geophysical Research Letters</i> , 2016 , 43, 9342-9351	4.9	27
116	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
115	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
114	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
113	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

112	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
111	Molecular composition and volatility of isoprene photochemical oxidation secondary organic aerosol under low and high NO _x conditions 2016 ,		2
110	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
109	Nitrate radicals and biogenic volatile organic compounds: oxidation, mechanisms and organic aerosol 2016 ,		3
108	Identifying precursors and aqueous organic aerosol formation pathways during the SOAS campaign 2016 ,		1
107	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
106	Ozone production chemistry in the presence of urban plumes. <i>Faraday Discussions</i> , 2016 , 189, 169-89	3.6	37
105	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
104	Chemical Characterization of Secondary Organic Aerosol from Oxidation of Isoprene Hydroxyhydroperoxides. <i>Environmental Science & Technology</i> , 2016 , 50, 9889-99	10.3	77
103	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
102	Meteorology, Air Quality, and Health in London: The ClearLo Project. <i>Bulletin of the American Meteorological Society</i> , 2015 , 96, 779-804	6.1	84
101	A large and ubiquitous source of atmospheric formic acid. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 6283-6304	6.8	141
100	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
99	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
98	Tropospheric halogen chemistry: sources, cycling, and impacts. <i>Chemical Reviews</i> , 2015 , 115, 4035-62	68.1	250
97	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
96	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
95	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

94	Reactive uptake of an isoprene-derived epoxydiol to submicron aerosol particles. <i>Environmental Science & Technology</i> , 2014 , 48, 11178-86	10.3	163
93	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
92	A large source of low-volatility secondary organic aerosol. <i>Nature</i> , 2014 , 506, 476-9	50.4	1078
91	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
90	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
89	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
88	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
87	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
86	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
85	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
84	Observational insights into aerosol formation from isoprene. <i>Environmental Science & Technology</i> , 2013 , 47, 11403-13	10.3	95
83	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
82	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
81	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
80	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
79	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
78	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
77	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

76	Quantifying trace gas uptake to tropospheric aerosol: recent advances and remaining challenges. <i>Chemical Society Reviews</i> , 2012 , 41, 6555-81	58.5	156
75	Nitryl chloride and molecular chlorine in the coastal marine boundary layer. <i>Environmental Science & Technology</i> , 2012 , 46, 10463-70	10.3	152
74	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
73	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
72	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
71	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
70	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
69	Insights into hydroxyl measurements and atmospheric oxidation in a California forest. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 8009-8020	6.8	175
68	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
67	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
66	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
65	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
64	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
63	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
62	A field-deployable, chemical ionization time-of-flight mass spectrometer: application to the measurement of gas-phase organic and inorganic acids 2011 ,		4
61	A field-deployable, chemical ionization time-of-flight mass spectrometer. <i>Atmospheric Measurement Techniques</i> , 2011 , 4, 1471-1479	4	162
60	A large atomic chlorine source inferred from mid-continental reactive nitrogen chemistry. <i>Nature</i> , 2010 , 464, 271-4	50.4	471
59	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

58	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
57	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
56	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
55	Chlorine activation by N ₂ O ₅ ; simultaneous, in situ detection of ClNO ₂ and N ₂ O ₅ by chemical ionization mass spectrometry.	4	156
54	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
53	Direct observations of N ₂ O ₅ reactivity on ambient aerosol particles. <i>Geophysical Research Letters</i> , 2009 , 36,	4.9	109
52	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
51	Quantifying atmospheric nitrate formation pathways based on a global model of the oxygen isotopic composition (¹⁷ O) of atmospheric nitrate. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 5043-5056	6.8	181
50	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
49	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
48	Toward a general parameterization of N ₂ O ₅ 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
47	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
46	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
45	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
44	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
43	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
42	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
41	Measurements of HO ₂ uptake to aqueous aerosol: Mass accommodation coefficients and net reactive loss. <i>Journal of Geophysical Research</i> , 2005 , 110,		55

40	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
39	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
38	Measurements of the sum of HO ₂ and NO ₂ and CH ₃ O ₂ and NO ₂ in the remote troposphere. <i>Atmospheric Chemistry and Physics</i> , 2004 , 4, 377-384	6.8	43
37	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
36	Comparisons of in situ and long path measurements of NO ₂ in urban plumes. <i>Journal of Geophysical Research</i> , 2003 , 108,		47
35	On alkyl nitrates, O ₃ , and the missing NO _y . <i>Journal of Geophysical Research</i> , 2003 , 108,		100
34	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
33	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
32	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
31	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
30	The CU Airborne Solar Occultation Flux Instrument: Performance Evaluation during BB-FLUX. <i>ACS Earth and Space Chemistry</i> ,	3.2	3
29	Observations of elevated formaldehyde over a forest canopy suggest missing sources from rapid oxidation of arboreal hydrocarbons		1
28	Forest-atmosphere exchange of ozone: sensitivity to very reactive biogenic VOC emissions and implications for in-canopy photochemistry		2
27	Photochemical modeling of glyoxal at a rural site: observations and analysis from BEARPEX 2007		2
26	Temperature dependent halogen activation by N ₂ O ₅ reactions on halide-doped ice surfaces		2
25	Insights into hydroxyl measurements and atmospheric oxidation in a California forest		15
24	Semi-continuous measurements of gas/particle partitioning of organic acids in a ponderosa pine forest using a MOVI-HRToF-CIMS		2
23	On the temperature dependence of organic reactivity, nitrogen oxides, ozone production, and the impact of emission controls in San Joaquin Valley California		1

22	An MCM modeling study of nitryl chloride (ClNO_2) impacts on oxidation, ozone production and nitrogen oxide partitioning in polluted continental outflow	3
21	Reactive uptake of N_2O_5 to internally mixed inorganic and organic particles: the role of organic carbon oxidation state and inferred organic phase separations	1
20	The influence of nitrogen oxides on the activation of bromide and chloride in salt aerosol	8
19	Organic nitrate aerosol formation via $\text{NO}_3 + \text{BVOC}$ in the Southeastern US	5
18	Constraining condensed-phase formation kinetics of secondary organic aerosol components from isoprene epoxydiols	2
17	Formaldehyde production from isoprene oxidation across NO_x regimes	6
16	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
15	Interannual variability of long-range transport as seen at the Mt. Bachelor Observatory	3
14	Eddy covariance fluxes of acyl peroxy nitrates (PAN, PPN, and MPAN) above a Ponderosa pine forest	2
13	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
12	Quantifying atmospheric nitrate formation pathways based on a global model of the oxygen isotopic composition ($\delta^{17}\text{O}$) of atmospheric nitrate	3
11	Toward a general parameterization of N_2O_5 reactivity on aqueous particles: the competing effects of particle liquid water, nitrate and chloride	8
10	Closing the peroxy acetyl (PA) radical budget: observations of acyl peroxy nitrates (PAN, PPN, and MPAN) during BEARPEX 2007	1
9	Instrumentation and Measurement Strategy for the NOAA SENEX Aircraft Campaign as Part of the Southeast Atmosphere Study 2013	6
8	Chlorine activation by N_2O_5 : simultaneous, in situ detection of ClNO_2 and N_2O_5 by chemical ionization mass spectrometry	4
7	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
6	An experimental technique for the direct measurement of N_2O_5 reactivity on ambient particles	1
5	Total peroxy nitrates (PNs) in the atmosphere: the thermal dissociation-laser induced fluorescence (TD-LIF) technique and comparisons to speciated PAN measurements	1

4	Observations of atmosphere-biosphere exchange of total and speciated peroxy nitrates: nitrogen fluxes and biogenic sources of peroxy nitrates		1
3	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
2	Observations and Modeling of NO _x Photochemistry and Fate in Fresh Wildfire Plumes. <i>ACS Earth and Space Chemistry</i> ,	3.2	1
1	Complexity in the evolution, composition, and spectroscopy of brown carbon in aircraft measurements of wildfire plumes. <i>Geophysical Research Letters</i> ,	4.9	2