

# Neil M. Donahue

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/8643106/neil-m-donahue-publications-by-citations.pdf>

**Version:** 2024-04-28

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.

329  
papers

30,493  
citations

85  
h-index

170  
g-index

392  
ext. papers

35,008  
ext. citations

8.6  
avg, IF

6.93  
L-index

#	Paper	IF	Citations
329	The formation, properties and impact of secondary organic aerosol: current and emerging issues. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 5155-5236	6.8	2861
328	Evolution of organic aerosols in the atmosphere. <i>Science</i> , <b>2009</b> , 326, 1525-9	33.3	2767
327	Rethinking organic aerosols: semivolatile emissions and photochemical aging. <i>Science</i> , <b>2007</b> , 315, 1259-63	33.3	1452
326	Coupled partitioning, dilution, and chemical aging of semivolatile organics. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 2635-43	10.3	1073
325	Organic aerosol components observed in Northern Hemispheric datasets from Aerosol Mass Spectrometry. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 4625-4641	6.8	749
324	Carbon oxidation state as a metric for describing the chemistry of atmospheric organic aerosol. <i>Nature Chemistry</i> , <b>2011</b> , 3, 133-9	17.6	689
323	Molecular understanding of sulphuric acid-amine particle nucleation in the atmosphere. <i>Nature</i> , <b>2013</b> , 502, 359-63	50.4	585
322	Elemental ratio measurements of organic compounds using aerosol mass spectrometry: characterization, improved calibration, and implications. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 253-272	6.8	563
321	Aging of organic aerosol: bridging the gap between laboratory and field studies. <i>Annual Review of Physical Chemistry</i> , <b>2007</b> , 58, 321-52	15.7	427
320	A two-dimensional volatility basis set: 1. organic-aerosol mixing thermodynamics. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 3303-3318	6.8	421
319	The role of low-volatility organic compounds in initial particle growth in the atmosphere. <i>Nature</i> , <b>2016</b> , 533, 527-31	50.4	388
318	Laboratory investigation of photochemical oxidation of organic aerosol from wood fires 1: measurement and simulation of organic aerosol evolution. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 1263-1277	6.8	381
317	Ion-induced nucleation of pure biogenic particles. <i>Nature</i> , <b>2016</b> , 533, 521-6	50.4	377
316	Oxidation products of biogenic emissions contribute to nucleation of atmospheric particles. <i>Science</i> , <b>2014</b> , 344, 717-21	33.3	375
315	A two-dimensional volatility basis set [Part 2: Diagnostics of organic-aerosol evolution. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 615-634	6.8	365
314	Organic condensation: a vital link connecting aerosol formation to cloud condensation nuclei (CCN) concentrations. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 3865-3878	6.8	319
313	Brownness of organics in aerosols from biomass burning linked to their black carbon content. <i>Nature Geoscience</i> , <b>2014</b> , 7, 647-650	18.3	314

312	Atmospheric organic particulate matter: From smoke to secondary organic aerosol. <i>Atmospheric Environment</i> , <b>2009</b> , 43, 94-106	5.3	292
311	The contribution of organics to atmospheric nanoparticle growth. <i>Nature Geoscience</i> , <b>2012</b> , 5, 453-458	18.3	282
310	Highly Oxygenated Organic Molecules (HOM) from Gas-Phase Autoxidation Involving Peroxy Radicals: A Key Contributor to Atmospheric Aerosol. <i>Chemical Reviews</i> , <b>2019</b> , 119, 3472-3509	68.1	262
309	Secondary organic aerosol production from terpene ozonolysis. 2. Effect of NO <sub>x</sub> concentration. <i>Environmental Science &amp; Technology</i> , <b>2005</b> , 39, 7046-54	10.3	261
308	Molecular understanding of atmospheric particle formation from sulfuric acid and large oxidized organic molecules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 17223-8	11.5	249
307	A review of the anthropogenic influence on biogenic secondary organic aerosol. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 321-343	6.8	246
306	Simulating secondary organic aerosol formation using the volatility basis-set approach in a chemical transport model. <i>Atmospheric Environment</i> , <b>2008</b> , 42, 7439-7451	5.3	241
305	Absorptivity of brown carbon in fresh and photo-chemically aged biomass-burning emissions. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 7683-7693	6.8	231
304	High formation of secondary organic aerosol from the photo-oxidation of toluene. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 2973-2986	6.8	221
303	Global atmospheric particle formation from CERN CLOUD measurements. <i>Science</i> , <b>2016</b> , 354, 1119-1124	33.3	207
302	Nitrate radicals and biogenic volatile organic compounds: oxidation, mechanisms, and organic aerosol. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 2103-2162	6.8	206
301	Aging of biogenic secondary organic aerosol via gas-phase OH radical reactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 13503-8	11.5	201
300	Effects of gas particle partitioning and aging of primary emissions on urban and regional organic aerosol concentrations. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		196
299	Mechanism of HO <sub>x</sub> Formation in the Gas-Phase Ozone-Alkene Reaction. 2. Prompt versus Thermal Dissociation of Carbonyl Oxides to Form OH. <i>Journal of Physical Chemistry A</i> , <b>2001</b> , 105, 4446-4457	2.8	192
298	Organic aerosol formation from photochemical oxidation of diesel exhaust in a smog chamber. <i>Environmental Science &amp; Technology</i> , <b>2007</b> , 41, 6969-75	10.3	181
297	Investigation of alpha-pinene + ozone secondary organic aerosol formation at low total aerosol mass. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 3536-43	10.3	178
296	Laboratory investigation of photochemical oxidation of organic aerosol from wood fires 2: analysis of aerosol mass spectrometer data. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 2227-2240	6.8	168
295	Formation of 3-methyl-1,2,3-butanetricarboxylic acid via gas phase oxidation of pinonic acid: a mass spectrometric study of SOA aging. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 1483-1496	6.8	162

294	Fourier Transform Ultraviolet Spectroscopy of the A $2B/2 \leftarrow X 2B/2$ Transition of BrO $\square$ <i>Journal of Physical Chemistry A</i> , <b>1999</b> , 103, 8935-8945	2.8	160
293	Secondary organic aerosol formation from high-NO(x) photo-oxidation of low volatility precursors: n-alkanes. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 2029-34	10.3	156
292	Neutral molecular cluster formation of sulfuric acid-dimethylamine observed in real time under atmospheric conditions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 15019-24	11.5	155
291	Mechanism of HO Formation in the Gas-Phase Ozone-Alkene Reaction. 1. Direct, Pressure-Dependent Measurements of Prompt OH Yields. <i>Journal of Physical Chemistry A</i> , <b>2001</b> , 105, 1554-1560	2.8	154
290	Source apportionment of molecular markers and organic aerosol. 3. Food cooking emissions. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 7820-7	10.3	153
289	Secondary organic aerosol production from terpene ozonolysis. 1. Effect of UV radiation. <i>Environmental Science &amp; Technology</i> , <b>2005</b> , 39, 7036-45	10.3	150
288	Unspeciated organic emissions from combustion sources and their influence on the secondary organic aerosol budget in the United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 10473-8	11.5	148
287	Adventures in ozoneland: down the rabbit-hole. <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 10848-57	3.6	145
286	Ozonolysis of $\alpha$ -pinene: parameterization of secondary organic aerosol mass fraction. <i>Atmospheric Chemistry and Physics</i> , <b>2007</b> , 7, 3811-3821	6.8	139
285	Saturation vapor pressures and transition enthalpies of low-volatility organic molecules of atmospheric relevance: from dicarboxylic acids to complex mixtures. <i>Chemical Reviews</i> , <b>2015</b> , 115, 4115-58	68.1	138
284	Particle-phase chemistry of secondary organic material: modeled compared to measured O:C and H:C elemental ratios provide constraints. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 4763-70	10.3	138
283	Ozonolysis of $\alpha$ -pinene at atmospherically relevant concentrations: Temperature dependence of aerosol mass fractions (yields). <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		138
282	Product analysis of the OH oxidation of isoprene and 1,3-butadiene in the presence of NO. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ACH 8-1		137
281	Secondary organic aerosol formation from intermediate-volatility organic compounds: cyclic, linear, and branched alkanes. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 8773-81	10.3	134
280	Quantification of the volatility of secondary organic compounds in ultrafine particles during nucleation events. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 9019-9036	6.8	132
279	Direct observation of OH production from the ozonolysis of olefins. <i>Geophysical Research Letters</i> , <b>1998</b> , 25, 59-62	4.9	132
278	Atmospheric volatile organic compound measurements during the Pittsburgh Air Quality Study: Results, interpretation, and quantification of primary and secondary contributions. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		131
277	Secondary organic aerosol formation from limonene ozonolysis: homogeneous and heterogeneous influences as a function of NO(x). <i>Journal of Physical Chemistry A</i> , <b>2006</b> , 110, 11053-63	2.8	131

276	Isotope Specific Kinetics of Hydroxyl Radical (OH) with Water (H <sub>2</sub> O): Testing Models of Reactivity and Atmospheric Fractionation. <i>Journal of Physical Chemistry A</i> , <b>1997</b> , 101, 1494-1500	2.8	129
275	Secondary organic aerosol formation exceeds primary particulate matter emissions for light-duty gasoline vehicles. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 4661-4678	6.8	128
274	Source apportionment of molecular markers and organic aerosol-1. Polycyclic aromatic hydrocarbons and methodology for data visualization. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 7803-10	10.3	123
273	Equilibration time scales of organic aerosol inside thermodenuders: Evaporation kinetics versus thermodynamics. <i>Atmospheric Environment</i> , <b>2010</b> , 44, 597-607	5.3	122
272	Effect of NO <sub>x</sub> on secondary organic aerosol concentrations. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 6022-7	10.3	121
271	A semiempirical correlation between enthalpy of vaporization and saturation concentration for organic aerosol. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 743-8	10.3	120
270	Causes and importance of new particle formation in the present-day and preindustrial atmospheres. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2017</b> , 122, 8739-8760	4.4	119
269	Adsorptive uptake of water by semisolid secondary organic aerosols. <i>Geophysical Research Letters</i> , <b>2015</b> , 42, 3063-3068	4.9	113
268	Constraining the volatility distribution and gas-particle partitioning of combustion aerosols using isothermal dilution and thermodenuder measurements. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 4750-6	10.3	113
267	Aged organic aerosol in the Eastern Mediterranean: the Finokalia Aerosol Measurement Experiment 2008. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 4167-4186	6.8	109
266	Cloud condensation nuclei activation of limited solubility organic aerosol. <i>Atmospheric Environment</i> , <b>2006</b> , 40, 605-617	5.3	109
265	Multicomponent new particle formation from sulfuric acid, ammonia, and biogenic vapors. <i>Science Advances</i> , <b>2018</b> , 4, eaau5363	14.3	105
264	Updating the conceptual model for fine particle mass emissions from combustion systems. <i>Journal of the Air and Waste Management Association</i> , <b>2010</b> , 60, 1204-22	2.4	103
263	Is the gas-particle partitioning in alpha-pinene secondary organic aerosol reversible?. <i>Geophysical Research Letters</i> , <b>2007</b> , 34,	4.9	101
262	Ozone observations and a model of marine boundary layer photochemistry during SAGA 3. <i>Journal of Geophysical Research</i> , <b>1993</b> , 98, 16955		101
261	Volatility and hygroscopicity of aging secondary organic aerosol in a smog chamber. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 11477-11496	6.8	100
260	Gas-phase ozonolysis of alkenes: formation of OH from anti carbonyl oxides. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 8518-9	16.4	100
259	Time scales for gas-particle partitioning equilibration of secondary organic aerosol formed from alpha-pinene ozonolysis. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 5588-94	10.3	99

258	Photochemical oxidation and changes in molecular composition of organic aerosol in the regional context. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		98
257	Water content of aged aerosol. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 911-920	6.8	97
256	Relationship between peroxyacetyl nitrate and nitrogen oxides in the clean troposphere. <i>Nature</i> , <b>1985</b> , 318, 347-349	50.4	97
255	Evolving mass spectra of the oxidized component of organic aerosol: results from aerosol mass spectrometer analyses of aged diesel emissions. <i>Atmospheric Chemistry and Physics</i> , <b>2008</b> , 8, 1139-1152	6.8	95
254	Source apportionment of molecular markers and organic aerosol. 2. Biomass smoke. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 7811-9	10.3	94
253	Contribution of brown carbon and lensing to the direct radiative effect of carbonaceous aerosols from biomass and biofuel burning emissions. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2015</b> , 120, 10,285	4.4	93
252	OH clock determination by proton transfer reaction mass spectrometry at an environmental chamber. <i>Atmospheric Measurement Techniques</i> , <b>2012</b> , 5, 647-656	4	90
251	Cloud condensation nuclei activation of monoterpene and sesquiterpene secondary organic aerosol. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110, n/a-n/a		89
250	The effect of acid-base clustering and ions on the growth of atmospheric nano-particles. <i>Nature Communications</i> , <b>2016</b> , 7, 11594	17.4	88
249	Quantifying the effect of organic aerosol aging and intermediate-volatility emissions on regional-scale aerosol pollution in China. <i>Scientific Reports</i> , <b>2016</b> , 6, 28815	4.9	88
248	Theoretical constraints on pure vapor-pressure driven condensation of organics to ultrafine particles. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4.9	88
247	Intermediate-volatility organic compounds: a potential source of ambient oxidized organic aerosol. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 4744-9	10.3	88
246	The temperature-dependence of rapid low temperature reactions: experiment, understanding and prediction. <i>Faraday Discussions</i> , <b>2006</b> , 133, 137-56; discussion 191-230, 449-52	3.6	87
245	Why do organic aerosols exist? Understanding aerosol lifetimes using the two-dimensional volatility basis set. <i>Environmental Chemistry</i> , <b>2013</b> , 10, 151	3.2	85
244	How do organic vapors contribute to new-particle formation?. <i>Faraday Discussions</i> , <b>2013</b> , 165, 91-104	3.6	84
243	Photochemical aging of $\alpha$ -pinene secondary organic aerosol: effects of OH radical sources and photolysis. <i>Journal of Physical Chemistry A</i> , <b>2012</b> , 116, 5932-40	2.8	84
242	High-pressure flow study of the reactions OH + NO <sub>x</sub> → HONO <sub>x</sub> : Errors in the falloff region. <i>Journal of Geophysical Research</i> , <b>1997</b> , 102, 6159-6168		84
241	Critical factors determining the variation in SOA yields from terpene ozonolysis: a combined experimental and computational study. <i>Faraday Discussions</i> , <b>2005</b> , 130, 295-309; discussion 363-86, 519-246		83

240	Effective rate constants and uptake coefficients for the reactions of organic molecular markers (n-alkanes, hopanes, and steranes) in motor oil and diesel primary organic aerosols with hydroxyl radicals. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 8794-800	10.3	82
239	Nonmethane hydrocarbon chemistry in the remote marine boundary layer. <i>Journal of Geophysical Research</i> , <b>1990</b> , 95, 18387		82
238	Effect of ions on sulfuric acid-water binary particle formation: 2. Experimental data and comparison with QC-normalized classical nucleation theory. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 1752-1775	4.4	80
237	Mixing of secondary organic aerosols versus relative humidity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 12649-12654	11.5	79
236	Predicting Radical Molecule Barrier Heights: The Role of the Ionic Surface. <i>Journal of Physical Chemistry A</i> , <b>1998</b> , 102, 3923-3933	2.8	79
235	Pinene Autoxidation Products May Not Have Extremely Low Saturation Vapor Pressures Despite High O:C Ratios. <i>Journal of Physical Chemistry A</i> , <b>2016</b> , 120, 2569-82	2.8	79
234	Reduced anthropogenic aerosol radiative forcing caused by biogenic new particle formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 12053-12058	11.5	79
233	Contribution of motor vehicle emissions to organic carbon and fine particle mass in Pittsburgh, Pennsylvania: Effects of varying source profiles and seasonal trends in ambient marker concentrations. <i>Atmospheric Environment</i> , <b>2006</b> , 40, 8002-8019	5.3	78
232	Aerosol analysis using a Thermal-Desorption Proton-Transfer-Reaction Mass Spectrometer (TD-PTR-MS): a new approach to study processing of organic aerosols. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 2257-2267	6.8	77
231	Constraining Particle Evolution from Wall Losses, Coagulation, and Condensation-Evaporation in Smog-Chamber Experiments: Optimal Estimation Based on Size Distribution Measurements. <i>Aerosol Science and Technology</i> , <b>2008</b> , 42, 1001-1015	3.4	77
230	Reactivity of stabilized Criegee intermediates (sCIs) from isoprene and monoterpene ozonolysis toward SO <sub>2</sub> and organic acids. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 12143-12153	6.8	76
229	Fragmentation vs. functionalization: chemical aging and organic aerosol formation. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 10553-10563	6.8	75
228	On the Mechanism for Nitrate Formation via the Peroxy Radical + NO Reaction. <i>Journal of Physical Chemistry A</i> , <b>2004</b> , 108, 9082-9095	2.8	75
227	Controlled OH radical production via ozone-alkene reactions for use in aerosol aging studies. <i>Environmental Science &amp; Technology</i> , <b>2007</b> , 41, 2357-63	10.3	74
226	In situ nonmethane hydrocarbon measurements on SAGA 3. <i>Journal of Geophysical Research</i> , <b>1993</b> , 98, 16915		74
225	Rapid growth of organic aerosol nanoparticles over a wide tropospheric temperature range. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 9122-9127	11.5	73
224	Reducing secondary organic aerosol formation from gasoline vehicle exhaust. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 6984-6989	11.5	73
223	Rapid growth of new atmospheric particles by nitric acid and ammonia condensation. <i>Nature</i> , <b>2020</b> , 581, 184-189	50.4	72

222	Simulating the oxygen content of ambient organic aerosol with the 2D volatility basis set. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 7859-7873	6.8	71
221	Photo-oxidation of low-volatility organics found in motor vehicle emissions: production and chemical evolution of organic aerosol mass. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 1638-43	10.3	71
220	Functionalization and fragmentation during ambient organic aerosol aging: application of the 2-D volatility basis set to field studies. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 10797-10816	6.8	71
219	Organosulfates from pinene and isoprene over the Pearl River Delta, South China: seasonal variation and implication in formation mechanisms. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 9236-45	10.3	70
218	Volatility of organic molecular markers used for source apportionment analysis: measurements and implications for atmospheric lifetime. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 12435-44	10.3	70
217	Insights into the primary, secondary and regional local contributions to organic aerosol and PM2.5 mass in Pittsburgh, Pennsylvania. <i>Atmospheric Environment</i> , <b>2007</b> , 41, 7414-7433	5.3	70
216	Cycloalkene ozonolysis: collisionally mediated mechanistic branching. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 12363-73	16.4	70
215	Vapor wall loss of semi-volatile organic compounds in a Teflon chamber. <i>Aerosol Science and Technology</i> , <b>2016</b> , 50, 822-834	3.4	69
214	New Rate Constants for Ten OH Alkane Reactions from 300 to 400 K: An Assessment of Accuracy. <i>Journal of Physical Chemistry A</i> , <b>1998</b> , 102, 3121-3126	2.8	69
213	A naming convention for atmospheric organic aerosol. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 5825-5839	5.3	68
212	On the composition of ammonia-sulfuric-acid ion clusters during aerosol particle formation. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 55-78	6.8	68
211	Parameterization of secondary organic aerosol mass fractions from smog chamber data. <i>Atmospheric Environment</i> , <b>2008</b> , 42, 2276-2299	5.3	66
210	Temperature and pressure dependent kinetics of the gas-phase reaction of the hydroxyl radical with nitrogen dioxide. <i>Geophysical Research Letters</i> , <b>1999</b> , 26, 687-690	4.9	66
209	Near-unity mass accommodation coefficient of organic molecules of varying structure. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 12083-9	10.3	65
208	Pressure dependence of stabilized Criegee intermediate formation from a sequence of alkenes. <i>Journal of Physical Chemistry A</i> , <b>2011</b> , 115, 4381-7	2.8	64
207	New particle formation in the sulfuric acid-dimethylamine-water system: reevaluation of CLOUD chamber measurements and comparison to an aerosol nucleation and growth model. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 845-863	6.8	62
206	Secondary aerosol formation from photochemical aging of aircraft exhaust in a smog chamber. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 4135-4147	6.8	62
205	Laboratory measurements of the heterogeneous oxidation of condensed-phase organic molecular makers for motor vehicle exhaust. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 7950-6	10.3	62



204	Secondary organic aerosol formation from photo-oxidation of unburned fuel: experimental results and implications for aerosol formation from combustion emissions. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 12886-93	10.3	61
203	Volatility of secondary organic aerosol during OH radical induced ageing. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 11055-11067	6.8	60
202	Testing Frontier Orbital Control: Kinetics of OH with Ethane, Propane, and Cyclopropane from 180 to 360K. <i>Journal of Physical Chemistry A</i> , <b>1998</b> , 102, 9847-9857	2.8	57
201	Volatility and aging of atmospheric organic aerosol. <i>Topics in Current Chemistry</i> , <b>2014</b> , 339, 97-143		56
200	Secondary organic aerosol formation from multiphase oxidation of limonene by ozone: mechanistic constraints via two-dimensional heteronuclear NMR spectroscopy. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 7810-8	3.6	56
199	Ozonolysis Fragment Quenching by Nitrate Formation: The Pressure Dependence of Prompt OH Radical Formation. <i>Journal of Physical Chemistry A</i> , <b>2004</b> , 108, 9096-9104	2.8	56
198	Experimental particle formation rates spanning tropospheric sulfuric acid and ammonia abundances, ion production rates, and temperatures. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 12,377	4.4	54
197	Revisiting the Hammond Postulate: The Role of Reactant and Product Ionic States in Regulating Barrier Heights, Locations, and Transition State Frequencies <i>Journal of Physical Chemistry A</i> , <b>2001</b> , 105, 1489-1497	2.8	52
196	Heterogeneous ice nucleation of viscous secondary organic aerosol produced from ozonolysis of $\alpha$ -pinene. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 6495-6509	6.8	51
195	Functionalization vs. fragmentation: n-aldehyde oxidation mechanisms and secondary organic aerosol formation. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 13975-82	3.6	51
194	Relating cloud condensation nuclei activity and oxidation level of $\alpha$ -pinene secondary organic aerosols. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116, n/a-n/a		51
193	Oligomer formation within secondary organic aerosols: equilibrium and dynamic considerations. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 3691-3701	6.8	50
192	Humidity influence on gas-particle phase partitioning of $\alpha$ -pinene + O <sub>3</sub> secondary organic aerosol. <i>Geophysical Research Letters</i> , <b>2010</b> , 37, n/a-n/a	4.9	49
191	Organic aerosol mixing observed by single-particle mass spectrometry. <i>Journal of Physical Chemistry A</i> , <b>2013</b> , 117, 13935-45	2.8	48
190	2,3-Dimethyl-2-butene (TME) ozonolysis: pressure dependence of stabilized Criegee intermediates and evidence of stabilized vinyl hydroperoxides. <i>Journal of Physical Chemistry A</i> , <b>2011</b> , 115, 161-6	2.8	48
189	Free-Radical Kinetics at High Pressure: A Mathematical Analysis of the Flow Reactor. <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 5821-5838		48
188	Emulsified and Liquid-Liquid Phase-Separated States of $\alpha$ -Pinene Secondary Organic Aerosol Determined Using Aerosol Optical Tweezers. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 12154-12163	10.3	48
187	Observation of viscosity transition in $\alpha$ -pinene secondary organic aerosol. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 4423-4438	6.8	47

186	Mixing and phase partitioning of primary and secondary organic aerosols. <i>Geophysical Research Letters</i> , <b>2009</b> , 36, n/a-n/a	4.9	45
185	Accurate, direct measurements of OH yields from gas-phase ozone-alkene reactions using an in situ LIF Instrument. <i>Geophysical Research Letters</i> , <b>2001</b> , 28, 3863-3866	4.9	45
184	Evaluation of one-dimensional and two-dimensional volatility basis sets in simulating the aging of secondary organic aerosol with smog-chamber experiments. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 2245-54	10.3	44
183	MRCISD studies of the dissociation of vinylhydroperoxide, CH <sub>2</sub> CHOOH: there is a saddle point. <i>Journal of Physical Chemistry A</i> , <b>2012</b> , 116, 6823-30	2.8	44
182	Reactions of Atmospheric Particulate Stabilized Criegee Intermediates Lead to High-Molecular-Weight Aerosol Components. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 5702-10	10.3	43
181	Reaction barriers: origin and evolution. <i>Chemical Reviews</i> , <b>2003</b> , 103, 4593-604	68.1	42
180	Evaluating the mixing of organic aerosol components using high-resolution aerosol mass spectrometry. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 6329-35	10.3	41
179	Insight into acid-base nucleation experiments by comparison of the chemical composition of positive, negative, and neutral clusters. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 13675-84	10.3	40
178	Constraining the Mechanism of OH + NO <sub>2</sub> Using Isotopically Labeled Reactants: Experimental Evidence for HOONO Formation. <i>Journal of Physical Chemistry A</i> , <b>2001</b> , 105, 1515-1520	2.8	40
177	Production of Secondary Organic Aerosol During Aging of Biomass Burning Smoke From Fresh Fuels and Its Relationship to VOC Precursors. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2019</b> , 124, 3583-3606	4.4	39
176	Influence of temperature on the molecular composition of ions and charged clusters during pure biogenic nucleation. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 65-79	6.8	39
175	Formation of highly oxygenated organic aerosol in the atmosphere: Insights from the Finokalia Aerosol Measurement Experiments. <i>Geophysical Research Letters</i> , <b>2010</b> , 37, n/a-n/a	4.9	38
174	Molecular identification of organic vapors driving atmospheric nanoparticle growth. <i>Nature Communications</i> , <b>2019</b> , 10, 4442	17.4	37
173	Sources and atmospheric processing of organic aerosol in the Mediterranean: insights from aerosol mass spectrometer factor analysis. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 12499-12515	6.8	37
172	Apportioning black carbon to sources using highly time-resolved ambient measurements of organic molecular markers in Pittsburgh. <i>Atmospheric Environment</i> , <b>2009</b> , 43, 3941-3950	5.3	37
171	Aqueous phase oxidation of sulphur dioxide by ozone in cloud droplets. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 1693-1712	6.8	35
170	Peroxy radical chemistry and the volatility basis set. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 1183-1199	16.9	34
169	Secondary organic aerosol from limonene ketone: insights into terpene ozonolysis via synthesis of key intermediates. <i>Physical Chemistry Chemical Physics</i> , <b>2007</b> , 9, 2991-8	3.6	34

168	Experimental investigation of ion-ion recombination under atmospheric conditions. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 7203-7216	6.8	33
167	A dual-chamber method for quantifying the effects of atmospheric perturbations on secondary organic aerosol formation from biomass burning emissions. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2017</b> , 122, 6043-6058	4.4	32
166	Photochemical aging of secondary organic aerosols generated from the photooxidation of polycyclic aromatic hydrocarbons in the gas-phase. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 5407-16	10.3	32
165	Following Particle-Particle Mixing in Atmospheric Secondary Organic Aerosols by Using Isotopically Labeled Terpenes. <i>CheM</i> , <b>2018</b> , 4, 318-333	16.2	32
164	The role of ions in new particle formation in the CLOUD chamber. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 15181-15197	6.8	32
163	Understanding evolution of product composition and volatility distribution through in-situ GC & GC analysis: a case study of longifolene ozonolysis. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 5335-5346	6.8	32
162	Ozonolysis of beta-pinene: temperature dependence of secondary organic aerosol mass fraction. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 5081-6	10.3	32
161	Molecular understanding of new-particle formation from $\alpha$ -pinene between 0 and +25 °C. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 9183-9207	6.8	32
160	Organic Aerosol Processing During Winter Severe Haze Episodes in Beijing. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2019</b> , 124, 10248-10263	4.4	31
159	Comment on: "The measurement of tropospheric OH radicals by laser-induced fluorescence spectroscopy during the POPCORN Field Campaign" by Hofzumahaus et al. and "Intercomparison of tropospheric OH radical measurements by multiple folded long-path laser absorption and laser induced fluorescence" by Brauers et al. <i>Geophysical Research Letters</i> , <b>1997</b> , 24, 3037-3038	4.9	31
158	High-Pressure Flow Reactor Product Study of the Reactions of HO <sub>x</sub> + NO <sub>2</sub> : The Role of Vibrationally Excited Intermediates. <i>Journal of Physical Chemistry A</i> , <b>2001</b> , 105, 1507-1514	2.8	31
157	Role of iodine oxoacids in atmospheric aerosol nucleation. <i>Science</i> , <b>2021</b> , 371, 589-595	33.3	31
156	Can Highly Oxidized Organics Contribute to Atmospheric New Particle Formation?. <i>Journal of Physical Chemistry A</i> , <b>2016</b> , 120, 1452-8	2.8	30
155	Multiple Excited States in a Two-State Crossing Model: Predicting Barrier Height Evolution for H + Alkene Addition Reactions. <i>Journal of Physical Chemistry A</i> , <b>2000</b> , 104, 4458-4468	2.8	30
154	Aerosol Optical Tweezers Constrain the Morphology Evolution of Liquid-Liquid Phase-Separated Atmospheric Particles. <i>CheM</i> , <b>2020</b> , 6, 204-220	16.2	30
153	Spatial Variability of Sources and Mixing State of Atmospheric Particles in a Metropolitan Area. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 6807-6815	10.3	30
152	Unimolecular Decay of the Dimethyl-Substituted Criegee Intermediate in Alkene Ozonolysis: Decay Time Scales and the Importance of Tunneling. <i>Journal of Physical Chemistry A</i> , <b>2017</b> , 121, 6036-6045	2.8	29
151	Reactivity of oleic acid in organic particles: changes in oxidant uptake and reaction stoichiometry with particle oxidation. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 7951-62	3.6	29

150	The kinetics of tetramethylethene ozonolysis: decomposition of the primary ozonide and subsequent product formation in the condensed phase. <i>Journal of Physical Chemistry A</i> , <b>2008</b> , 112, 13535-41	2.8	29
149	Constraining the mechanism and kinetics of OH + NO <sub>2</sub> and HO <sub>2</sub> + NO using the multiple-well master equation. <i>Journal of Physical Chemistry A</i> , <b>2006</b> , 110, 6898-911	2.8	29
148	Particle wall-loss correction methods in smog chamber experiments. <i>Atmospheric Measurement Techniques</i> , <b>2018</b> , 11, 6577-6588	4	29
147	Size-dependent influence of NO on the growth rates of organic aerosol particles. <i>Science Advances</i> , <b>2020</b> , 6, eaay4945	14.3	28
146	Laboratory measurements of the oxidation kinetics of organic aerosol mixtures using a relative rate constants approach. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		28
145	Effect of ions on sulfuric acid-water binary particle formation: 1. Theory for kinetic- and nucleation-type particle formation and atmospheric implications. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 1736-1751	4.4	28
144	Formation and aging of secondary organic aerosol from toluene: changes in chemical composition, volatility, and hygroscopicity. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 8301-8313	6.8	27
143	Organic aerosol yields from $\alpha$ -pinene oxidation: bridging the gap between first-generation yields and aging chemistry. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 12347-54	10.3	27
142	Photo-oxidation of Aromatic Hydrocarbons Produces Low-Volatility Organic Compounds. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 7911-7921	10.3	26
141	Evolution of particle composition in CLOUD nucleation experiments. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 5587-5600	6.8	25
140	Hydrogen and helium pressure broadening of water transitions in the 3800-cm <sup>-1</sup> region. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2004</b> , 83, 183-191	2.1	25
139	Effect of secondary organic aerosol coating thickness on the real-time detection and characterization of biomass-burning soot by two particle mass spectrometers. <i>Atmospheric Measurement Techniques</i> , <b>2016</b> , 9, 6117-6137	4	25
138	Introductory lecture: atmospheric organic aerosols: insights from the combination of measurements and chemical transport models. <i>Faraday Discussions</i> , <b>2013</b> , 165, 9-24	3.6	24
137	Photo-oxidation of pinonaldehyde at low NO <sub>x</sub> : from chemistry to organic aerosol formation. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 3227-3236	6.8	24
136	The formation, properties and impact of secondary organic aerosol: current and emerging issues		24
135	Wall effects in smog chamber experiments: A model study. <i>Aerosol Science and Technology</i> , <b>2016</b> , 50, 1180-1200	3.4	24
134	Formation of Highly Oxygenated Organic Molecules from $\alpha$ -Pinene Ozonolysis: Chemical Characteristics, Mechanism, and Kinetic Model Development. <i>ACS Earth and Space Chemistry</i> , <b>2019</b> , 3, 873-883	3.2	23
133	Modeling the formation and properties of traditional and non-traditional secondary organic aerosol: problem formulation and application to aircraft exhaust. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 9025-9040	6.8	23

132	The Synergistic Role of Sulfuric Acid, Bases, and Oxidized Organics Governing New-Particle Formation in Beijing. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2020GL091944	4.9	23
131	Pressure-Dependent Criegee Intermediate Stabilization from Alkene Ozonolysis. <i>Journal of Physical Chemistry A</i> , <b>2016</b> , 120, 2173-8	2.8	23
130	Thermodynamics of the formation of sulfuric acid dimers in the binary (H <sub>2</sub> SO <sub>4</sub> /H <sub>2</sub> O) and ternary (H <sub>2</sub> SO <sub>4</sub> /H <sub>2</sub> O/NH <sub>3</sub> ) system. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 10701-10721	6.8	22
129	Laboratory measurements of the heterogeneous oxidation of condensed-phase organic molecular makers for meat cooking emissions. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 5177-82	10.3	22
128	Competitive oxidation in atmospheric aerosols: The case for relative kinetics. <i>Geophysical Research Letters</i> , <b>2005</b> , 32,	4.9	22
127	Enhanced growth rate of atmospheric particles from sulfuric acid. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 7359-7372	6.8	21
126	Effect of the OH Radical Scavenger Hydrogen Peroxide on Secondary Organic Aerosol Formation from Pinene Ozonolysis. <i>Aerosol Science and Technology</i> , <b>2011</b> , 45, 696-700	3.4	21
125	A two-dimensional volatility basis set [Part 3: Prognostic modeling and dependence]. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 123-134	6.8	20
124	High concentration of ultrafine particles in the Amazon free troposphere produced by organic new particle formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 25344-25351	11.5	20
123	Probing the Evaporation Dynamics of Mixed SOA/Squalane Particles Using Size-Resolved Composition and Single-Particle Measurements. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 9724-32	10.3	19
122	Hygroscopicity of nanoparticles produced from homogeneous nucleation in the CLOUD experiments. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 293-304	6.8	19
121	Rate constants of nine C6-C9 alkanes with OH from 230 to 379 K: chemical tracers for [OH]. <i>Journal of Physical Chemistry A</i> , <b>2009</b> , 113, 5030-8	2.8	19
120	Organic Aerosol Speciation: Intercomparison of Thermal Desorption Aerosol GC/MS (TAG) and Filter-Based Techniques. <i>Aerosol Science and Technology</i> , <b>2010</b> , 44, 141-151	3.4	18
119	Ozonolysis of cyclic alkenes as surrogates for biogenic terpenes: primary ozonide formation and decomposition. <i>Journal of Physical Chemistry A</i> , <b>2010</b> , 114, 7509-15	2.8	18
118	Testing secondary organic aerosol models using smog chamber data for complex precursor mixtures: influence of precursor volatility and molecular structure. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 5771-5780	6.8	17
117	High time-resolved measurements of organic air toxics in different source regimes. <i>Atmospheric Environment</i> , <b>2009</b> , 43, 6205-6217	5.3	17
116	Morphological transformation of soot: investigation of microphysical processes during the condensation of sulfuric acid and limonene ozonolysis product vapors. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 9845-9860	6.8	17
115	An Experimental Method for Testing Reactivity Models: A High-Pressure Discharge Flow Study of H + Alkene and Haloalkene Reactions. <i>Journal of Physical Chemistry A</i> , <b>2000</b> , 104, 5254-5264	2.8	16

114	Molecular understanding of the suppression of new-particle formation by isoprene. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 11809-11821	6.8	16
113	Reaction Modulation Spectroscopy: A New Approach to Quantifying Reaction Mechanisms <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 17855-17861		15
112	Molecular Composition and Volatility of Nucleated Particles from $\alpha$ -Pinene Oxidation between -50 $^{\circ}$ C and +25 $^{\circ}$ C. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 12357-12365	10.3	14
111	Elemental composition and clustering behaviour of $\alpha$ -pinene oxidation products for different oxidation conditions. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 4145-4159	6.8	14
110	Collection efficiency of $\alpha$ -pinene secondary organic aerosol particles explored via light-scattering single-particle aerosol mass spectrometry. <i>Atmospheric Measurement Techniques</i> , <b>2017</b> , 10, 1139-1154	4	13
109	Measurement-model comparison of stabilized Criegee intermediate and highly oxygenated molecule production in the CLOUD chamber. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 2363-2380	6.8	13
108	Pressure broadening coefficients for rotational transitions of water in the 380-800 $\text{cm}^{-1}$ range. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2002</b> , 72, 775-782	2.1	13
107	Effect of dimethylamine on the gas phase sulfuric acid concentration measured by Chemical Ionization Mass Spectrometry. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 3036-3049	4.4	13
106	Secondary organic aerosol coating of synthetic metal-oxide nanoparticles. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 4689-95	10.3	12
105	Elemental ratio measurements of organic compounds using aerosol mass spectrometry: characterization, improved calibration, and implications		12
104	Phase transition observations and discrimination of small cloud particles by light polarization in expansion chamber experiments. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 3651-3664	6.8	11
103	Near-Field Influence on Barrier Evolution in Symmetric Atom Transfer Reactions: A New Model for Two-State Mixing <i>Journal of Physical Chemistry A</i> , <b>2001</b> , 105, 1498-1506	2.8	11
102	Efficient alkane oxidation under combustion engine and atmospheric conditions. <i>Communications Chemistry</i> , <b>2021</b> , 4,	6.3	11
101	Contribution of brown carbon and lensing to the direct radiative effect of carbonaceous aerosols from biomass and biofuel burning emissions. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2015</b> , n/a-n/a	n/a	11
100	Improvement of simulation of fine inorganic PM levels through better descriptions of coarse particle chemistry. <i>Atmospheric Environment</i> , <b>2015</b> , 102, 274-281	5.3	10
99	Moving beyond Fine Particle Mass: High-Spatial Resolution Exposure to Source-Resolved Atmospheric Particle Number and Chemical Mixing State. <i>Environmental Health Perspectives</i> , <b>2020</b> , 128, 17009	8.4	10
98	Modeling the thermodynamics and kinetics of sulfuric acid-dimethylamine-water nanoparticle growth in the CLOUD chamber. <i>Aerosol Science and Technology</i> , <b>2016</b> , 50, 1017-1032	3.4	10
97	Emerging investigator series: determination of biphasic core-shell droplet properties using aerosol optical tweezers. <i>Environmental Sciences: Processes and Impacts</i> , <b>2018</b> , 20, 1512-1523	4.3	10

96	Fitting multiple datasets in kinetics: n-butane + OH -products. <i>International Journal of Chemical Kinetics</i> , <b>2004</b> , 36, 259-272	1.4	10
95	Formation of 3-methyl-1,2,3-butanetricarboxylic acid via gas phase oxidation of pinonic acid by mass spectrometric study of SOA aging		10
94	Estimating ambient particulate organic carbon concentrations and partitioning using thermal optical measurements and the volatility basis set. <i>Aerosol Science and Technology</i> , <b>2016</b> , 50, 638-651	3.4	9
93	Single-particle measurements of phase partitioning between primary and secondary organic aerosols. <i>Faraday Discussions</i> , <b>2016</b> , 189, 31-49	3.6	9
92	Simulations of smog-chamber experiments using the two-dimensional volatility basis set: linear oxygenated precursors. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 11179-86	10.3	9
91	Secondary organic aerosol formation exceeds primary particulate matter emissions for light-duty gasoline vehicles		9
90	The interplay between assumed morphology and the direct radiative effect of light-absorbing organic aerosol. <i>Geophysical Research Letters</i> , <b>2016</b> , 43, 8735-8743	4.9	9
89	Mass accommodation coefficients of fresh and aged biomass-burning emissions. <i>Aerosol Science and Technology</i> , <b>2018</b> , 52, 300-309	3.4	8
88	Multi-generation chemical aging of $\alpha$ -pinene ozonolysis products by reactions with OH. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 3589-3601	6.8	8
87	Atmospheric nanoparticles and climate change. <i>AIChE Journal</i> , <b>2013</b> , 59, 4006-4019	3.6	8
86	Aging of secondary organic aerosol from small aromatic VOCs: changes in chemical composition, mass yield, volatility and hygroscopicity		8
85	Determination of the collision rate coefficient between charged iodine acid clusters and iodine acid using the appearance time method. <i>Aerosol Science and Technology</i> , <b>2021</b> , 55, 231-242	3.4	8
84	The driving factors of new particle formation and growth in the polluted boundary layer. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 14275-14291	6.8	8
83	Air Pollution and Air Quality <b>2018</b> , 151-176		7
82	Cloud condensation nuclei activity and droplet formation of primary and secondary organic aerosol mixtures. <i>Aerosol Science and Technology</i> , <b>2018</b> , 52, 242-251	3.4	7
81	Secondary organic aerosol production from pinanediol, a semi-volatile surrogate for first-generation oxidation products of monoterpenes. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 6171-6186	6.8	7
80	Evaporation of sulfate aerosols at low relative humidity. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 8923-8938	6.8	7
79	Deconstructing experimental rate constant measurements: Obtaining intrinsic reaction parameters, kinetic isotope effects, and tunneling coefficients from kinetic data for OH+methane, ethane and cyclohexane. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2005</b> , 176, 238-249	4.7	7

78	Reactivity of stabilized Criegee intermediates (sCI) from isoprene and monoterpene ozonolysis toward SO <sub>2</sub> and organic acids		7
77	Laboratory investigation of photochemical oxidation of organic aerosol from wood fires [Part 1: Measurement and simulation of organic aerosol evolution		7
76	Uptake of Semivolatile Secondary Organic Aerosol Formed from Pinene into Nonvolatile Polyethylene Glycol Probe Particles. <i>Journal of Physical Chemistry A</i> , <b>2016</b> , 120, 1459-67	2.8	6
75	Dynamic consideration of smog chamber experiments. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 10019-10036		6
74	Volatility and hygroscopicity of aging secondary organic aerosol in a smog chamber		6
73	Laboratory investigation of photochemical oxidation of organic aerosol from wood fires [Part 2: Analysis of aerosol mass spectrometer data		6
72	Evaporation rate of particles in the vaporizer of the Aerodyne aerosol mass spectrometer. <i>Aerosol Science and Technology</i> , <b>2017</b> , 51, 501-508	3.4	5
71	Cloud-Aerosol-Turbulence Interactions: Science Priorities and Concepts for a Large-Scale Laboratory Facility. <i>Bulletin of the American Meteorological Society</i> , <b>2020</b> , 101, E1026-E1035	6.1	5
70	A two-dimensional volatility basis set: 1. organic-aerosol mixing thermodynamics		5
69	A two-dimensional volatility basis set [Part 2: Diagnostics of organic-aerosol evolution		5
68	Evolving mass spectra of the oxidized component of organic aerosol: results from aerosol mass spectrometer analyses of aged diesel emissions		5
67	Where Did This Particle Come From? Sources of Particle Number and Mass for Human Exposure Estimates. <i>Issues in Environmental Science and Technology</i> , <b>2016</b> , 35-71	0.7	5
66	Pressure Stabilization of Criegee Intermediates Formed from Symmetric trans-Alkene Ozonolysis. <i>Journal of Physical Chemistry A</i> , <b>2018</b> , 122, 9426-9434	2.8	5
65	Contribution of Atmospheric Oxygenated Organic Compounds to Particle Growth in an Urban Environment. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 13646-13656	10.3	5
64	Synergistic HNO-HSO-NH upper tropospheric particle formation.. <i>Nature</i> , <b>2022</b> , 605, 483-489	50.4	5
63	The HOOH UV spectrum: importance of the transition dipole moment and torsional motion from semiclassical calculations on an ab initio potential energy surface. <i>Journal of Chemical Physics</i> , <b>2010</b> , 132, 084304	3.9	4
62	Observation of viscosity transition in Pinene secondary organic aerosol		4
61	OH clock determination by proton transfer reaction mass spectrometry at an environmental chamber <b>2011</b> ,		3



60	Organic aerosol formation in citronella candle plumes. <i>Air Quality, Atmosphere and Health</i> , <b>2010</b> , 3, 131-137		3
59	Gas-Phase Organic Oxidation Chemistry and Atmospheric Particles <b>2019</b> , 199-317		3
58	Molecular Composition of Oxygenated Organic Molecules and Their Contributions to Organic Aerosol in Beijing. <i>Environmental Science &amp; Technology</i> , <b>2021</b> ,	10.3	3
57	Secondary aerosol formation from photochemical aging of aircraft exhaust in a smog chamber		3
56	Quantification of the volatility of secondary organic compounds in ultrafine particles during nucleation events		3
55	Photo-oxidation of pinonaldehyde at low NO <sub>x</sub> : from chemistry to organic aerosol formation		3
54	High formation of secondary organic aerosol from the photo-oxidation of toluene		3
53	Formation of condensable organic vapors from anthropogenic and biogenic volatile organic compounds (VOCs) is strongly perturbed by NO <sub>x</sub> in eastern China. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 14789-14814	6.8	3
52	Nitrate radicals and biogenic volatile organic compounds: oxidation, mechanisms and organic aerosol <b>2016</b> ,		3
51	The driving factors of new particle formation and growth in the polluted boundary layer		3
50	Full-volatility emission framework corrects missing and underestimated secondary organic aerosol sources. <i>One Earth</i> , <b>2022</b> , 5, 403-412	8.1	3
49	Primary ion diffusion charging and particle wall loss in smog chamber experiments. <i>Aerosol Science and Technology</i> , <b>2020</b> , 54, 1058-1069	3.4	2
48	Modelling the gas/particle partitioning and water uptake of isoprene-derived secondary organic aerosol at high and low relative humidity. <i>Atmospheric Chemistry and Physics</i> , <b>2022</b> , 22, 215-244	6.8	2
47	New particle formation in the sulfuric acid-dimethylamine-water system: Reevaluation of CLOUD chamber measurements and comparison to an aerosol nucleation and growth model		2
46	Anthropogenic influence on biogenic secondary organic aerosol		2
45	Water content of aged aerosol		2
44	Sources and atmospheric processing of organic aerosol in the Mediterranean: insights from aerosol mass spectrometer factor analysis		2
43	Organic condensation is a vital link connecting aerosol formation to climate forcing		2

42	Absorptivity of brown carbon in fresh and photo-chemically aged biomass-burning emissions		2
41	Heterogeneous ice nucleation of viscous secondary organic aerosol produced from ozonolysis of $\alpha$ -pinene		2
40	Experimental investigation of ion-ion recombination at atmospheric conditions		2
39	Ozonolysis of $\alpha$ -pinene: parameterization of secondary organic aerosol mass fraction		2
38	Collection efficiency of $\alpha$ -pinene secondary organic aerosol particles explored via light scattering single particle aerosol mass spectrometry		2
37	Aged organic aerosol in the Eastern Mediterranean: the Finokalia aerosol measurement experiment-2008		2
36	Quantifying errors in the aerosol mixing-state index based on limited particle sample size. <i>Aerosol Science and Technology</i> , <b>2020</b> , 54, 1527-1541	3.4	2
35	Technical note: The enhancement limit of coagulation scavenging of small charged particles. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 3827-3832	6.8	2
34	Impact of Urban Pollution on Organic-Mediated New-Particle Formation and Particle Number Concentration in the Amazon Rainforest. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 4357-4367	10.3	2
33	Measurement of iodine species and sulfuric acid using bromide chemical ionization mass spectrometers. <i>Atmospheric Measurement Techniques</i> , <b>2021</b> , 14, 4187-4202	4	2
32	Molecular characterization of ultrafine particles using extractive electrospray time-of-flight mass spectrometry. <i>Environmental Science Atmospheres</i> , <b>2021</b> , 1, 434-448		2
31	Peroxy radical kinetics and new particle formation. <i>Environmental Science Atmospheres</i> , <b>2021</b> , 1, 79-92		2
30	Evaporation of sulphate aerosols at low relative humidity <b>2016</b> ,		1
29	Molecular understanding of new-particle formation from alpha-pinene between 10 °C and 25 °C <b>2020</b> ,		1
28	Morphological transformation of soot: investigation of microphysical processes during the condensation of sulfuric acid and limonene ozonolysis product vapors <b>2017</b> ,		1
27	Urban case studies: general discussion. <i>Faraday Discussions</i> , <b>2016</b> , 189, 473-514	3.6	1
26	Influence of temperature on the molecular composition of ions and charged clusters during pure biogenic nucleation <b>2017</b> ,		1
25	Multi-generation Chemical Aging of $\alpha$ -Pinene Ozonolysis Products by Reactions with OH <b>2017</b> ,		1

24	Nature of the chemical bond in transition: dissection of radical-molecule reactivity. <i>Journal of Physical Chemistry A</i> , <b>2012</b> , 116, 6303-11	2.8	1
23	Role of organics in particle nucleation: From the lab to global model <b>2013</b> ,		1
22	Two-dimensional volatility basis set modeling of pinanediol oxidation in the CLOUD experiment <b>2013</b> ,		1
21	Chemical composition of nanoparticles from $\alpha$ -pinene nucleation and the influence of isoprene and relative humidity at low temperature. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 17099-17114	6.8	1
20	Simulating the oxygen content of ambient organic aerosol with the 2D volatility basis set		1
19	Evolution of particle composition in CLOUD nucleation experiments		1
18	Functionalization and fragmentation during ambient organic aerosol aging: application of the 2-D volatility basis set to field studies		1
17	Modeling the influence of precursor volatility and molecular structure on secondary organic aerosol formation using evaporated fuel experiments		1
16	Thermodynamics of the formation of sulfuric acid dimers in the binary ( $\text{H}_2\text{SO}_4$ - $\text{H}_2\text{O}$ ) and ternary ( $\text{H}_2\text{SO}_4$ - $\text{H}_2\text{O}$ - $\text{NH}_3$ ) system		1
15	Discrimination of water, ice and aerosols by light polarisation in the CLOUD experiment		1
14	Fragmentation vs. functionalization: chemical aging and organic aerosol formation		1
13	Oligomer formation within secondary organic aerosol: equilibrium and dynamic considerations		1
12	A naming convention for atmospheric organic aerosol		1
11	Molecular understanding of the suppression of new-particle formation by isoprene <b>2020</b> ,		1
10	Measurement report: Molecular composition and volatility of gaseous organic compounds in a boreal forest [From volatile organic compounds to highly oxygenated organic molecules. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 8961-8977	6.8	1
9	Enhanced growth rate of atmospheric particles from sulfuric acid <b>2019</b> ,		1
8	Limited Secondary Organic Aerosol Production from Acyclic Oxygenated Volatile Chemical Products.. <i>Environmental Science &amp; Technology</i> , <b>2022</b> , 56, 4806-4815	10.3	1
7	Atmospheric Nanoparticle Survivability Reduction Due to Charge-Induced Coagulation Scavenging Enhancement. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2021GL092758	4.9	0

6	Effects of aerosol size and coating thickness on the molecular detection using extractive electrospray ionization. <i>Atmospheric Measurement Techniques</i> , <b>2021</b> , 14, 5913-5923	4	○
5	The seasonal variation, characteristics and secondary generation of PM in Xi'an, China, especially during pollution events.. <i>Environmental Research</i> , <b>2022</b> , 212, 113388	7.9	○
4	Using Ionic Liquids To Study the Migration of Semivolatile Organic Vapors in Smog Chamber Experiments. <i>Journal of Physical Chemistry A</i> , <b>2019</b> , 123, 3887-3892	2.8	
3	James G. Anderson Tribute. <i>Journal of Physical Chemistry A</i> , <b>2016</b> , 120, 1317-9	2.8	
2	Timescales of mixing and of chemistry: general discussion. <i>Faraday Discussions</i> , <b>2016</b> , 189, 253-76	3.6	
1	Numerical modelling strategies for the urban atmosphere: general discussion. <i>Faraday Discussions</i> , <b>2016</b> , 189, 635-60	3.6	