

# William H Brune

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/3166051/william-h-brune-publications-by-citations.pdf>

**Version:** 2024-04-23

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.

245  
papers

13,862  
citations

67  
h-index

109  
g-index

301  
ext. papers

15,534  
ext. citations

6.8  
avg, IF

5.88  
L-index

#	Paper	IF	Citations
245	Effects of aging on organic aerosol from open biomass burning smoke in aircraft and laboratory studies. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 12049-12064	6.8	418
244	Missing OH reactivity in a forest: evidence for unknown reactive biogenic VOCs. <i>Science</i> , <b>2004</b> , 304, 722-733	33.3	384
243	Free Radicals Within the Antarctic Vortex: The Role of CFCs in Antarctic Ozone Loss. <i>Science</i> , <b>1991</b> , 251, 39-46	33.3	344
242	Air quality in North America's most populous city: Overview of the MCMA-2003 campaign. <i>Atmospheric Chemistry and Physics</i> , <b>2007</b> , 7, 2447-2473	6.8	257
241	OH and HO <sub>2</sub> Chemistry in the urban atmosphere of New York City. <i>Atmospheric Environment</i> , <b>2003</b> , 37, 3639-3651	5.3	249
240	Laboratory studies of the chemical composition and cloud condensation nuclei (CCN) activity of secondary organic aerosol (SOA) and oxidized primary organic aerosol (OPOA). <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 8913-8928	6.8	247
239	Characterization of aerosol photooxidation flow reactors: heterogeneous oxidation, secondary organic aerosol formation and cloud condensation nuclei activity measurements. <i>Atmospheric Measurement Techniques</i> , <b>2011</b> , 4, 445-461	4	233
238	Relationship between aerosol oxidation level and hygroscopic properties of laboratory generated secondary organic aerosol (SOA) particles. <i>Geophysical Research Letters</i> , <b>2010</b> , 37, n/a-n/a	4.9	227
237	Airborne measurement of OH reactivity during INTEX-B. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 1636-1643	6.8	225
236	Relationship between oxidation level and optical properties of secondary organic aerosol. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 6349-57	10.3	222
235	Introducing the concept of Potential Aerosol Mass (PAM). <i>Atmospheric Chemistry and Physics</i> , <b>2007</b> , 7, 5727-5744	6.8	221
234	Overview of the summer 2004 Intercontinental Chemical Transport Experiment North America (INTEX-A). <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		209
233	Chemistry and transport of pollution over the Gulf of Mexico and the Pacific: spring 2006 INTEX-B campaign overview and first results. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 2301-2318	6.8	206
232	Chemistry of HO <sub>x</sub> radicals in the upper troposphere. <i>Atmospheric Environment</i> , <b>2001</b> , 35, 469-489	5.3	195
231	DOAS measurement of glyoxal as an indicator for fast VOC chemistry in urban air. <i>Geophysical Research Letters</i> , <b>2005</b> , 32,	4.9	189
230	Secondary organic aerosol formation and primary organic aerosol oxidation from biomass-burning smoke in a flow reactor during FLAME-3. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 11551-11571	6.8	186
229	Kinetics of O <sub>3</sub> destruction by ClO and BrO within the Antarctic vortex: An analysis based on in situ ER-2 data. <i>Journal of Geophysical Research</i> , <b>1989</b> , 94, 11480		186

228	Chemistry of hydrogen oxide radicals (HO <sub>x</sub> ) in the Arctic troposphere in spring. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 5823-5838	6.8	184
227	Atmospheric oxidation in the Mexico City Metropolitan Area (MCMA) during April 2003. <i>Atmospheric Chemistry and Physics</i> , <b>2006</b> , 6, 2753-2765	6.8	183
226	Ozone production rates as a function of NO <sub>x</sub> abundances and HO <sub>x</sub> production rates in the Nashville urban plume. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ACH 7-1		178
225	Insights into hydroxyl measurements and atmospheric oxidation in a California forest. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 8009-8020	6.8	175
224	Atmospheric oxidation capacity in the summer of Houston 2006: Comparison with summer measurements in other metropolitan studies. <i>Atmospheric Environment</i> , <b>2010</b> , 44, 4107-4115	5.3	168
223	Emissions of black carbon, organic, and inorganic aerosols from biomass burning in North America and Asia in 2008. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		166
222	Ozone destruction by chlorine radicals within the Antarctic vortex: The spatial and temporal evolution of ClO-O <sub>3</sub> anticorrelation based on in situ ER-2 data. <i>Journal of Geophysical Research</i> , <b>1989</b> , 94, 11465		153
221	OH and HO <sub>2</sub> concentrations, sources, and loss rates during the Southern Oxidants Study in Nashville, Tennessee, summer 1999. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		152
220	Transitions from functionalization to fragmentation reactions of laboratory secondary organic aerosol (SOA) generated from the OH oxidation of alkane precursors. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 5430-7	10.3	147
219	Photochemistry of HO <sub>x</sub> in the upper troposphere at northern midlatitudes. <i>Journal of Geophysical Research</i> , <b>2000</b> , 105, 3877-3892		145
218	A Laser-induced Fluorescence Instrument for Detecting Tropospheric OH and HO <sub>2</sub> : Characteristics and Calibration. <i>Journal of Atmospheric Chemistry</i> , <b>2004</b> , 47, 139-167	3.2	144
217	HO <sub>x</sub> chemistry during INTEX-A 2004: Observation, model calculation, and comparison with previous studies. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113, n/a-n/a		142
216	The Deep Convective Clouds and Chemistry (DC3) Field Campaign. <i>Bulletin of the American Meteorological Society</i> , <b>2015</b> , 96, 1281-1309	6.1	140
215	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
214	Effect of oxidant concentration, exposure time, and seed particles on secondary organic aerosol chemical composition and yield. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 3063-3075	6.8	134
213	Behavior of OH and HO <sub>2</sub> in the winter atmosphere in New York City. <i>Atmospheric Environment</i> , <b>2006</b> , 40, 252-263	5.3	132
212	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
211	Measurement of tropospheric OH and HO <sub>2</sub> by laser-induced fluorescence at low pressure. <i>Journal of Geophysical Research</i> , <b>1994</b> , 99, 3543		108

210	Modeling the radical chemistry in an oxidation flow reactor: radical formation and recycling, sensitivities, and the OH exposure estimation equation. <i>Journal of Physical Chemistry A</i> , <b>2015</b> , 119, 4418-32	2.8	104
209	Daytime HONO vertical gradients during SHARP 2009 in Houston, TX. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 635-652	6.8	103
208	Large upper tropospheric ozone enhancements above midlatitude North America during summer: In situ evidence from the IONS and MOZAIC ozone measurement network. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		102
207	Hydroxyl radicals from secondary organic aerosol decomposition in water. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 1761-1771	6.8	101
206	Atmospheric amines and ammonia measured with a chemical ionization mass spectrometer (CIMS). <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 12181-12194	6.8	99
205	Total OH Loss Rate Measurement. <i>Journal of Atmospheric Chemistry</i> , <b>2001</b> , 39, 105-122	3.2	99
204	In situ observations of ClO in the Arctic stratosphere: ER-2 aircraft results from 59°N TO 80°N latitude. <i>Geophysical Research Letters</i> , <b>1990</b> , 17, 505-508	4.9	99
203	In situ secondary organic aerosol formation from ambient pine forest air using an oxidation flow reactor. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 2943-2970	6.8	98
202	Real-time measurements of secondary organic aerosol formation and aging from ambient air in an oxidation flow reactor in the Los Angeles area. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 7411-7433	6.8	97
201	Ultraviolet and visible complex refractive indices of secondary organic material produced by photooxidation of the aromatic compounds toluene and <i>m</i> -xylene. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 1435-1446	6.8	94
200	HO <sub>x</sub> radical chemistry in oxidation flow reactors with low-pressure mercury lamps systematically examined by modeling. <i>Atmospheric Measurement Techniques</i> , <b>2015</b> , 8, 4863-4890	4	93
199	Impacts of Combustion Conditions and Photochemical Processing on the Light Absorption of Biomass Combustion Aerosol. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 14663-71	10.3	92
198	Non-OH chemistry in oxidation flow reactors for the study of atmospheric chemistry systematically examined by modeling. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 4283-4305	6.8	90
197	Inter-comparison of laboratory smog chamber and flow reactor systems on organic aerosol yield and composition. <i>Atmospheric Measurement Techniques</i> , <b>2015</b> , 8, 2315-2332	4	90
196	Dependence of SOA oxidation on organic aerosol mass concentration and OH exposure: experimental PAM chamber studies. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 1837-1852	6.8	90
195	The potential for ozone depletion in the arctic polar stratosphere. <i>Science</i> , <b>1991</b> , 252, 1260-6	33.3	90
194	Sources of HO <sub>x</sub> and production of ozone in the upper troposphere over the United States. <i>Geophysical Research Letters</i> , <b>1998</b> , 25, 1709-1712	4.9	88
193	Airborne in-situ OH and HO <sub>2</sub> observations in the cloud-free troposphere and lower stratosphere during SUCCESS. <i>Geophysical Research Letters</i> , <b>1998</b> , 25, 1701-1704	4.9	88

192	Direct measurements of urban OH reactivity during Nashville SOS in summer 1999. <i>Journal of Environmental Monitoring</i> , <b>2003</b> , 5, 68-74		87
191	In situ observations of ClO in the Antarctic: ER-2 aircraft results from 54°S to 72°S latitude. <i>Journal of Geophysical Research</i> , <b>1989</b> , 94, 16649		82
190	Isoprene and its oxidation products, methacrolein and methylvinyl ketone, at an urban forested site during the 1999 Southern Oxidants Study. <i>Journal of Geophysical Research</i> , <b>2001</b> , 106, 8035-8046		81
189	Airborne observations of total RONO <sub>2</sub> : new constraints on the yield and lifetime of isoprene nitrates. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 1451-1463	6.8	80
188	OH, HO <sub>2</sub> , and OH reactivity during the PMTACS <sub>NY</sub> Whiteface Mountain 2002 campaign: Observations and model comparison. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111, n/a-n/a		79
187	Oxygenated volatile organic chemicals in the oceans: Inferences and implications based on atmospheric observations and air-sea exchange models. <i>Geophysical Research Letters</i> , <b>2003</b> , 30,	4.9	77
186	Deep convection as a source of new particles in the midlatitude upper troposphere. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, AAC 6-1-AAC 6-10		77
185	HO <sub>2</sub> /OH and RO <sub>2</sub> /HO <sub>2</sub> ratios during the Tropospheric OH Photochemistry Experiment: Measurement and theory. <i>Journal of Geophysical Research</i> , <b>1997</b> , 102, 6379-6391		76
184	Laser magnetic resonance, resonance fluorescence, resonance absorption studies of the reaction kinetics of atomic oxygen + hydroxyl .fwdarw. atomic hydrogen + molecular oxygen, atomic oxygen + perhydroxyl .fwdarw. hydroxyl + molecular oxygen, atomic nitrogen + hydroxyl .fwdarw. atomic hydrogen + nitric oxide, atomic nitrogen + perhydroxyl .fwdarw. products at 300 K between 1 and 5		75
183	In situ observations of BrO over Antarctica: ER-2 aircraft results From 54°S to 72°S latitude. <i>Journal of Geophysical Research</i> , <b>1989</b> , 94, 16639		72
182	Secondary organic aerosol production from local emissions dominates the organic aerosol budget over Seoul, South Korea, during KORUS-AQ. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 17769-17800	6.8	71
181	Characterization of Wintertime Reactive Oxygen Species Concentrations in Flushing, New York. <i>Aerosol Science and Technology</i> , <b>2007</b> , 41, 97-111	3.4	70
180	Influence of lateral and top boundary conditions on regional air quality prediction: A multiscale study coupling regional and global chemical transport models. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		68
179	Atmospheric oxidation chemistry and ozone production: Results from SHARP 2009 in Houston, Texas. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 5770-5780	4.4	67
178	The Chemistry of Atmosphere-Forest Exchange (CAFE) Model [Part 2: Application to BEARPEX-2007 observations. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 1269-1294	6.8	67
177	Kinetic and mechanistic investigations of fluorine atom + water/water-d <sub>2</sub> and fluorine atom + hydrogen/deuterium over the temperature range 240-373 K. <i>The Journal of Physical Chemistry</i> , <b>1989</b> , 93, 4068-4079		67
176	In situ measurements of BrO in the Arctic stratosphere. <i>Geophysical Research Letters</i> , <b>1990</b> , 17, 513-516	4.9	64
175	A reevaluation of airborne HO <sub>x</sub> observations from NASA field campaigns. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111, n/a-n/a		63

174	Observations of HO <sub>x</sub> and its relationship with NO <sub>x</sub> in the upper troposphere during SONEX. <i>Journal of Geophysical Research</i> , <b>2000</b> , 105, 3771-3783		63
173	OH and HO <sub>2</sub> chemistry in the North Atlantic free troposphere. <i>Geophysical Research Letters</i> , <b>1999</b> , 26, 3077-3080	4.9	63
172	Observation of isoprene hydroxynitrates in the southeastern United States and implications for the fate of NO <sub>x</sub> . <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 11257-11272	6.8	62
171	On the temperature dependence of organic reactivity, nitrogen oxides, ozone production, and the impact of emission controls in San Joaquin Valley, California. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 3373-3395	6.8	61
170	OH and HO <sub>2</sub> measurements using laser-induced fluorescence. <i>Journal of Geophysical Research</i> , <b>1997</b> , 102, 6427-6436		61
169	Peroxy radicals from photostationary state deviations and steady state calculations during the Tropospheric OH Photochemistry Experiment at Idaho Hill, Colorado, 1993. <i>Journal of Geophysical Research</i> , <b>1997</b> , 102, 6369-6378		61
168	Global airborne sampling reveals a previously unobserved dimethyl sulfide oxidation mechanism in the marine atmosphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 4505-4510	11.5	61
167	Volatility and lifetime against OH heterogeneous reaction of ambient isoprene-epoxydiols-derived secondary organic aerosol (IEPOX-SOA). <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 11563-11580	6.8	60
166	Measurement of HO <sub>2</sub> NO <sub>2</sub> in the free troposphere during the Intercontinental Chemical Transport Experiment North America 2004. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		60
165	Seasonal differences in the photochemistry of the South Pacific: A comparison of observations and model results from PEM-Tropics A and B. <i>Journal of Geophysical Research</i> , <b>2001</b> , 106, 32749-32766		59
164	Kinetics of mercapto (SH) with nitrogen dioxide, ozone, molecular oxygen, and hydrogen peroxide. <i>The Journal of Physical Chemistry</i> , <b>1985</b> , 89, 5505-5510		59
163	Time-resolved characterization of primary particle emissions and secondary particle formation from a modern gasoline passenger car. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 8559-8570	6.8	58
162	Observations of total RONO <sub>2</sub> over the boreal forest: NO <sub>x</sub> sinks and HNO <sub>3</sub> sources. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 4543-4562	6.8	57
161	Deciphering the role of radical precursors during the Second Texas Air Quality Study. <i>Journal of the Air and Waste Management Association</i> , <b>2009</b> , 59, 1258-77	2.4	57
160	Measuring OH and HO <sub>2</sub> in the Troposphere by Laser-Induced Fluorescence at Low Pressure. <i>Journals of the Atmospheric Sciences</i> , <b>1995</b> , 52, 3328-3336	2.1	57
159	Exposure of Lung Epithelial Cells to Photochemically Aged Secondary Organic Aerosol Shows Increased Toxic Effects. <i>Environmental Science and Technology Letters</i> , <b>2018</b> , 5, 424-430	11	55
158	Evidence for a nitrous acid (HONO) reservoir at the ground surface in Bakersfield, CA, during CalNex 2010. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2014</b> , 119, 9093-9106	4.4	54
157	A comparison of chemical mechanisms based on TRAMP-2006 field data. <i>Atmospheric Environment</i> , <b>2010</b> , 44, 4116-4125	5.3	54

156	Comparison of OH reactivity measurements in the atmospheric simulation chamber SAPHIR. <i>Atmospheric Measurement Techniques</i> , <b>2017</b> , 10, 4023-4053	4	52
155	Hydroxyl and Peroxy Radical Chemistry in a Rural Area of Central Pennsylvania: Observations and Model Comparisons. <i>Journal of Atmospheric Chemistry</i> , <b>2005</b> , 52, 231-257	3.2	51
154	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
153	Testing fast photochemical theory during TRACE-P based on measurements of OH, HO <sub>2</sub> , and CH <sub>2</sub> O. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		50
152	The lifetime of nitrogen oxides in an isoprene-dominated forest. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 7623-7637	6.8	49
151	Interference Testing for Atmospheric HO <sub>x</sub> Measurements by Laser-induced Fluorescence. <i>Journal of Atmospheric Chemistry</i> , <b>2004</b> , 47, 169-190	3.2	49
150	Calculations of ozone destruction during the 1988/89 Arctic winter. <i>Geophysical Research Letters</i> , <b>1990</b> , 17, 553-556	4.9	48
149	Speciation of OH reactivity above the canopy of an isoprene-dominated forest. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 9349-9359	6.8	47
148	On the flux of oxygenated volatile organic compounds from organic aerosol oxidation. <i>Geophysical Research Letters</i> , <b>2006</b> , 33,	4.9	47
147	In situ observations of midlatitude stratospheric ClO and BrO. <i>Geophysical Research Letters</i> , <b>1986</b> , 13, 1391-1394	4.9	45
146	Observations of elevated formaldehyde over a forest canopy suggest missing sources from rapid oxidation of arboreal hydrocarbons. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 8761-8781	6.8	44
145	Constraints on Aerosol Nitrate Photolysis as a Potential Source of HONO and NO. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 13738-13746	10.3	43
144	Reactive Oxygen Species Formed by Secondary Organic Aerosols in Water and Surrogate Lung Fluid. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 11642-11651	10.3	43
143	Large-scale ozone and aerosol distributions, air mass characteristics, and ozone fluxes over the western Pacific Ocean in late winter/early spring. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		42
142	Ozone production in the upper troposphere and the influence of aircraft during SONEX: approach of NO <sub>x</sub> -saturated conditions. <i>Geophysical Research Letters</i> , <b>1999</b> , 26, 3081-3084	4.9	42
141	Testing Atmospheric Oxidation in an Alabama Forest. <i>Journals of the Atmospheric Sciences</i> , <b>2016</b> , 73, 4699-4710	2.1	42
140	Large-scale air mass characteristics observed over the remote tropical Pacific Ocean during March-April 1999: Results from PEM-Tropics B field experiment. <i>Journal of Geophysical Research</i> , <b>2001</b> , 106, 32481-32501		41
139	Photochemical modeling of glyoxal at a rural site: observations and analysis from BEARPEX 2007. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 8883-8897	6.8	39

138	Peroxy radical behavior during the Transport and Chemical Evolution over the Pacific (TRACE-P) campaign as measured aboard the NASA P-3B aircraft. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		39
137	Nighttime isoprene trends at an urban forested site during the 1999 Southern Oxidant Study. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ACH 7-1		39
136	Influence of fuel ethanol content on primary emissions and secondary aerosol formation potential for a modern flex-fuel gasoline vehicle. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 5311-5329	6.8	38
135	Gas and aerosol carbon in California: comparison of measurements and model predictions in Pasadena and Bakersfield. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 5243-5258	6.8	37
134	A regional scale modeling analysis of aerosol and trace gas distributions over the eastern Pacific during the INTEX-B field campaign. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 2091-2115	6.8	37
133	Experimental evidence for the importance of convected methylhydroperoxide as a source of hydrogen oxide (HOx) radicals in the tropical upper troposphere. <i>Journal of Geophysical Research</i> , <b>2001</b> , 106, 32709-32716		37
132	In Situ Northern Mid-Latitude Observations of ClO, O <sub>3</sub> , and BrO in the Wintertime Lower Stratosphere. <i>Science</i> , <b>1988</b> , 242, 558-62	33.3	37
131	Ozone production chemistry in the presence of urban plumes. <i>Faraday Discussions</i> , <b>2016</b> , 189, 169-89	3.6	37
130	Anthropogenic Sulfur Perturbations on Biogenic Oxidation: SO <sub>2</sub> Additions Impact Gas-Phase OH Oxidation Products of $\alpha$ -Pinene. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 1269-79	10.3	36
129	Laboratory studies on secondary organic aerosol formation from crude oil vapors. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 12566-74	10.3	36
128	Reactive oxygen species formed in aqueous mixtures of secondary organic aerosols and mineral dust influencing cloud chemistry and public health in the Anthropocene. <i>Faraday Discussions</i> , <b>2017</b> , 200, 251-270	3.6	35
127	Controlled nitric oxide production via O( <sup>1</sup> D) + N <sub>2</sub> O reactions for use in oxidation flow reactor studies. <i>Atmospheric Measurement Techniques</i> , <b>2017</b> , 10, 2283-2298		35
126	Factors controlling tropospheric O <sub>3</sub> , OH, NO <sub>x</sub> and SO <sub>2</sub> over the tropical Pacific during PEM-Tropics B. <i>Journal of Geophysical Research</i> , <b>2001</b> , 106, 32733-32747		35
125	Kinetics and mechanism of X + ClNO <sub>2</sub> → XCl + NO (X = Cl, F, Br, OH, O, N) from 220 K to 450 K. Correlation of reactivity and activation energy with electron affinity of X. <i>The Journal of Physical Chemistry</i> , <b>1989</b> , 93, 1022-1029		35
124	Balloon-borne in situ measurements of ClO and ozone: Implications for heterogeneous chemistry and mid-latitude ozone loss. <i>Geophysical Research Letters</i> , <b>1993</b> , 20, 1795-1798	4.9	34
123	Secondary organic aerosol from VOC mixtures in an oxidation flow reactor. <i>Atmospheric Environment</i> , <b>2017</b> , 161, 210-220	5.3	33
122	Effects of temperature-dependent NO <sub>x</sub> emissions on continental ozone production. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 2601-2614	6.8	33
121	In situ measurements of midlatitude ClO in winter. <i>Geophysical Research Letters</i> , <b>1991</b> , 18, 21-24	4.9	33



120	Detailed comparisons of airborne formaldehyde measurements with box models during the 2006 INTEX-B and MILAGRO campaigns: potential evidence for significant impacts of unmeasured and multi-generation volatile organic carbon compounds. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 11867-11894	6.8	32
119	Southeast Atmosphere Studies: learning from model-observation syntheses. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 2615-2651	6.8	31
118	Role of convection in redistributing formaldehyde to the upper troposphere over North America and the North Atlantic during the summer 2004 INTEX campaign. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		31
117	Preface [to special section on Photochemistry of Ozone Loss in the Arctic Region in Summer (POLARIS)]. <i>Journal of Geophysical Research</i> , <b>1999</b> , 104, 26481-26495		31
116	Urban measurements of atmospheric nitrous acid: A caveat on the interpretation of the HONO photostationary state. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 12,274-12,281	4.4	30
115	Measurement of Ozone Production Sensor. <i>Atmospheric Measurement Techniques</i> , <b>2010</b> , 3, 545-555	4	30
114	Direct measurement of ozone production rates in Houston in 2009 and comparison with two estimation methods. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 1203-1212	6.8	29
113	Summertime buildup and decay of lightning NO <sub>x</sub> and aged thunderstorm outflow above North America. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		29
112	Intercomparison of peroxy radical measurements at a rural site using laser-induced fluorescence and Peroxy Radical Chemical Ionization Mass Spectrometer (PerCIMS) techniques. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		29
111	Performance evaluation of an air quality forecast modeling system for a summer and winter season [Photochemical oxidants and their precursors. <i>Atmospheric Environment</i> , <b>2008</b> , 42, 8585-8599	5.3	28
110	Isoprene suppression of new particle formation: Potential mechanisms and implications. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 14,621	4.4	26
109	Loss of isoprene and sources of nighttime OH radicals at a rural site in the United States: Results from photochemical models. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ACH 2-1-ACH 2-14		25
108	Kinetics and mechanism of the hydroxyl + hydroperoxo reaction. <i>The Journal of Physical Chemistry</i> , <b>1989</b> , 93, 1030-1035		25
107	A laser induced fluorescence instrument for measuring tropospheric NO <sub>2</sub> . <i>Review of Scientific Instruments</i> , <b>1997</b> , 68, 4253-4262	1.7	24
106	Measuring atmospheric naphthalene with laser-induced fluorescence. <i>Atmospheric Chemistry and Physics</i> , <b>2004</b> , 4, 563-569	6.8	24
105	An Atmospheric Constraint on the NO <sub>2</sub> Dependence of Daytime Near-Surface Nitrous Acid (HONO). <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 12774-81	10.3	23
104	Model Evaluation of New Techniques for Maintaining High-NO Conditions in Oxidation Flow Reactors for the Study of OH-Initiated Atmospheric Chemistry. <i>ACS Earth and Space Chemistry</i> , <b>2018</b> , 2, 72-86	3.2	23
103	Airborne intercomparison of HO <sub>2</sub> measurements using laser-induced fluorescence and chemical ionization mass spectrometry during ARCTAS. <i>Atmospheric Measurement Techniques</i> , <b>2012</b> , 5, 2025-2037	4	23

102	Heterogeneous chemistry on liquid sulfate aerosols: A comparison of in situ measurements with zero-dimensional model calculations. <i>Geophysical Research Letters</i> , <b>1990</b> , 17, 1283-1286	4.9	23
101	Primary and Secondary Sources of Gas-Phase Organic Acids from Diesel Exhaust. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 10872-10880	10.3	22
100	Evaluation of simulated O <sub>3</sub> production efficiency during the KORUS-AQ campaign: Implications for anthropogenic NO <sub>x</sub> emissions in Korea. <i>Elementa</i> , <b>2019</b> , 7,	3.6	22
99	Bulk and molecular-level characterization of laboratory-aged biomass burning organic aerosol from oak leaf and heartwood fuels. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 2199-2224	6.8	21
98	Global sensitivity analysis of ozone production and O <sub>3</sub> /NO <sub>x</sub> /VOC limitation based on field data. <i>Atmospheric Environment</i> , <b>2012</b> , 55, 288-296	5.3	21
97	Modeling organic aerosol from the oxidation of pinene in a Potential Aerosol Mass (PAM) chamber. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 5017-5031	6.8	21
96	Measurements of ClO and O <sub>3</sub> from 21°N to 61°N in the lower stratosphere during February 1988: Implications for heterogeneous chemistry. <i>Geophysical Research Letters</i> , <b>1991</b> , 18, 2273-2276	4.9	21
95	Convective transport and scavenging of peroxides by thunderstorms observed over the central U.S. during DC3. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 4272-4295	4.4	20
94	Observational Constraints on the Oxidation of NO <sub>x</sub> in the Upper Troposphere. <i>Journal of Physical Chemistry A</i> , <b>2016</b> , 120, 1468-78	2.8	20
93	Airborne Southern Hemisphere Ozone Experiment/Measurements for Assessing the Effects of Stratospheric Aircraft (ASHOE/MAESA): A road map. <i>Journal of Geophysical Research</i> , <b>1997</b> , 102, 3901-3904		20
92	Effects of aging on organic aerosol from open biomass burning smoke in aircraft and lab studies		20
91	Changes in ozone photochemical regime in Fresno, California from 1994 to 2018 deduced from changes in the weekend effect. <i>Environmental Pollution</i> , <b>2020</b> , 263, 114380	9.3	19
90	The sunrise and sunset variation of ClO in the lower stratosphere. <i>Geophysical Research Letters</i> , <b>1990</b> , 17, 509-512	4.9	19
89	Understanding isoprene photooxidation using observations and modeling over a subtropical forest in the southeastern US. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 7725-7741	6.8	18
88	In situ observations of ClO near the winter polar tropopause. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		18
87	The Environmental Control of Individual Aqueous Particles in a Cubic Electrodynamic Levitation System. <i>Aerosol Science and Technology</i> , <b>1996</b> , 24, 263-278	3.4	18
86	Constraining remote oxidation capacity with ATom observations. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 7753-7781	6.8	18
85	Intercomparison of OH and OH reactivity measurements in a high isoprene and low NO environment during the Southern Oxidant and Aerosol Study (SOAS). <i>Atmospheric Environment</i> , <b>2018</b> , 174, 227-236	5.3	18

84	Changes in ozone production and VOC reactivity in the atmosphere of the Mexico City Metropolitan Area. <i>Atmospheric Environment</i> , <b>2020</b> , 238, 117747	5.3	17
83	Direct ozone production rate measurements and their use in assessing ozone source and receptor regions for Houston in 2013. <i>Atmospheric Environment</i> , <b>2015</b> , 114, 83-91	5.3	17
82	On the relative role of convection, chemistry, and transport over the South Pacific Convergence Zone during PEM-Tropics B: A case study. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108, PEM 4-1		17
81	Stalking the elusive atmospheric hydroxyl radical. <i>Science</i> , <b>1992</b> , 256, 1154-5	33.3	17
80	Midlatitude oxygen ultraviolet nightglow. <i>Geophysical Research Letters</i> , <b>1978</b> , 5, 383-386	4.9	17
79	Physical properties of secondary photochemical aerosol from OH oxidation of a cyclic siloxane. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 1649-1664	6.8	16
78	Ozone and OH-induced oxidation of monoterpenes: Changes in the thermal properties of secondary organic aerosol (SOA). <i>Journal of Aerosol Science</i> , <b>2017</b> , 114, 31-41	4.3	15
77	Higher measured than modeled ozone production at increased NO <sub>x</sub> levels in the Colorado Front Range. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 11273-11292	6.8	15
76	The polar stratospheric cloud event of January 24: Part 2, Photochemistry. <i>Geophysical Research Letters</i> , <b>1990</b> , 17, 541-544	4.9	15
75	Mechanism and kinetics of Br + HO <sub>2</sub> → HBr + O <sub>2</sub> and Br + H <sub>2</sub> O <sub>2</sub> → products over the temperature range 260-390 K. <i>The Journal of Physical Chemistry</i> , <b>1987</b> , 91, 1215-1222		15
74	Insights into hydroxyl measurements and atmospheric oxidation in a California forest		15
73	Global sensitivity analysis of the GEOS-Chem chemical transport model: ozone and hydrogen oxides during ARCTAS (2008). <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 3769-3784	6.8	14
72	Unique isoprene oxidation products demonstrate chlorine atom chemistry occurs in the Houston, Texas urban area. <i>Journal of Atmospheric Chemistry</i> , <b>2008</b> , 61, 227-242	3.2	14
71	Missing OH reactivity in the global marine boundary layer. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 4013-4029	6.8	13
70	Global sensitivity analysis of the regional atmospheric chemical mechanism: an application of random sampling-high dimensional model representation to urban oxidation chemistry. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 11162-70	10.3	13
69	Measurement of NO and NO <sub>y</sub> emission indices during SUCCESS. <i>Geophysical Research Letters</i> , <b>1998</b> , 25, 1713-1716	4.9	13
68	Interpretation of aircraft measurements of NO, ClO, and O <sub>3</sub> in the lower stratosphere. <i>Journal of Geophysical Research</i> , <b>1990</b> , 95, 18597		13
67	Reaction kinetics of O + ClO → Cl + O <sub>2</sub> between 252-47 K. <i>Journal of Geophysical Research</i> , <b>1984</b> , 89, 9581		13

66	Photochemical aging of aerosol particles in different air masses arriving at Baengnyeong Island, Korea. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 6661-6677	6.8	13
65	Chemistry and transport of pollution over the Gulf of Mexico and the Pacific: Spring 2006 INTEX-B Campaign overview and first results		11
64	Exploring Oxidation in the Remote Free Troposphere: Insights From Atmospheric Tomography (ATom). <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2020</b> , 125, e2019JD031685	4.4	11
63	in situ measurements of HO <sub>x</sub> in aircraft exhaust plumes and contrails during SUCCESS. <i>Geophysical Research Letters</i> , <b>1998</b> , 25, 1721-1724	4.9	10
62	Real-time measurements of secondary organic aerosol formation and aging from ambient air in an oxidation flow reactor in the Los Angeles area		10
61	Extreme oxidant amounts produced by lightning in storm clouds. <i>Science</i> , <b>2021</b> , 372, 711-715	33.3	10
60	Effect of salt seed particle surface area, composition and phase on secondary organic aerosol mass yields in oxidation flow reactors. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 2701-2712	6.8	8
59	Global Atmospheric Budget of Acetone: Air-Sea Exchange and the Contribution to Hydroxyl Radicals. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2020</b> , 125, e2020JD032553	4.4	8
58	Atmospheric oxidation in the presence of clouds during the Deep Convective Clouds and Chemistry (DC3) study. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 14493-14510	6.8	8
57	Variability of active chlorine in the lowermost Arctic stratosphere. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		7
56	Precipitation intensity under a warming climate is threatening some Italian premium wines. <i>Science of the Total Environment</i> , <b>2019</b> , 685, 508-513	10.2	6
55	The Chamber Wall Index for Gas-Wall Interactions in Atmospheric Environmental Enclosures. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 3645-3652	10.3	6
54	THE NASA ATMOSPHERIC TOMOGRAPHY (ATom) MISSION: Imaging the Chemistry of the Global Atmosphere. <i>Bulletin of the American Meteorological Society</i> , <b>2021</b> , 1-53	6.1	6
53	Introducing the concept of Potential Aerosol Mass (PAM)		6
52	HO <sub>x</sub> radical chemistry in oxidation flow reactors with low-pressure mercury lamps systematically examined by modeling <b>2015</b> ,		5
51	Correction to Relationship between aerosol oxidation level and hygroscopic properties of laboratory generated secondary organic aerosol (SOA) particles <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4.9	5
50	Sources of upper tropospheric HO <sub>x</sub> over the South Pacific Convergence Zone: A case study. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108, PEM 1-1		5
49	Stratospheric Chemistry. <i>Reviews of Geophysics</i> , <b>1991</b> , 29, 12-24	23.1	5

48	Technical Note: Effect of varying the $\lambda_{\text{eff}} = 185$ and 254 nm photon flux ratio on radical generation in oxidation flow reactors. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 13417-13424	6.8	5
47	Observations of total RONO <sub>2</sub> over the boreal forest: NO <sub>x</sub> sinks and HNO <sub>3</sub> sources		5
46	Electrical Discharges Produce Prodigious Amounts of Hydroxyl and Hydroperoxyl Radicals. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2021</b> , 126, e2021JD034557	4.4	5
45	Global sensitivity analysis of GEOS-Chem modeled ozone and hydrogen oxides during the INTEX campaigns. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 2443-2460	6.8	4
44	No Particle Mass Enhancement from Induced Atmospheric Ageing at a Rural Site in Northern Europe. <i>Atmosphere</i> , <b>2019</b> , 10, 408	2.7	4
43	Laboratory studies of the chemical composition and cloud condensation nuclei (CCN) activity of secondary organic aerosol (SOA) and oxidized primary organic aerosol (OPOA)		4
42	Secondary organic aerosol formation and primary organic aerosol oxidation from biomass burning smoke in a flow reactor during FLAME-3		4
41	Atmospheric amines and ammonia measured with a Chemical Ionization Mass Spectrometer (CIMS)		4
40	Non-OH chemistry in oxidation flow reactors for the study of atmospheric chemistry systematically examined by modeling		4
39	In situ secondary organic aerosol formation from ambient pine forest air using an oxidation flow reactor		4
38	The ozone story: A model for addressing climate change?. <i>Bulletin of the Atomic Scientists</i> , <b>2015</b> , 71, 75-84	6	3
37	Time-resolved characterization of primary and secondary particle emissions of a modern gasoline passenger car		3
36	Comparison of OH reactivity measurements in the atmospheric simulation chamber SAPHIR		3
35	A Preliminary PAM Measurement of Ambient Air at Gosan, Jeju to Study the Secondary Aerosol Forming Potential. <i>Journal of Korean Society for Atmospheric Environment</i> , <b>2011</b> , 27, 534-544	1.5	3
34	Atmospheric Reactivity of Fullerene (C <sub>60</sub> ) Aerosols. <i>ACS Earth and Space Chemistry</i> , <b>2018</b> , 2, 95-102	3.2	3
33	Aqueous-phase reactive species formed by fine particulate matter from remote forests and polluted urban air. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 10439-10455	6.8	3
32	Inter-comparison of laboratory smog chamber and flow reactor systems on organic aerosol yield and composition <b>2015</b> ,		2
31	Photochemical aging of organic and inorganic ambient aerosol from the Potential Aerosol Mass (PAM) reactor experiment in East Asia <b>2017</b> ,		2

30	Introduction to the Deep Convective Clouds and Chemistry (DC3) 2012 Studies. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2019</b> , 124, 8095-8103	4.4	2
29	Airborne intercomparison of HO <sub>x</sub> measurements using laser-induced fluorescence and chemical ionization mass spectrometry during ARCTAS <b>2012</b> ,		2
28	Constraining remote oxidation capacity with ATom observations		2
27	Photochemical modeling of glyoxal at a rural site: observations and analysis from BEARPEX 2007		2
26	Ultraviolet and visible complex refractive indices of secondary organic material produced by photooxidation of the aromatic compounds toluene and <i>m</i> -Xylene		2
25	Overview of the Focused Isoprene eXperiments at California Institute of Technology (FIXCIT): mechanistic chamber studies on the oxidation of biogenic compounds		2
24	Airborne observations of total RONO <sub>2</sub> : new constraints on the yield and lifetime of isoprene nitrates		2
23	Airborne measurement of OH reactivity during INTEX-B		2
22	Global Impact of Lightning-Produced Oxidants. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2021GL095740	4.9	2
21	Daytime HONO Vertical Gradients during SHARP 2009 in Houston, TX		2
20	Speciation of OH reactivity above the canopy of an isoprene-dominated forest <b>2016</b> ,		2
19	Influence of fuel ethanol content on primary emissions and secondary aerosol formation potential for a modern flex-fuel gasoline vehicle <b>2016</b> ,		2
18	Characterization of aerosol photooxidation flow reactors: heterogeneous oxidation, secondary organic aerosol formation and cloud condensation nuclei activity measurements <b>2010</b> ,		1
17	Chapter 14 Chemistry of HO <sub>x</sub> radicals in the upper troposphere. <i>Developments in Environmental Science</i> , <b>2002</b> , 1, 393-433		1
16	Ozone Crisis: The Case Against Chlorofluorocarbons. <i>Weatherwise</i> , <b>1990</b> , 43, 136-143	0.2	1
15	Observations of atmospheric oxidation and ozone production in South Korea. <i>Atmospheric Environment</i> , <b>2022</b> , 269, 118854	5.3	1
14	Observations of elevated formaldehyde over a forest canopy suggest missing sources from rapid oxidation of arboreal hydrocarbons		1
13	Detailed comparisons of airborne formaldehyde measurements with box models during the 2006 INTEX-B campaign: potential evidence for unmeasured and multi-generation volatile organic carbon oxidation processing		1

12	On the temperature dependence of organic reactivity, nitrogen oxides, ozone production, and the impact of emission controls in San Joaquin Valley California		1
11	Comparison of secondary organic aerosol formed with an aerosol flow reactor and environmental reaction chambers: effect of oxidant concentration, exposure time and seed particles on chemical composition and yield		1
10	Observation of isoprene hydroxynitrates in the Southeastern United States and implications for the fate of NO <sub>x</sub>		1
9	Understanding isoprene photo-oxidation using observations and modelling over a subtropical forest in the Southeast US		1
8	Trans-Pacific transport and evolution of aerosols and trace gases from Asia during the INTEX-B field campaign		1
7	Measurement of ozone production sensor		1
6	Chemistry of hydrogen oxide radicals (HO <sub>x</sub> ) in the Arctic troposphere in spring		1
5	Normal breathing releases SARS-CoV-2 into the air. <i>Journal of Medical Microbiology</i> , <b>2021</b> , 70,	3.2	1
4	The Lifetime of Nitrogen Oxides in an Isoprene Dominated Forest <b>2016</b> ,		1
3	The role of a suburban forest in controlling vertical trace gas and OH reactivity distributions - a case study for the Seoul metropolitan area. <i>Faraday Discussions</i> , <b>2021</b> , 226, 537-550	3.6	1
2	Strategies for observing and modeling pollution. <i>Eos</i> , <b>2002</b> , 83, 575		1.5
1	The 75th Anniversary of the Journal of the Atmospheric Sciences. <i>Journals of the Atmospheric Sciences</i> , <b>2018</b> , 75, 4069-4070		2.1