

# John H Seinfeld

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/7824477/john-h-seinfeld-publications-by-citations.pdf>

**Version:** 2024-04-26

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.

449  
papers

52,803  
citations

123  
h-index

219  
g-index

511  
ext. papers

58,964  
ext. citations

7.5  
avg, IF

7.46  
L-index

#	Paper	IF	Citations
449	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
448	Organic aerosol and global climate modelling: a review. <i>Atmospheric Chemistry and Physics</i> , <b>2005</b> , 5, 1053-1123	6.8	2482
447	Gas/Particle Partitioning and Secondary Organic Aerosol Yields. <i>Environmental Science &amp; Technology</i> , <b>1996</b> , 30, 2580-2585	10.3	1186
446	Chemistry of secondary organic aerosol: Formation and evolution of low-volatility organics in the atmosphere. <i>Atmospheric Environment</i> , <b>2008</b> , 42, 3593-3624	5.3	1146
445	Role of sulphuric acid, ammonia and galactic cosmic rays in atmospheric aerosol nucleation. <i>Nature</i> , <b>2011</b> , 476, 429-33	50.4	863
444	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
443	Unexpected epoxide formation in the gas-phase photooxidation of isoprene. <i>Science</i> , <b>2009</b> , 325, 730-3	33.3	726
442	Reactive intermediates revealed in secondary organic aerosol formation from isoprene. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 6640-5	11.5	718
441	Ambient aerosol sampling using the Aerodyne Aerosol Mass Spectrometer. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		694
440	Secondary organic aerosol formation from isoprene photooxidation. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 1869-77	10.3	630
439	Marine aerosol formation from biogenic iodine emissions. <i>Nature</i> , <b>2002</b> , 417, 632-6	50.4	611
438	Formation of Organic Aerosols from the Oxidation of Biogenic Hydrocarbons. <i>Journal of Atmospheric Chemistry</i> , <b>1997</b> , 26, 189-222	3.2	608
437	Secondary organic aerosol formation from <i>m</i>-xylene, toluene, and benzene. <i>Atmospheric Chemistry and Physics</i> , <b>2007</b> , 7, 3909-3922	6.8	580
436	Global distribution and climate forcing of carbonaceous aerosols. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, AAC 14-1		578
435	Organic aerosol formation from the oxidation of biogenic hydrocarbons. <i>Journal of Geophysical Research</i> , <b>1999</b> , 104, 3555-3567		570
434	Chemical composition of secondary organic aerosol formed from the photooxidation of isoprene. <i>Journal of Physical Chemistry A</i> , <b>2006</b> , 110, 9665-90	2.8	533
433	A large organic aerosol source in the free troposphere missing from current models. <i>Geophysical Research Letters</i> , <b>2005</b> , 32, n/a-n/a	4.9	515

432	Evidence for organosulfates in secondary organic aerosol. <i>Environmental Science &amp; Technology</i> , <b>2007</b> , 41, 517-27	10.3	508
431	Organosulfate formation in biogenic secondary organic aerosol. <i>Journal of Physical Chemistry A</i> , <b>2008</b> , 112, 8345-78	2.8	487
430	Organic atmospheric particulate material. <i>Annual Review of Physical Chemistry</i> , <b>2003</b> , 54, 121-40	15.7	466
429	Organics alter hygroscopic behavior of atmospheric particles. <i>Journal of Geophysical Research</i> , <b>1995</b> , 100, 18755		461
428	The atmospheric aerosol-forming potential of whole gasoline vapor. <i>Science</i> , <b>1997</b> , 276, 96-9	33.3	457
427	Gas-Phase Ozone Oxidation of Monoterpenes: Gaseous and Particulate Products. <i>Journal of Atmospheric Chemistry</i> , <b>1999</b> , 34, 207-258	3.2	414
426	Effect of acidity on secondary organic aerosol formation from isoprene. <i>Environmental Science &amp; Technology</i> , <b>2007</b> , 41, 5363-9	10.3	398
425	Isoprene photooxidation: new insights into the production of acids and organic nitrates. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 1479-1501	6.8	391
424	Changes in organic aerosol composition with aging inferred from aerosol mass spectra. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 6465-6474	6.8	377
423	Ion-induced nucleation of pure biogenic particles. <i>Nature</i> , <b>2016</b> , 533, 521-6	50.4	377
422	Oxidation products of biogenic emissions contribute to nucleation of atmospheric particles. <i>Science</i> , <b>2014</b> , 344, 717-21	33.3	375
421	Response of an aerosol mass spectrometer to organonitrates and organosulfates and implications for atmospheric chemistry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 6670-5	11.5	366
420	Global secondary organic aerosol from isoprene oxidation. <i>Geophysical Research Letters</i> , <b>2006</b> , 33,	4.9	360
419	Recent advances in understanding secondary organic aerosol: Implications for global climate forcing. <i>Reviews of Geophysics</i> , <b>2017</b> , 55, 509-559	23.1	359
418	Unexpected air pollution with marked emission reductions during the COVID-19 outbreak in China. <i>Science</i> , <b>2020</b> , 369, 702-706	33.3	344
417	Effect of NO <sub>x</sub> level on secondary organic aerosol (SOA) formation from the photooxidation of terpenes. <i>Atmospheric Chemistry and Physics</i> , <b>2007</b> , 7, 5159-5174	6.8	340
416	Secondary Organic Aerosol from the Photooxidation of Aromatic Hydrocarbons: Molecular Composition. <i>Environmental Science &amp; Technology</i> , <b>1997</b> , 31, 1345-1358	10.3	330
415	Particle phase acidity and oligomer formation in secondary organic aerosol. <i>Environmental Science &amp; Technology</i> , <b>2004</b> , 38, 6582-9	10.3	323

4 <sup>14</sup>	Sensitivity analysis of a chemical mechanism for aqueous-phase atmospheric chemistry. <i>Journal of Geophysical Research</i> , <b>1989</b> , 94, 1105		323
4 <sup>13</sup>	Influence of vapor wall loss in laboratory chambers on yields of secondary organic aerosol. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 5802-7	11.5	319
4 <sup>12</sup>	Improving our fundamental understanding of the role of aerosol-cloud interactions in the climate system. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 5781-90	11.5	314
4 <sup>11</sup>	Global modeling of secondary organic aerosol formation from aromatic hydrocarbons: high- vs. low-yield pathways. <i>Atmospheric Chemistry and Physics</i> , <b>2008</b> , 8, 2405-2420	6.8	312
4 <sup>10</sup>	Aromatics, Reformulated Gasoline, and Atmospheric Organic Aerosol Formation. <i>Environmental Science &amp; Technology</i> , <b>1997</b> , 31, 1890-1897	10.3	308
4 <sup>09</sup>	Atmospheric Gas-Aerosol Equilibrium I. Thermodynamic Model. <i>Aerosol Science and Technology</i> , <b>1993</b> , 19, 157-181	3.4	304
4 <sup>08</sup>	Contribution of first- versus second-generation products to secondary organic aerosols formed in the oxidation of biogenic hydrocarbons. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 2283-97	10.3	302
4 <sup>07</sup>	Predicted change in global secondary organic aerosol concentrations in response to future climate, emissions, and land use change. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113, n/a-n/a		291
4 <sup>06</sup>	Chamber studies of secondary organic aerosol growth by reactive uptake of simple carbonyl compounds. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		289
4 <sup>05</sup>	Predicting global aerosol size distributions in general circulation models. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, AAC 4-1		283
4 <sup>04</sup>	Gas-phase products and secondary aerosol yields from the photooxidation of 16 different terpenes. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		280
4 <sup>03</sup>	Low-Molecular-Weight and Oligomeric Components in Secondary Organic Aerosol from the Ozonolysis of Cycloalkenes and Pinene. <i>Journal of Physical Chemistry A</i> , <b>2004</b> , 108, 10147-10164	2.8	278
4 <sup>02</sup>	Estimate of global atmospheric organic aerosol from oxidation of biogenic hydrocarbons. <i>Geophysical Research Letters</i> , <b>1999</b> , 26, 2721-2724	4.9	271
4 <sup>01</sup>	Secondary organic aerosol formation from isoprene photooxidation under high-NO <sub>x</sub> conditions. <i>Geophysical Research Letters</i> , <b>2005</b> , 32, n/a-n/a	4.9	269
4 <sup>00</sup>	Effect of changes in climate and emissions on future sulfate-nitrate-ammonium aerosol levels in the United States. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		259
399	Measurements of secondary organic aerosol from oxidation of cycloalkenes, terpenes, and m-xylene using an Aerodyne aerosol mass spectrometer. <i>Environmental Science &amp; Technology</i> , <b>2005</b> , 39, 5674-88	10.3	259
398	Secondary organic aerosol (SOA) formation from reaction of isoprene with nitrate radicals (NO <sub>3</sub> ). <i>Atmospheric Chemistry and Physics</i> , <b>2008</b> , 8, 4117-4140	6.8	255
397	Parameterization of cloud droplet formation in global climate models. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		248

396	Evolution of trace gases and particles emitted by a chaparral fire in California. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 1397-1421	6.8	247
395	Secondary organic aerosol formation from photooxidation of naphthalene and alkylnaphthalenes: implications for oxidation of intermediate volatility organic compounds (IVOCs). <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 3049-3060	6.8	245
394	Apportionment of primary and secondary organic aerosols in southern California during the 2005 study of organic aerosols in riverside (SOAR-1). <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 7655-7662	10.3	244
393	Aerosol formation in the photooxidation of isoprene and pinene. <i>Atmospheric Environment Part A General Topics</i> , <b>1991</b> , 25, 997-1008		241
392	New and extended parameterization of the thermodynamic model AIOMFAC: calculation of activity coefficients for organic-inorganic mixtures containing carboxyl, hydroxyl, carbonyl, ether, ester, alkenyl, alkyl, and aromatic functional groups. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 9155-9206	6.8	240
391	State-of-the-art chamber facility for studying atmospheric aerosol chemistry. <i>Environmental Science &amp; Technology</i> , <b>2001</b> , 35, 2594-601	10.3	230
390	3-methyl-1,2,3-butanetricarboxylic acid: An atmospheric tracer for terpene secondary organic aerosol. <i>Geophysical Research Letters</i> , <b>2007</b> , 34,	4.9	228
389	Development and evaluation of a photooxidation mechanism for isoprene. <i>Journal of Geophysical Research</i> , <b>1992</b> , 97, 20703		226
388	Climate response of direct radiative forcing of anthropogenic black carbon. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		220
387	Thermodynamic modelling of aqueous aerosols containing electrolytes and dissolved organic compounds. <i>Journal of Aerosol Science</i> , <b>2001</b> , 32, 713-738	4.3	213
386	Chemical Coupling Between Atmospheric Ozone and Particulate Matter. <i>Science</i> , <b>1997</b> , 277, 116-119	33.3	212
385	Gas-Phase Reactions of Isoprene and Its Major Oxidation Products. <i>Chemical Reviews</i> , <b>2018</b> , 118, 3337-3380	33.3	211
384	Aerosol absorption and radiative forcing. <i>Atmospheric Chemistry and Physics</i> , <b>2007</b> , 7, 5237-5261	6.8	211
383	A global perspective on aerosol from low-volatility organic compounds. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 4377-4401	6.8	209
382	Turbulent deposition and gravitational sedimentation of an aerosol in a vessel of arbitrary shape. <i>Journal of Aerosol Science</i> , <b>1981</b> , 12, 405-415	4.3	203
381	Role of climate change in global predictions of future tropospheric ozone and aerosols. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		201
380	Global impacts of gas-phase chemistry-aerosol interactions on direct radiative forcing by anthropogenic aerosols and ozone. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		193
379	Biogenic secondary organic aerosol over the United States: Comparison of climatological simulations with observations. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		189

378	Formation and evolution of molecular products in Pinene secondary organic aerosol. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 14168-73	11.5	183
377	Atmospheric Gas-Aerosol Equilibrium II. Analysis of Common Approximations and Activity Coefficient Calculation Methods. <i>Aerosol Science and Technology</i> , <b>1993</b> , 19, 182-198	3.4	183
376	Gas-phase products and secondary aerosol yields from the ozonolysis of ten different terpenes. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		182
375	Modeling the gas-particle partitioning of secondary organic aerosol: the importance of liquid-liquid phase separation. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 3857-3882	6.8	179
374	Atmospheric photooxidation of isoprene part I: The hydroxyl radical and ground state atomic oxygen reactions. <i>International Journal of Chemical Kinetics</i> , <b>1992</b> , 24, 79-101	1.4	179
373	The 2010 California Research at the Nexus of Air Quality and Climate Change (CalNex) field study. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 5830-5866	4.4	178
372	Global modeling of organic aerosol: the importance of reactive nitrogen (NO <sub>x</sub> and NO <sub>3</sub> ). <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 11261-11276	6.8	178
371	Gas-particle partitioning of atmospheric aerosols: interplay of physical state, non-ideal mixing and morphology. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 11441-53	3.6	173
370	Organic aerosol formation from the reactive uptake of isoprene epoxydiols (IEPOX) onto non-acidified inorganic seeds. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 3497-3510	6.8	172
369	On the Source of the Submicrometer Droplet Mode of Urban and Regional Aerosols. <i>Aerosol Science and Technology</i> , <b>1994</b> , 20, 253-265	3.4	172
368	The effect of water on gas-particle partitioning of secondary organic aerosol. Part I: Pinene/ozone system. <i>Atmospheric Environment</i> , <b>2001</b> , 35, 6049-6072	5.3	169
367	Equilibration timescale of atmospheric secondary organic aerosol partitioning. <i>Geophysical Research Letters</i> , <b>2012</b> , 39,	4.9	167
366	New particle formation from photooxidation of diiodomethane (CH <sub>2</sub> I <sub>2</sub> ). <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		164
365	Production of ultrafine metal oxide aerosol particles by thermal decomposition of metal alkoxide vapors. <i>AIChE Journal</i> , <b>1986</b> , 32, 2010-2019	3.6	164
364	Oxalic acid in clear and cloudy atmospheres: Analysis of data from International Consortium for Atmospheric Research on Transport and Transformation 2004. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		163
363	Surface tension prevails over solute effect in organic-influenced cloud droplet activation. <i>Nature</i> , <b>2017</b> , 546, 637-641	50.4	162
362	Comprehensive simultaneous shipboard and airborne characterization of exhaust from a modern container ship at sea. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 4626-40	10.3	162
361	Role of aldehyde chemistry and NO <sub>x</sub> concentrations in secondary organic aerosol formation. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 7169-7188	6.8	162

360	Development and application of the Model of Aerosol Dynamics, Reaction, Ionization, and Dissolution (MADRID). <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		158
359	Elemental composition and oxidation of chamber organic aerosol. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 8827-8845	6.8	156
358	Can chemical effects on cloud droplet number rival the first indirect effect?. <i>Geophysical Research Letters</i> , <b>2002</b> , 29, 29-1-29-4	4.9	156
357	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
356	Kinetic limitations on droplet formation in clouds. <i>Nature</i> , <b>1997</b> , 390, 594-596	50.4	155
355	Atmospheric Gas/Aerosol Equilibrium: III. Thermodynamics of Crustal Elements Ca <sup>2+</sup> , K <sup>+</sup> , and Mg <sup>2+</sup> . <i>Aerosol Science and Technology</i> , <b>1995</b> , 22, 93-110	3.4	154
354	Computation of liquid-liquid equilibria and phase stabilities: implications for RH-dependent gas/particle partitioning of organic-inorganic aerosols. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 7795-7820	6.8	152
353	Secondary organic aerosol 1. Atmospheric chemical mechanism for production of molecular constituents. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, AAC 3-1-AAC 3-26		150
352	Atmospheric photooxidation of isoprene part II: The ozone-isoprene reaction. <i>International Journal of Chemical Kinetics</i> , <b>1992</b> , 24, 103-125	1.4	149
351	On the source of organic acid aerosol layers above clouds. <i>Environmental Science &amp; Technology</i> , <b>2007</b> , 41, 4647-54	10.3	148
350	Modeling the formation of secondary organic aerosol (SOA). 2. The predicted effects of relative humidity on aerosol formation in the alpha-pinene-, beta-pinene-, sabinene-, delta 3-carene-, and cyclohexene-ozone systems. <i>Environmental Science &amp; Technology</i> , <b>2001</b> , 35, 1806-17	10.3	148
349	Chemical physics. Single-molecule spectroscopy comes of age. <i>Science</i> , <b>2001</b> , 292, 1671-2	33.3	144
348	Characterization and quantification of isoprene-derived epoxydiols in ambient aerosol in the southeastern United States. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 4590-6	10.3	142
347	Terpenylic acid and related compounds from the oxidation of alpha-pinene: implications for new particle formation and growth above forests. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 6976-82	10.3	142
346	Mechanism of Atmospheric Photooxidation of Aromatics: A Theoretical Study. <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 10967-10980		141
345	Mathematical model for gas-particle partitioning of secondary organic aerosols. <i>Atmospheric Environment</i> , <b>1997</b> , 31, 3921-3931	5.3	140
344	Inversion of aerosol size distribution data. <i>Journal of Aerosol Science</i> , <b>1990</b> , 21, 227-247	4.3	140
343	Formation of Low Volatility Organic Compounds and Secondary Organic Aerosol from Isoprene Hydroxyhydroperoxide Low-NO Oxidation. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 10330-9	10.3	139

342	Elemental analysis of chamber organic aerosol using an aerodyne high-resolution aerosol mass spectrometer. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 4111-4131	6.8	139
341	Overview of the Second Texas Air Quality Study (TexAQS II) and the Gulf of Mexico Atmospheric Composition and Climate Study (GoMACCS). <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		138
340	Aerosol Formation in the Cyclohexene-Ozone System. <i>Environmental Science &amp; Technology</i> , <b>2000</b> , 34, 4894-4901	10.3	138
339	Interactions between tropospheric chemistry and aerosols in a unified general circulation model. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108, AAC 1-1		137
338	Radial Differential Mobility Analyzer. <i>Aerosol Science and Technology</i> , <b>1995</b> , 23, 357-372	3.4	136
337	Aerosol production and growth in the marine boundary layer. <i>Journal of Geophysical Research</i> , <b>1994</b> , 99, 20989		136
336	Observation of gaseous and particulate products of monoterpene oxidation in forest atmospheres. <i>Geophysical Research Letters</i> , <b>1999</b> , 26, 1145-1148	4.9	135
335	Secondary organic aerosol formation from biomass burning intermediates: phenol and methoxyphenols. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 8019-8043	6.8	134
334	Atmospheric fates of Criegee intermediates in the ozonolysis of isoprene. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 10241-54	3.6	130
333	Size distribution dynamics reveal particle-phase chemistry in organic aerosol formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 11746-50	11.5	126
332	Thermodynamic models of aqueous solutions containing inorganic electrolytes and dicarboxylic acids at 298.15 K. 1. The acids as nondissociating components. <i>Journal of Physical Chemistry A</i> , <b>2006</b> , 110, 5692-717	2.8	126
331	Simulation of Aerosol Size Distribution Evolution in Systems with Simultaneous Nucleation, Condensation, and Coagulation. <i>Aerosol Science and Technology</i> , <b>1985</b> , 4, 31-43	3.4	126
330	Gas phase production and loss of isoprene epoxydiols. <i>Journal of Physical Chemistry A</i> , <b>2014</b> , 118, 1237-46	6.8	125
329	Improved Inversion of Scanning DMA Data. <i>Aerosol Science and Technology</i> , <b>2002</b> , 36, 1-9	3.4	125
328	Natural convection in a shallow cavity with differentially heated end walls. Part 2. Numerical solutions. <i>Journal of Fluid Mechanics</i> , <b>1974</b> , 65, 231-246	3.7	124
327	Secondary organic aerosol 2. Thermodynamic model for gas/particle partitioning of molecular constituents. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, AAC 4-1-AAC 4-15		123
326	Simulation of Aerosol Dynamics: A Comparative Review of Mathematical Models. <i>Aerosol Science and Technology</i> , <b>1986</b> , 5, 205-222	3.4	123
325	The general dynamic equation for aerosols. Theory and application to aerosol formation and growth. <i>Journal of Colloid and Interface Science</i> , <b>1979</b> , 68, 363-382	9.3	120



324	Global radiative forcing of coupled tropospheric ozone and aerosols in a unified general circulation model. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		117
323	Influence of aerosol acidity on the chemical composition of secondary organic aerosol from $\beta$ -caryophyllene. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 1735-1751	6.8	116
322	Characterization of 2-methylglyceric acid oligomers in secondary organic aerosol formed from the photooxidation of isoprene using trimethylsilylation and gas chromatography/ion trap mass spectrometry. <i>Journal of Mass Spectrometry</i> , <b>2007</b> , 42, 101-16	2.2	112
321	Dynamics of aerosol coagulation and condensation. <i>AIChE Journal</i> , <b>1976</b> , 22, 840-851	3.6	112
320	Characterization of polar organic components in fine aerosols in the southeastern United States: Identity, origin, and evolution. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		108
319	Reactions of semivolatile organics and their effects on secondary organic aerosol formation. <i>Environmental Science &amp; Technology</i> , <b>2007</b> , 41, 3545-50	10.3	106
318	. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , <b>2001</b> , 53, 133-149	3.3	105
317	Modification of aerosol mass and size distribution due to aqueous-phase SO <sub>2</sub> oxidation in clouds: Comparisons of several models. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		104
316	The Marine Stratus/Stratocumulus Experiment (MASE): Aerosol-cloud relationships in marine stratocumulus. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		102
315	Particulate organic acids and overall water-soluble aerosol composition measurements from the 2006 Gulf of Mexico Atmospheric Composition and Climate Study (GoMACCS). <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		102
314	Thermodynamic models of aqueous solutions containing inorganic electrolytes and dicarboxylic acids at 298.15 K. 2. Systems including dissociation equilibria. <i>Journal of Physical Chemistry A</i> , <b>2006</b> , 110, 5718-34	2.8	102
313	Secondary organic aerosol formation from the ozonolysis of cycloalkenes and related compounds. <i>Environmental Science &amp; Technology</i> , <b>2004</b> , 38, 4157-64	10.3	102
312	Cloud condensation nucleus activation properties of biogenic secondary organic aerosol. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		99
311	Pinene photooxidation under controlled chemical conditions [Part 2: SOA yield and composition in low- and high-NO <sub>x</sub> environments. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 7413-7427	6.8	98
310	On the link between ocean biota emissions, aerosol, and maritime clouds: Airborne, ground, and satellite measurements off the coast of California. <i>Global Biogeochemical Cycles</i> , <b>2009</b> , 23, n/a-n/a	5.9	98
309	Modeling and Characterization of a Particle-into-Liquid Sampler (PILS). <i>Aerosol Science and Technology</i> , <b>2006</b> , 40, 396-409	3.4	98
308	Modeling kinetic partitioning of secondary organic aerosol and size distribution dynamics: representing effects of volatility, phase state, and particle-phase reaction. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 5153-5181	6.8	97
307	Concentrations and sources of organic carbon aerosols in the free troposphere over North America. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		97

306	Observational insights into aerosol formation from isoprene. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 11403-13	10.3	95
305	Aerosol/cloud drop concentration closure in warm cumulus. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109, n/a-n/a		95
304	Vapor wall deposition in Teflon chambers. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 4197-4214	6.8	94
303	Adjoint inverse modeling of black carbon during the Asian Pacific Regional Aerosol Characterization Experiment. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110, n/a-n/a		94
302	Atmospheric Photochemical Oxidation of Benzene: Benzene + OH and the Benzene-OH Adduct (Hydroxyl-2,4-cyclohexadienyl) + O <sub>2</sub> . <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 6543-6554		94
301	Toward aerosol/cloud condensation nuclei (CCN) closure during CRYSTAL-FACE. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		92
300	Direct evaluation of the equilibrium distribution of physical clusters by a grand canonical Monte Carlo simulation. <i>Journal of Chemical Physics</i> , <b>1998</b> , 108, 3416-3423	3.9	92
299	Explicit modelling of SOA formation from $\alpha$ -pinene photooxidation: sensitivity to vapour pressure estimation. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 6895-6910	6.8	91
298	Observability and optimal measurement location in linear distributed parameter systems. <i>International Journal of Control</i> , <b>1973</b> , 18, 785-799	1.5	91
297	Yields of oxidized volatile organic compounds during the OH radical initiated oxidation of isoprene, methyl vinyl ketone, and methacrolein under high-NO <sub>x</sub> conditions. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 10779-10790	6.8	90
296	Formation of secondary organic aerosol from irradiated $\alpha$ -pinene/toluene/NO <sub>x</sub> mixtures and the effect of isoprene and sulfur dioxide. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		90
295	Binary nucleation of sulfuric acid-water: Monte Carlo simulation. <i>Journal of Chemical Physics</i> , <b>1998</b> , 108, 6829-6848	3.9	90
294	Mechanism of the hydroxyl radical oxidation of methacryloyl peroxyxynitrate (MPAN) and its pathway toward secondary organic aerosol formation in the atmosphere. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 17914-26	3.6	88
293	Aircraft-based aerosol size and composition measurements during ACE-Asia using an Aerodyne aerosol mass spectrometer. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		88
292	A STUDY OF PROCESSES THAT GOVERN THE MAINTENANCE OF AEROSOLS IN THE MARINE BOUNDARY LAYER. <i>Journal of Aerosol Science</i> , <b>1999</b> , 30, 503-532	4.3	88
291	The Pasadena Aerosol Characterization Observatory (PACO): chemical and physical analysis of the Western Los Angeles basin aerosol. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 7417-7443	6.8	87
290	Characterization of vapor wall loss in laboratory chambers. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 5074-8	10.3	86
289	Impact of nonabsorbing anthropogenic aerosols on clear-sky atmospheric absorption. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		86

288	Regional variation of organic functional groups in aerosol particles on four U.S. east coast platforms during the International Consortium for Atmospheric Research on Transport and Transformation 2004 campaign. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		85
287	Automatic sensitivity analysis of kinetic mechanisms. <i>International Journal of Chemical Kinetics</i> , <b>1979</b> , 11, 427-444	1.4	85
286	Aerosol-cloud drop concentration closure for clouds sampled during the International Consortium for Atmospheric Research on Transport and Transformation 2004 campaign. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		84
285	Improvement of the Zdanovskii-Stokes-Robinson Model for Mixtures Containing Solutes of Different Charge Types. <i>Journal of Physical Chemistry A</i> , <b>2004</b> , 108, 1008-1017	2.8	84
284	Conversion of hydroperoxides to carbonyls in field and laboratory instrumentation: Observational bias in diagnosing pristine versus anthropogenically controlled atmospheric chemistry. <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 8645-8651	4.9	83
283	Electron tomography of nanoparticle clusters: Implications for atmospheric lifetimes and radiative forcing of soot. <i>Geophysical Research Letters</i> , <b>2005</b> , 32,	4.9	83
282	Aerosol emissions from prescribed fires in the United States: A synthesis of laboratory and aircraft measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2014</b> , 119, 11,826-11,849	4.4	81
281	Will black carbon mitigation dampen aerosol indirect forcing?. <i>Geophysical Research Letters</i> , <b>2010</b> , 37, n/a-n/a	4.9	81
280	A Coupled Hydrophobic-Hydrophilic Model for Predicting Secondary Organic Aerosol Formation. <i>Journal of Atmospheric Chemistry</i> , <b>2003</b> , 44, 171-190	3.2	80
279	Disproportionate impact of particulate emissions on global cloud condensation nuclei concentrations. <i>Geophysical Research Letters</i> , <b>2003</b> , 30, n/a-n/a	4.9	80
278	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 <sup>11.5</sup>		79
277	Secondary organic aerosol yields of 12-carbon alkanes. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 1423-1439 <sup>7.8</sup>		78
276	Composition and hygroscopicity of the Los Angeles Aerosol: CalNex. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 3016-3036	4.4	78
275	Cloud condensation nuclei activity, closure, and droplet growth kinetics of Houston aerosol during the Gulf of Mexico Atmospheric Composition and Climate Study (GoMACCS). <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		78
274	Water-soluble SOA from Alkene ozonolysis: composition and droplet activation kinetics inferences from analysis of CCN activity. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 1585-1597	6.8	78
273	A comparison of particle mass spectrometers during the 1999 Atlanta Supersite Project. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		78
272	Investigating the links between ozone and organic aerosol chemistry in a biomass burning plume from a prescribed fire in California chaparral. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 6667-6688	6.8	76
271	Evaluation of a new cloud droplet activation parameterization with in situ data from CRYSTAL-FACE and CSTRIFE. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		76

270	Occurrence of lower cloud albedo in ship tracks. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 8223-8235	6.8	75
269	Three-dimensional simulations of inorganic aerosol distributions in east Asia during spring 2001. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		74
268	Impact of biomass burning on cloud properties in the Amazon Basin. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		73
267	Isoprene NO <sub>3</sub> Oxidation Products from the RO <sub>2</sub> + HO <sub>2</sub> Pathway. <i>Journal of Physical Chemistry A</i> , <b>2015</b> , 119, 10158-71	2.8	72
266	Rapid growth of new atmospheric particles by nitric acid and ammonia condensation. <i>Nature</i> , <b>2020</b> , 581, 184-189	50.4	72
265	Eastern Pacific Emitted Aerosol Cloud Experiment. <i>Bulletin of the American Meteorological Society</i> , <b>2013</b> , 94, 709-729	6.1	71
264	Chemical aging of <i>m</i> -xylene secondary organic aerosol: laboratory chamber study. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 151-167	6.8	71
263	Influence of particle-phase state on the hygroscopic behavior of mixed organic/inorganic aerosols. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 5027-5045	6.8	70
262	Black carbon aerosol over the Los Angeles Basin during CalNex. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		70
261	Constraining the contribution of organic acids and AMS m/z 44 to the organic aerosol budget: On the importance of meteorology, aerosol hygroscopicity, and region. <i>Geophysical Research Letters</i> , <b>2010</b> , 37, n/a-n/a	4.9	70
260	Study of the Aerosol Indirect Effect by Large-Eddy Simulation of Marine Stratocumulus. <i>Journals of the Atmospheric Sciences</i> , <b>2005</b> , 62, 3909-3932	2.1	70
259	Molecular corridors and kinetic regimes in the multiphase chemical evolution of secondary organic aerosol. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 8323-8341	6.8	69
258	Measurements of isoprene-derived organosulfates in ambient aerosols by aerosol time-of-flight mass spectrometry-part 2: temporal variability and formation mechanisms. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 8648-55	10.3	69
257	Particle Wall Loss Rates in Vessels. <i>Aerosol Science and Technology</i> , <b>1982</b> , 2, 303-309	3.4	69
256	Development and initial evaluation of a dynamic species-resolved model for gas phase chemistry and size-resolved gas/particle partitioning associated with secondary organic aerosol formation. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		68
255	Emission factor ratios, SOA mass yields, and the impact of vehicular emissions on SOA formation. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 2383-2397	6.8	67
254	Mass spectrometric characterization of isomeric terpenic acids from the oxidation of $\alpha$ -pinene, $\beta$ -pinene, d-limonene, and $\beta$ -carene in fine forest aerosol. <i>Journal of Mass Spectrometry</i> , <b>2011</b> , 46, 425-42	2.2	67
253	Role of isoprene in secondary organic aerosol formation on a regional scale. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		67

252	Air pollution: A half century of progress. <i>AICHE Journal</i> , <b>2004</b> , 50, 1096-1108	3.6	67
251	An outdoor smog chamber and modeling study of toluene-NO <sub>x</sub> photooxidation. <i>International Journal of Chemical Kinetics</i> , <b>1985</b> , 17, 177-216	1.4	67
250	Optimal location of process measurements. <i>International Journal of Control</i> , <b>1975</b> , 21, 1003-1014	1.5	67
249	Primary marine aerosol-cloud interactions off the coast of California. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2015</b> , 120, 4282-4303	4.4	66
248	Pinene photooxidation under controlled chemical conditions [Part 1: Gas-phase composition in low- and high-NO <sub>x</sub> environments]. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 6489-6504	6.8	66
247	Kinetic modeling of secondary organic aerosol formation: effects of particle- and gas-phase reactions of semivolatile products. <i>Atmospheric Chemistry and Physics</i> , <b>2007</b> , 7, 4135-4147	6.8	66
246	Molecular composition of the water-soluble fraction of atmospheric carbonaceous aerosols collected during ACE-Asia. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109, n/a-n/a		66
245	Secondary organic aerosol formation from low-NO(x) photooxidation of dodecane: evolution of multigeneration gas-phase chemistry and aerosol composition. <i>Journal of Physical Chemistry A</i> , <b>2012</b> , 116, 6211-30	2.8	65
244	Asymmetric Instrument Response Resulting from Mixing Effects in Accelerated DMA-CPC Measurements. <i>Aerosol Science and Technology</i> , <b>1995</b> , 23, 491-509	3.4	64
243	Particle generation in a chemical vapor deposition process with seed particles. <i>AICHE Journal</i> , <b>1990</b> , 36, 409-419	3.6	63
242	Growth Kinetics and Size Distribution Dynamics of Viscous Secondary Organic Aerosol. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 1191-1199	10.3	63
241	Influence of seed aerosol surface area and oxidation rate on vapor wall deposition and SOA mass yields: a case study with $\alpha$ -pinene ozonolysis. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 9361-9379	6.8	62
240	Ship impacts on the marine atmosphere: insights into the contribution of shipping emissions to the properties of marine aerosol and clouds. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 8439-8458	6.8	62
239	Rapid, Size-Resolved Aerosol Hygroscopic Growth Measurements: Differential Aerosol Sizing and Hygroscopicity Spectrometer Probe (DASH-SP). <i>Aerosol Science and Technology</i> , <b>2008</b> , 42, 445-464	3.4	62
238	A model for the radiative forcing during ACE-Asia derived from CIRPAS Twin Otter and R/V Ronald H. Brown data and comparison with observations. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		60
237	Column closure studies of lower tropospheric aerosol and water vapor during ACE-Asia using airborne Sun photometer and airborne in situ and ship-based lidar measurements. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108, ACE 24-1-ACE 24-22		60
236	A New Algorithm for Inversion of Aerosol Size Distribution Data. <i>Aerosol Science and Technology</i> , <b>1981</b> , 1, 15-34	3.4	60
235	Formation of highly oxygenated low-volatility products from cresol oxidation. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 3453-3474	6.8	59

234	Aerosol-cloud relationships in continental shallow cumulus. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		58
233	Kinetic limitations on cloud droplet formation and impact on cloud albedo. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , <b>2001</b> , 53, 133-149	3-3	58
232	Peroxy radical chemistry and OH radical production during the NO <sub>2</sub> -initiated oxidation of isoprene. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 7499-7515	6.8	57
231	The Scanning DMA Transfer Function. <i>Aerosol Science and Technology</i> , <b>2004</b> , 38, 833-850	3-4	57
230	Secondary organic aerosol 3. Urban/regional scale model of size- and composition-resolved aerosols. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, AAC 5-1-AAC 5-14		57
229	Aerosol hygroscopicity in the marine atmosphere: a closure study using high-time-resolution, multiple-RH DASH-SP and size-resolved C-ToF-AMS data. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 2543-2554	6.8	56
228	Spatial and temporal distributions of air pollutant emissions from open crop straw and biomass burnings in China from 2002 to 2016. <i>Environmental Chemistry Letters</i> , <b>2018</b> , 16, 301-309	13-3	55
227	Effect of aerosol number concentration on cloud droplet dispersion: A large-eddy simulation study and implications for aerosol indirect forcing. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		55
226	Nucleation and Growth of Aerosol From a Continuously Reinforced Vapor. <i>Aerosol Science and Technology</i> , <b>1984</b> , 3, 135-153	3-4	54
225	Review of Numerical Integration Techniques for Stiff Ordinary Differential Equations. <i>Industrial &amp; Engineering Chemistry Fundamentals</i> , <b>1970</b> , 9, 266-275		54
224	Marine stratocumulus aerosol-cloud relationships in the MASE-II experiment: Precipitation susceptibility in eastern Pacific marine stratocumulus. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		53
223	Clear-column radiative closure during ACE-Asia: Comparison of multiwavelength extinction derived from particle size and composition with results from Sun photometry. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, AAC 7-1-AAC 7-22		53
222	Ozone productivity of atmospheric organics. <i>Journal of Geophysical Research</i> , <b>1994</b> , 99, 5309		53
221	Black carbon radiative heating effects on cloud microphysics and implications for the aerosol indirect effect 1. Extended Köhler theory. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, AAC 23-1-AAC 23-9		52
220	Impact of a large wildfire on water-soluble organic aerosol in a major urban area: the 2009 Station Fire in Los Angeles County. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 8257-8270	6.8	51
219	Overview of the Focused Isoprene eXperiment at the California Institute of Technology (FIXCIT): mechanistic chamber studies on the oxidation of biogenic compounds. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 13531-13549	6.8	50
218	Analysis of photochemical and dark glyoxal uptake: Implications for SOA formation. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4-9	50
217	Observation of playa salts as nuclei in orographic wave clouds. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		50

216	Nanometer-Sized Particle Formation from NH <sub>3</sub> /SO <sub>2</sub> /H <sub>2</sub> O/Air Mixtures by Ionizing Irradiation. <i>Aerosol Science and Technology</i> , <b>1998</b> , 29, 111-125	3.4	48
215	Sensitivity of multiangle imaging to the optical and microphysical properties of biomass burning aerosols. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		48
214	Ion-induced nucleation: A density functional approach. <i>Journal of Chemical Physics</i> , <b>1995</b> , 102, 913-924	3.9	48
213	SOA formation from the photooxidation of $\alpha$ -pinene: systematic exploration of the simulation of chamber data. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 2785-2802	6.8	47
212	Vapor-wall deposition in chambers: theoretical considerations. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 10251-8	10.3	47
211	Simulating secondary organic aerosol in a regional air quality model using the statistical oxidation model [Part 2: Assessing the influence of vapor wall losses. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 3041-3059	6.8	46
210	Biogenic and biomass burning organic aerosol in a boreal forest at Hyytiälä, Finland, during HUMPPA-COPEC 2010. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 12233-12256	6.8	46
209	Anvil glaciation in a deep cumulus updraught over Florida simulated with the Explicit Microphysics Model. I: Impact of various nucleation processes. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>2005</b> , 131, 2019-2046	6.4	46
208	The Use of Ambient Measurements To Identify which Precursor Species Limit Aerosol Nitrate Formation. <i>Journal of the Air and Waste Management Association</i> , <b>2000</b> , 50, 2073-2084	2.4	46
207	Kinetics of binary nucleation: Multiple pathways and the approach to stationarity. <i>Journal of Chemical Physics</i> , <b>1990</b> , 93, 9033-9041	3.9	46
206	Homogeneous Nucleation by Continuous Mixing of High Temperature Vapor with Room Temperature Gas. <i>Aerosol Science and Technology</i> , <b>1987</b> , 6, 15-27	3.4	46
205	Water-soluble organic aerosol in the Los Angeles Basin and outflow regions: Airborne and ground measurements during the 2010 CalNex field campaign. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		45
204	Effect of chemistry-aerosol-climate coupling on predictions of future climate and future levels of tropospheric ozone and aerosols. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		45
203	Observations of marine stratocumulus microphysics and implications for processes controlling droplet spectra: Results from the Marine Stratus/Stratocumulus Experiment. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		45
202	Size- and Composition-Resolved Externally Mixed Aerosol Model. <i>Aerosol Science and Technology</i> , <b>1998</b> , 28, 403-416	3.4	45
201	Nonisothermal homogeneous nucleation. <i>Journal of Chemical Physics</i> , <b>1992</b> , 97, 2661-2670	3.9	44
200	A comprehensive numerical study of aerosol-cloud-precipitation interactions in marine stratocumulus. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 9749-9769	6.8	43
199	Diffusion-Limited Versus Quasi-Equilibrium Aerosol Growth. <i>Aerosol Science and Technology</i> , <b>2012</b> , 46, 874-885	3.4	43

198	Cloud condensation nuclei prediction error from application of Köhler theory: Importance for the aerosol indirect effect. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		43
197	A practical method for the calculation of liquid-liquid equilibria in multicomponent organic-water-electrolyte systems using physicochemical constraints. <i>Fluid Phase Equilibria</i> , <b>2013</b> , 337, 201-213	2.5	42
196	Secondary organic aerosol composition from C12 alkanes. <i>Journal of Physical Chemistry A</i> , <b>2015</b> , 119, 4281-97	2.8	42
195	Characterisation and airborne deployment of a new counterflow virtual impactor inlet. <i>Atmospheric Measurement Techniques</i> , <b>2012</b> , 5, 1259-1269	4	42
194	Airborne measurements of atmospheric carbonaceous aerosols during ACE-Asia. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, AAC 13-1-AAC 13-21		42
193	Ion-induced nucleation. II. Polarizable multipolar molecules. <i>Journal of Chemical Physics</i> , <b>1995</b> , 103, 8993-9009	3.9	42
192	Rapid Aqueous-Phase Hydrolysis of Ester Hydroperoxides Arising from Criegee Intermediates and Organic Acids. <i>Journal of Physical Chemistry A</i> , <b>2018</b> , 122, 5190-5201	2.8	42
191	Constraining uncertainties in particle-wall deposition correction during SOA formation in chamber experiments. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 2297-2310	6.8	41
190	On the mixing and evaporation of secondary organic aerosol components. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 6173-80	10.3	41
189	Projected effect of 2000-2050 changes in climate and emissions on aerosol levels in China and associated transboundary transport. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 7937-7960	6.8	41
188	Unexpected rise of ozone in urban and rural areas, and sulfur dioxide in rural areas during the coronavirus city lockdown in Hangzhou, China: implications for air quality. <i>Environmental Chemistry Letters</i> , <b>2020</b> , 18, 1-11	13.3	40
187	Transient kinetics of nucleation and crystallization: Part I. Nucleation. <i>Journal of Materials Research</i> , <b>1991</b> , 6, 2091-2096	2.5	40
186	Atmospheric chemistry-climate feedbacks. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		39
185	Unified Theory of Vapor-Wall Mass Transport in Teflon-Walled Environmental Chambers. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 2134-2142	10.3	38
184	Application of the Statistical Oxidation Model (SOM) to Secondary Organic Aerosol formation from photooxidation of C <sub>12</sub> alkanes. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 1591-1606	6.8	38
183	Determination of Water Activity in Ammonium Sulfate and Sulfuric Acid Mixtures Using Levitated Single Particles. <i>Aerosol Science and Technology</i> , <b>1994</b> , 20, 275-284	3.4	38
182	Effect of chemical structure on secondary organic aerosol formation from C <sub>12</sub> alkanes. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 11121-11140	6.8	37
181	Sensitivity and uncertainty of reaction mechanisms for photochemical air pollution. <i>International Journal of Chemical Kinetics</i> , <b>1979</b> , 11, 1137-1162	1.4	37



180	Role of ozone in SOA formation from alkane photooxidation. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 1733-1753	6.8	36
179	Secondary Organic Aerosol Coating Formation and Evaporation: Chamber Studies Using Black Carbon Seed Aerosol and the Single-Particle Soot Photometer. <i>Aerosol Science and Technology</i> , <b>2013</b> , 47, 326-347	3.4	35
178	Analysis of secondary organic aerosol formation and aging using positive matrix factorization of high-resolution aerosol mass spectra: application to the dodecane low-NO <sub>x</sub> system. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 11795-11817	6.8	35
177	Experimental Measurement of Competitive Ion-Induced and Binary Homogeneous Nucleation in SO <sub>2</sub> /H <sub>2</sub> O/N <sub>2</sub> Mixtures. <i>Aerosol Science and Technology</i> , <b>1997</b> , 26, 527-543	3.4	35
176	A Differential Mobility Analyzer (DMA) System for Submicron Aerosol Measurements at Ambient Relative Humidity. <i>Aerosol Science and Technology</i> , <b>2003</b> , 37, 46-52	3.4	35
175	The Caltech Photooxidation Flow Tube reactor: design, fluid dynamics and characterization. <i>Atmospheric Measurement Techniques</i> , <b>2017</b> , 10, 839-867	4	33
174	Black carbon radiative heating effects on cloud microphysics and implications for the aerosol indirect effect 2. Cloud microphysics. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, AAC 24-1-AAC 24-11		33
173	Estimation of spatially varying parameters in partial differential equations. <i>International Journal of Control</i> , <b>1972</b> , 15, 487-495	1.5	33
172	Under What Conditions Can Equilibrium Gas-Particle Partitioning Be Expected to Hold in the Atmosphere?. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 11485-91	10.3	32
171	Observations of continental biogenic impacts on marine aerosol and clouds off the coast of California. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2014</b> , 119, 6724-6748	4.4	32
170	A functional group oxidation model (FGOM) for SOA formation and aging. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 5907-5926	6.8	32
169	Environmental snapshots from ACE-Asia. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		32
168	Facilitated Aerosol Sizing Using the Differential Mobility Analyzer. <i>Aerosol Science and Technology</i> , <b>1990</b> , 12, 225-239	3.4	32
167	Fourier transform infrared spectroscopy of a single aerosol particle. <i>Journal of Chemical Physics</i> , <b>1987</b> , 86, 5897-5903	3.9	32
166	Stochastic sensitivity analysis in chemical kinetics. <i>Journal of Chemical Physics</i> , <b>1981</b> , 74, 3852-3858	3.9	32
165	Gas/Aerosol Distribution of Formic and Acetic Acids. <i>Aerosol Science and Technology</i> , <b>1995</b> , 23, 561-578	3.4	31
164	Production and Fate of C <sub>4</sub> Dihydroxycarbonyl Compounds from Isoprene Oxidation. <i>Journal of Physical Chemistry A</i> , <b>2016</b> , 120, 106-17	2.8	30
163	Multi-generational oxidation model to simulate secondary organic aerosol in a 3-D air quality model. <i>Geoscientific Model Development</i> , <b>2015</b> , 8, 2553-2567	6.3	30

162	Characterization of ambient aerosol from measurements of cloud condensation nuclei during the 2003 Atmospheric Radiation Measurement Aerosol Intensive Observational Period at the Southern Great Plains site in Oklahoma. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		30
161	Inverse Modeling of Aerosol Dynamics Using Adjoints: Theoretical and Numerical Considerations. <i>Aerosol Science and Technology</i> , <b>2005</b> , 39, 677-694	3-4	30
160	Coupling Thermodynamic Theory with Measurements to Characterize Acidity of Atmospheric Particles. <i>Aerosol Science and Technology</i> , <b>1993</b> , 19, 279-293	3-4	30
159	Efficient control of atmospheric sulfate production based on three formation regimes. <i>Nature Geoscience</i> , <b>2019</b> , 12, 977-982	18.3	30
158	Oxygenated Aromatic Compounds are Important Precursors of Secondary Organic Aerosol in Biomass-Burning Emissions. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 8568-8579	10.3	29
157	Real-Time Studies of Iron Oxalate-Mediated Oxidation of Glycolaldehyde as a Model for Photochemical Aging of Aqueous Tropospheric Aerosols. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 12241-12249	10.3	29
156	On the representation of droplet coalescence and autoconversion: Evaluation using ambient cloud droplet size distributions. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		29
155	Iodometry-Assisted Liquid Chromatography Electrospray Ionization Mass Spectrometry for Analysis of Organic Peroxides: An Application to Atmospheric Secondary Organic Aerosol. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 2108-2117	10.3	28
154	Low-volatility compounds contribute significantly to isoprene secondary organic aerosol (SOA) under high-NO <sub>x</sub> conditions. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 7255-7278	6.8	28
153	The effect on photochemical smog of converting the U.S. fleet of gasoline vehicles to modern diesel vehicles. <i>Geophysical Research Letters</i> , <b>2004</b> , 31,	4.9	28
152	Updated chemical mechanism for atmospheric photooxidation of toluene. <i>International Journal of Chemical Kinetics</i> , <b>1984</b> , 16, 159-193	1.4	28
151	Hygroscopic properties of smoke-generated organic aerosol particles emitted in the marine atmosphere. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 9819-9835	6.8	27
150	Statistical comparison of properties of simulated and observed cumulus clouds in the vicinity of Houston during the Gulf of Mexico Atmospheric Composition and Climate Study (GoMACCS). <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		27
149	Fundamental basis of incremental reactivities of organics in ozone formation in VOC/NO <sub>x</sub> mixtures. <i>Atmospheric Environment</i> , <b>1994</b> , 28, 3359-3368	5.3	27
148	The application of an approximate non-linear filter to systems governed by coupled ordinary and partial differential equations. <i>International Journal of Systems Science</i> , <b>1975</b> , 6, 313-332	2.3	27
147	An Evaluation of Mean Reynolds Stress Turbulence Models: The Triple Velocity Correlation. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , <b>1978</b> , 100, 47-54	2.1	27
146	AEROSOL-CLOUD-METEOROLOGY INTERACTION AIRBORNE FIELD INVESTIGATIONS: Using Lessons Learned from the U.S. West Coast in the Design of ACTIVATE off the U.S. East Coast. <i>Bulletin of the American Meteorological Society</i> , <b>2019</b> , 100, 1511-1528	6.1	26
145	Simulating secondary organic aerosol in a regional air quality model using the statistical oxidation model [Part I]: Assessing the influence of constrained multi-generational ageing. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 2309-2322	6.8	26

144	Discontinuities in hygroscopic growth below and above water saturation for laboratory surrogates of oligomers in organic atmospheric aerosols. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 12767-12792	6.8	25
143	Parameterization of cloud droplet size distributions: Comparison with parcel models and observations. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		25
142	Future climate impacts of direct radiative forcing of anthropogenic aerosols, tropospheric ozone, and long-lived greenhouse gases. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		25
141	Aerosol Growth in a Steady-State, Continuous Flow Chamber: Application to Studies of Secondary Aerosol Formation. <i>Aerosol Science and Technology</i> , <b>2003</b> , 37, 728-734	3.4	25
140	In Situ Study of Single Aqueous Droplet Solidification of Ceramic Precursors Used for Spray Pyrolysis. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 81, 646-648	3.8	25
139	Nonlinear Filtering in Distributed Parameter Systems. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , <b>1971</b> , 93, 157-163	1.6	25
138	Combined forced and free convection flow past a horizontal flat plate. <i>AIChE Journal</i> , <b>1973</b> , 19, 998-1008	6	25
137	Global climate response to anthropogenic aerosol indirect effects: Present day and year 2100. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		23
136	Transient kinetics of nucleation and crystallization: Part II. Crystallization. <i>Journal of Materials Research</i> , <b>1991</b> , 6, 2097-2102	2.5	23
135	A new algorithm for the estimation of parameters in ordinary differential equations. <i>AIChE Journal</i> , <b>1972</b> , 18, 90-93	3.6	23
134	Predicted impact of thermal power generation emission control measures in the Beijing-Tianjin-Hebei region on air pollution over Beijing, China. <i>Scientific Reports</i> , <b>2018</b> , 8, 934	4.9	22
133	Synergistic O + OH oxidation pathway to extremely low-volatility dimers revealed in pinene secondary organic aerosol. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 8301-8306	11.5	22
132	Precipitation effects of giant cloud condensation nuclei artificially introduced into stratocumulus clouds. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 5645-5658	6.8	22
131	Incremental Aerosol Reactivity: Application to Aromatic and Biogenic Hydrocarbons. <i>Environmental Science &amp; Technology</i> , <b>1999</b> , 33, 2403-2408	10.3	22
130	Particle sizing in the electrodynamic balance. <i>Review of Scientific Instruments</i> , <b>1986</b> , 57, 933-936	1.7	22
129	Ozone air quality models. A critical review. <i>Japca</i> , <b>1988</b> , 38, 616-45		22
128	Biomass Burning Plumes in the Vicinity of the California Coast: Airborne Characterization of Physicochemical Properties, Heating Rates, and Spatiotemporal Features. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2018</b> , 123, 13,560	4.4	22
127	Relationships between giant sea salt particles and clouds inferred from aircraft physicochemical data. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2017</b> , 122, 3421-3434	4.4	21

126	Distributed parameter filtering: boundary noise and discrete observations. <i>International Journal of Systems Science</i> , <b>1979</b> , 10, 493-512	2.3	21
125	Characteristic Vertical Profiles of Cloud Water Composition in Marine Stratocumulus Clouds and Relationships With Precipitation. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2018</b> , 123, 3704-3723	4.4	20
124	Stratocumulus Cloud Clearings and Notable Thermodynamic and Aerosol Contrasts across the Clear/Cloudy Interface. <i>Journals of the Atmospheric Sciences</i> , <b>2016</b> , 73, 1083-1099	2.1	20
123	High reduction of ozone and particulate matter during the 2016 G-20 summit in Hangzhou by forced emission controls of industry and traffic. <i>Environmental Chemistry Letters</i> , <b>2017</b> , 15, 709-715	13.3	19
122	Impacts of household sources on air pollution at village and regional scales in India. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 7719-7742	6.8	18
121	A multi-year data set on aerosol-cloud-precipitation-meteorology interactions for marine stratocumulus clouds. <i>Scientific Data</i> , <b>2018</b> , 5, 180026	8.2	18
120	Prediction of bond dissociation energies and transition state barriers by a modified complete basis set model chemistry. <i>Journal of Chemical Physics</i> , <b>1997</b> , 107, 1513-1521	3.9	18
119	Residential emissions predicted as a major source of fine particulate matter in winter over the Yangtze River Delta, China. <i>Environmental Chemistry Letters</i> , <b>2018</b> , 16, 1117-1127	13.3	17
118	Satellite-Derived Correlation of SO <sub>2</sub> , NO <sub>2</sub> , and Aerosol Optical Depth with Meteorological Conditions over East Asia from 2005 to 2015. <i>Remote Sensing</i> , <b>2019</b> , 11, 1738	5	17
117	Oligomeric products and formation mechanisms from acid-catalyzed reactions of methyl vinyl ketone on acidic sulfate particles. <i>Journal of Atmospheric Chemistry</i> , <b>2013</b> , 70, 1-18	3.2	17
116	Studies in binary nucleation: The dibutylphthalate/dioctylphthalate system. <i>Journal of Chemical Physics</i> , <b>1988</b> , 89, 6442-6453	3.9	17
115	Filtering and Smoothing for Linear Discrete-Time Distributed Parameter Systems Based on Wiener-Hopf Theory with Application to Estimation of Air Pollution. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , <b>1981</b> , 11, 785-801		17
114	Contrasting cloud composition between coupled and decoupled marine boundary layer clouds. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 11,679	4.4	17
113	Inverse modeling of aerosol dynamics: Condensational growth. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		16
112	Meteorological and aerosol effects on marine cloud microphysical properties. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 4142-4161	4.4	16
111	Evaluation of an entraining droplet activation parameterization using in situ cloud data. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		15
110	Analytical Solution of the Multicomponent Aerosol General Dynamic Equation without Coagulation. <i>Aerosol Science and Technology</i> , <b>1997</b> , 27, 541-549	3.4	15
109	Further Results on Inversion of Aerosol Size Distribution Data: Higher-Order Sobolev Spaces and Constraints. <i>Aerosol Science and Technology</i> , <b>1982</b> , 1, 363-369	3.4	15

108	Effect of particle charge on aerosol dynamics in Teflon environmental chambers. <i>Aerosol Science and Technology</i> , <b>2018</b> , 52, 854-871	3.4	14
107	Rate constants for the gas-phase reaction of the hydroxyl radical with a series of dimethylbenzaldehydes and trimethylphenols at atmospheric pressure. <i>International Journal of Chemical Kinetics</i> , <b>1997</b> , 29, 523-525	1.4	14
106	Evaporation and Growth of Multicomponent Aerosols Laboratory Applications. <i>Aerosol Science and Technology</i> , <b>1987</b> , 6, 1-14	3.4	14
105	Scanning DMA data analysis II. Integrated DMA-CPC instrument response and data inversion. <i>Aerosol Science and Technology</i> , <b>2018</b> , 52, 1400-1414	3.4	14
104	High-altitude and long-range transport of aerosols causing regional severe haze during extreme dust storms explains why afforestation does not prevent storms. <i>Environmental Chemistry Letters</i> , <b>2019</b> , 17, 1333-1340	13.3	13
103	Probing the OH Oxidation of Pinonic Acid at the Air-Water Interface Using Field-Induced Droplet Ionization Mass Spectrometry (FIDI-MS). <i>Journal of Physical Chemistry A</i> , <b>2018</b> , 122, 6445-6456	2.8	13
102	Computational Simulation of Secondary Organic Aerosol Formation in Laboratory Chambers. <i>Chemical Reviews</i> , <b>2019</b> , 119, 11912-11944	68.1	13
101	Ion mobility-mass spectrometry with a radial opposed migration ion and aerosol classifier (ROMIAC). <i>Analytical Chemistry</i> , <b>2013</b> , 85, 6319-26	7.8	13
100	Inorganic and black carbon aerosols in the Los Angeles Basin during CalNex. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 1777-1803	4.4	13
99	Primal-Dual Interior-Point Method for an Optimization Problem Related to the Modeling of Atmospheric Organic Aerosols. <i>Journal of Optimization Theory and Applications</i> , <b>2006</b> , 130, 377-409	1.6	13
98	Marine aerosols and iodine emissions (Reply). <i>Nature</i> , <b>2005</b> , 433, E13-E14	50.4	13
97	From COVID-19 to future electrification: Assessing traffic impacts on air quality by a machine-learning model. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	13
96	Mitigation of severe urban haze pollution by a precision air pollution control approach. <i>Scientific Reports</i> , <b>2018</b> , 8, 8151	4.9	13
95	Common source areas of air pollution vary with haze intensity in the Yangtze River Delta, China. <i>Environmental Chemistry Letters</i> , <b>2020</b> , 18, 957-965	13.3	12
94	Photopolarimetric Sensitivity to Black Carbon Content of Wildfire Smoke: Results From the 2016 ImPACT-PM Field Campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2018</b> , 123, 5376-5396	4.4	12
93	Insights on global warming. <i>AIChE Journal</i> , <b>2011</b> , 57, 3259-3284	3.6	12
92	Synthesis of Carboxylic Acid and Dimer Ester Surrogates to Constrain the Abundance and Distribution of Molecular Products in $\alpha$ -Pinene and $\beta$ -Pinene Secondary Organic Aerosol. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 12829-12839	10.3	12
91	Effects of Biomass Burning on Stratocumulus Droplet Characteristics, Drizzle Rate, and Composition. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2019</b> , 124, 12301-12318	4.4	12

90	Ammonia emission abatement does not fully control reduced forms of nitrogen deposition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 9771-9775	11.5	12
89	Computational simulation of the dynamics of secondary organic aerosol formation in an environmental chamber. <i>Aerosol Science and Technology</i> , <b>2018</b> , 52, 470-482	3.4	11
88	Analytical-Numerical Solution of the Multicomponent Aerosol General Dynamic Equation-With Coagulation. <i>Aerosol Science and Technology</i> , <b>1997</b> , 27, 550-556	3.4	11
87	Reduced European aerosol emissions suppress winter extremes over northern Eurasia. <i>Nature Climate Change</i> , <b>2020</b> , 10, 225-230	21.4	11
86	Unexpected Oligomerization of Small Dicarboxyls for Secondary Organic Aerosol and Brown Carbon Formation. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 4430-4439	10.3	11
85	A note on the effects of inorganic seed aerosol on the oxidation state of secondary organic aerosol-Pinene ozonolysis. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 12,476-12,483	4.4	11
84	Cloud Adiabaticity and Its Relationship to Marine Stratocumulus Characteristics Over the Northeast Pacific Ocean. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2018</b> , 123, 13,790	4.4	11
83	Science of the Environmental Chamber <b>2017</b> , 1-93		10
82	On the presence of giant particles downwind of ships in the marine boundary layer. <i>Geophysical Research Letters</i> , <b>2015</b> , 42, 2024-2030	4.9	10
81	Aerosol behavior in the continuous stirred tank reactor. <i>AIChE Journal</i> , <b>1980</b> , 26, 610-616	3.6	10
80	Air quality impact of the Northern California Camp Fire of November 2018. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 14597-14616	6.8	10
79	Design, simulation, and characterization of a radial opposed migration ion and aerosol classifier (ROMIAC). <i>Aerosol Science and Technology</i> , <b>2017</b> , 51, 801-823	3.4	9
78	100 Years of Progress in Gas-Phase Atmospheric Chemistry Research. <i>Meteorological Monographs</i> , <b>2019</b> , 59, 10.1-10.52	5.7	8
77	A phase equilibrium model for atmospheric aerosols containing inorganic electrolytes and organic compounds (UHAERO), with application to dicarboxylic acids. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		8
76	Dynamic scaling of the cluster-size distribution nucleation: Precoalescence stages. <i>AIChE Journal</i> , <b>1994</b> , 40, 11-18	3.6	8
75	Aerosol Dynamics in Atmospheric Aromatic Photooxidation. <i>Aerosol Science and Technology</i> , <b>1989</b> , 10, 515-534	3.4	8
74	Estimation of Atmospheric Species Concentrations from Remote Sensing Data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>1982</b> , GE-20, 142-153	8.1	8
73	Secondary organic aerosol formation from biomass burning intermediates: phenol and methoxyphenols		8

72	City-level air quality improvement in the Beijing-Tianjin-Hebei region from 2016/17 to 2017/18 heating seasons: Attributions and process analysis. <i>Environmental Pollution</i> , <b>2021</b> , 274, 116523	9.3	8
71	Relative effects of open biomass burning and open crop straw burning on haze formation over central and eastern China: modeling study driven by constrained emissions. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 2419-2443	6.8	7
70	Analytical solution for transient partitioning and reaction of a condensing vapor species in a droplet. <i>Atmospheric Environment</i> , <b>2014</b> , 89, 651-654	5.3	7
69	Importance of composition and hygroscopicity of BC particles to the effect of BC mitigation on cloud properties: Application to California conditions. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		7
68	Los Angeles Basin airborne organic aerosol characterization during CalNex. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 11,453-11,467	4.4	7
67	Primal-Dual Active-Set Algorithm for Chemical Equilibrium Problems Related to the Modeling of Atmospheric Inorganic Aerosols. <i>Journal of Optimization Theory and Applications</i> , <b>2006</b> , 128, 469-498	1.6	7
66	Optimal control of a continuous stirred tank reactor with transportation lag. <i>International Journal of Control</i> , <b>1969</b> , 10, 29-39	1.5	7
65	Suboptimal control of stochastic distributed parameter systems. <i>AIChE Journal</i> , <b>1973</b> , 19, 389-392	3.6	7
64	Eastern Pacific Emitted Aerosol Cloud Experiment (E-PEACE). <i>Bulletin of the American Meteorological Society</i> , 130109100058001	6.1	7
63	Large scale control of surface ozone by relative humidity observed during warm seasons in China. <i>Environmental Chemistry Letters</i> , <b>2021</b> , 19, 3981	13.3	7
62	Ensemble Methods for Dynamic Data Assimilation of Chemical Observations in Atmospheric Models. <i>Journal of Algorithms and Computational Technology</i> , <b>2011</b> , 5, 667-692	0.7	6
61	Characterization and airborne deployment of a new counterflow virtual impactor inlet <b>2012</b> ,		6
60	Selective nucleation of silicon clusters in CVD. <i>Journal of Materials Research</i> , <b>1992</b> , 7, 1809-1815	2.5	6
59	Significant wintertime PM <sub>2.5</sub> mitigation in the Yangtze River Delta, China, from 2016 to 2019: observational constraints on anthropogenic emission controls. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 14787-14800	6.8	6
58	CCN Properties of Organic Aerosol Collected Below and within Marine Stratocumulus Clouds near Monterey, California. <i>Atmosphere</i> , <b>2015</b> , 6, 1590-1607	2.7	5
57	Instantaneous concentration fluctuations in point-source plumes. <i>AIChE Journal</i> , <b>1986</b> , 32, 1642-1654	3.6	5
56	Existence and comparison theorems for partial differential equations of Riccati type. <i>Journal of Optimization Theory and Applications</i> , <b>1982</b> , 36, 263-276	1.6	5
55	Secondary organic aerosol yields from the oxidation of benzyl alcohol. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 13167-13190	6.8	5

54	Characterization of Aerosol Hygroscopicity Over the Northeast Pacific Ocean: Impacts on Prediction of CCN and Stratocumulus Cloud Droplet Number Concentrations. <i>Earth and Space Science</i> , <b>2020</b> , 7, e2020EA001098	3.1	5
53	Multigeneration Production of Secondary Organic Aerosol from Toluene Photooxidation. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 8592-8603	10.3	5
52	A note on flow behavior in axially-dispersed plug flow reactors with step input of tracer. <i>Atmospheric Environment: X</i> , <b>2019</b> , 1, 100006	2.8	4
51	Aerosol Properties Computed from Aircraft-Based Observations During the ACE-Asia Campaign: 2. A Case Study of Lidar Ratio Closure. <i>Aerosol Science and Technology</i> , <b>2007</b> , 41, 231-243	3.4	4
50	The accuracy of kinetic parameters estimated from batch and integral reactor data. <i>Canadian Journal of Chemical Engineering</i> , <b>1970</b> , 48, 420-427	2.3	4
49	Real-time control of air pollution. <i>AIChE Journal</i> , <b>1973</b> , 19, 579-589	3.6	4
48	On meeting the provisions of the clean air act. <i>AIChE Journal</i> , <b>1974</b> , 20, 118-127	3.6	4
47	A Functional Group Oxidation Model (FGOM) for SOA formation and aging		4
46	Aerosol Properties Computed from Aircraft-Based Observations during the ACE-Asia Campaign: 1. Aerosol Size Distributions Retrieved from Optical Thickness Measurements. <i>Aerosol Science and Technology</i> , <b>2007</b> , 41, 202-216	3.4	3
45	Clouds and climate: Unravelling a key piece of global warming. <i>AIChE Journal</i> , <b>2000</b> , 46, 226-228	3.6	3
44	Synthesis of sub-optimal feedback controls for a class of distributed parameter systems [Communicated by Dr.A. F. Fuller.. <i>International Journal of Control</i> , <b>1968</b> , 7, 417-424	1.5	3
43	Determination of Optimal Multiyear Air Pollution Control Policies. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , <b>1972</b> , 94, 266-274	1.6	3
42	CHEMISTRY OF OZONE IN THE URBAN AND REGIONAL ATMOSPHERE. <i>Advanced Series in Physical Chemistry</i> , <b>1995</b> , 34-57		3
41	On the relationship between cloud water composition and cloud droplet number concentration. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 7645-7665	6.8	3
40	Effect of chemical structure on secondary organic aerosol formation from C <sub>12</sub> alkanes		3
39	Secondary organic aerosol yields of 12-carbon alkanes		3
38	Simulating secondary organic aerosol in a regional air quality model using the statistical oxidation model [Part 1: Assessing the influence of constrained multi-generational ageing		3
37	Simulating secondary organic aerosol in a regional air quality model using the statistical oxidation model [Part 2: Assessing the influence of vapor wall losses		3



36	Modeling secondary organic aerosol formation from volatile chemical products.. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 18247-18261	6.8	3
35	Coupling Filter-Based Thermal Desorption Chemical Ionization Mass Spectrometry with Liquid Chromatography/Electrospray Ionization Mass Spectrometry for Molecular Analysis of Secondary Organic Aerosol. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 13238-13248	10.3	2
34	Diffusional transfer function for the scanning electrical mobility spectrometer (SEMS). <i>Aerosol Science and Technology</i> , <b>2020</b> , 54, 1157-1168	3.4	2
33	Marine Boundary Layer Clouds Associated with Coastally Trapped Disturbances: Observations and Model Simulations. <i>Journals of the Atmospheric Sciences</i> , <b>2019</b> , 76, 2963-2993	2.1	2
32	Effect of Angle of Attack on the Performance of an Airborne Counterflow Virtual Impactor. <i>Aerosol Science and Technology</i> , <b>2005</b> , 39, 485-491	3.4	2
31	Secondary organic aerosol formation from the oxidation of decamethylcyclopentasiloxane at atmospherically relevant OH concentrations. <i>Atmospheric Chemistry and Physics</i> , <b>2022</b> , 22, 917-928	6.8	2
30	Organic aerosol formation from the reactive uptake of isoprene epoxydiols (IEPOX) onto non-acidified inorganic seeds		2
29	Modeling kinetic partitioning of secondary organic aerosol and size distribution dynamics: representing effects of volatility, phase state, and particle-phase reaction		2
28	Overview of the Focused Isoprene eXperiments at California Institute of Technology (FIXCIT): mechanistic chamber studies on the oxidation of biogenic compounds		2
27	Analysis of secondary organic aerosol formation and aging using positive matrix factorization of high-resolution aerosol mass spectra: application to the dodecane low-NO <sub>x</sub> system		2
26	Emissions Measurements from Household Solid Fuel Use in Haryana, India: Implications for Climate and Health Co-benefits. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 3201-3209	10.3	2
25	Impacts of Household Sources on Air Pollution at Village and Regional Scales in India <b>2018</b> ,		2
24	Constraining uncertainties in particle wall-deposition correction during SOA formation in chamber experiments <b>2016</b> ,		1
23	Multi-generational oxidation model to simulate secondary organic aerosol in a 3-D air quality model <b>2015</b> ,		1
22	Comment on "Unexpected epoxide formation in the gas-phase photooxidation of isoprene". <i>Science</i> , <b>2010</b> , 327, 644; author reply 644	33.3	1
21	Reply to Comment of V. A. Shneidman. <i>Journal of Materials Research</i> , <b>1993</b> , 8, 1191-1193	2.5	1
20	Effect of the Mechanism of Gas-To-Particle Conversion on the Evolution of Aerosol Size Distributions. <i>Geophysical Monograph Series</i> , <b>1982</b> , 6-12	1.1	1
19	Sensitivity analysis of nonlinear differential-difference equations [Application to control of a continuous-stirred tank reactor. <i>Canadian Journal of Chemical Engineering</i> , <b>1969</b> , 47, 212-214	2.3	1

18	Hyperfine-resolution mapping of on-road vehicle emissions with comprehensive traffic monitoring and an intelligent transportation system. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 16985-17002	6.8	1
17	Hygroscopic properties of organic aerosol particles emitted in the marine atmosphere		1
16	Biogenic and biomass burning organic aerosol in a boreal forest at Hyytiälä Finland, during HUMPPA-COPEC 2010		1
15	Emission factor ratios, SOA mass yields, and the impact of vehicular emissions on SOA formation		1
14	Precipitation effects of giant cloud condensation nuclei artificially introduced into stratocumulus clouds		1
13	Influence of particle phase state on the hygroscopic behavior of mixed organic/inorganic aerosols		1
12	Application of the Statistical Oxidation Model (SOM) to secondary organic aerosol formation from photooxidation of C <sub>12</sub> Alkanes		1
11	Efficacy of a portable, moderate-resolution, fast-scanning differential mobility analyzer for ambient aerosol size distribution measurements. <i>Atmospheric Measurement Techniques</i> , <b>2021</b> , 14, 4507-4516	4	1
10	The nano-scanning electrical mobility spectrometer (nSEMS) and its application to size distribution measurements of 1.5–5 nm particles. <i>Atmospheric Measurement Techniques</i> , <b>2021</b> , 14, 5429-5445	4	1
9	Analysis of multivariable control strategies on a heat conduction system. <i>International Journal of Control</i> , <b>1982</b> , 36, 1-24	1.5	0
8	Wakes in stratified flow past a hot or cold two-dimensional body. <i>Journal of Fluid Mechanics</i> , <b>1976</b> , 75, 233-256	3.7	0
7	Rapid assessments of light-duty gasoline vehicle emissions using on-road remote sensing and machine learning. <i>Science of the Total Environment</i> , <b>2022</b> , 815, 152771	10.2	0
6	A computationally efficient model to represent the chemistry, thermodynamics, and microphysics of secondary organic aerosols (simpleSOM): model development and application to Pinene SOA. <i>Environmental Science Atmospheres</i> , <b>2021</b> , 1, 372-394		0
5	Direct measurements of ozone response to emissions perturbations in California. <i>Atmospheric Chemistry and Physics</i> , <b>2022</b> , 22, 4929-4949	6.8	0
4	Estimating the Variance in Solutions to the Aerosol Data Inversion Problem. <i>Aerosol Science and Technology</i> , <b>1991</b> , 14, 348-357	3.4	
3	Optimal estimators for distributed-parameter systems with time-averaged pointwise measurements. <i>International Journal of Control</i> , <b>1987</b> , 45, 1963-1974	1.5	
2	Optimal estimators for time-averaged measurement systems. <i>International Journal of Systems Science</i> , <b>1988</b> , 19, 573-581	2.3	
1	Environmental Reaction Engineering. <i>ACS Symposium Series</i> , <b>1978</b> , 162-192	0.4	

