# William H Brune

## List of Publications by Year in Descending Order



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| 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 | Observations of atmospheric oxidation and ozone production in South Korea. *Atmospheric Environment*, **2022**, 269, 118854 | 5.3 | 1 |
| 244 | THE NASA ATMOSPHERIC TOMOGRAPHY (ATom) MISSION: Imaging the Chemistry of the Global Atmosphere. *Bulletin of the American Meteorological Society*, **2021**, 1-53 | 6.1 | 6 |
| 243 | Global Impact of Lightning-Produced Oxidants. *Geophysical Research Letters*, **2021**, 48, e2021GL095740 | 4.9 | 2 |
| 242 | Normal breathing releases SARS-CoV-2 into the air. *Journal of Medical Microbiology*, **2021**, 70, | 3.2 | 1 |
| 241 | Extreme oxidant amounts produced by lightning in storm clouds. *Science*, **2021**, 372, 711-715 | 33.3 | 10 |
| 240 | Electrical Discharges Produce Prodigious Amounts of Hydroxyl and Hydroperoxyl Radicals. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2021JD034557 | 4.4 | 5 |
| 239 | The role of a suburban forest in controlling vertical trace gas and OH reactivity distributions - a case study for the Seoul metropolitan area. *Faraday Discussions*, **2021**, 226, 537-550 | 3.6 | 1 |
| 238 | Aqueous-phase reactive species formed by fine particulate matter from remote forests and polluted urban air. *Atmospheric Chemistry and Physics*, **2021**, 21, 10439-10455 | 6.8 | 3 |
| 237 | Missing OH reactivity in the global marine boundary layer. *Atmospheric Chemistry and Physics*, **2020**, 20, 4013-4029 | 6.8 | 13 |
| 236 | Changes in ozone production and VOC reactivity in the atmosphere of the Mexico City Metropolitan Area. *Atmospheric Environment*, **2020**, 238, 117747 | 5.3 | 17 |
| 235 | Changes in ozone photochemical regime in Fresno, California from 1994 to 2018 deduced from changes in the weekend effect. *Environmental Pollution*, **2020**, 263, 114380 | 9.3 | 19 |
| 234 | Technical Note: Effect of varying the <i></i> = 185 and 254 nm photon flux ratio on radical generation in oxidation flow reactors. *Atmospheric Chemistry and Physics*, **2020**, 20, 13417-13424 | 6.8 | 5 |
| 233 | Constraining remote oxidation capacity with ATom observations. *Atmospheric Chemistry and Physics* , **2020**, 20, 7753-7781 | 6.8 | 18 |
| 232 | Global airborne sampling reveals a previously unobserved dimethyl sulfide oxidation mechanism in the marine atmosphere. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 4505-4510 | 11.5 | 61 |
| 231 | Exploring Oxidation in the Remote Free Troposphere: Insights From Atmospheric Tomography (ATom). *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD031685 | 4.4 | 11 |
| 230 | Global Atmospheric Budget of Acetone: Air-Sea Exchange and the Contribution to Hydroxyl Radicals. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2020JD032553 | 4.4 | 8 |
| 229 | Precipitation intensity under a warming climate is threatening some Italian premium wines. *Science of the Total Environment*, **2019**, 685, 508-513 | 10.2 | 6 |

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| 228 | The Chamber Wall Index for Gas-Wall Interactions in Atmospheric Environmental Enclosures. *Environmental Science & Technology*, **2019**, 53, 3645-3652 | 10.3 | 6 |
| 227 | Effect of salt seed particle surface area, composition and phase on secondary organic aerosol mass yields in oxidation flow reactors. *Atmospheric Chemistry and Physics*, **2019**, 19, 2701-2712 | 6.8 | 8 |
| 226 | Physical properties of secondary photochemical aerosol from OH oxidation of a cyclic siloxane. *Atmospheric Chemistry and Physics*, **2019**, 19, 1649-1664 | 6.8 | 16 |
| 225 | Introduction to the Deep Convective Clouds and Chemistry (DC3) 2012 Studies. *Journal of Geophysical Research D: Atmospheres*, **2019**, 124, 8095-8103 | 4.4 | 2 |
| 224 | No Particle Mass Enhancement from Induced Atmospheric Ageing at a Rural Site in Northern Europe. *Atmosphere*, **2019**, 10, 408 | 2.7 | 4 |
| 223 | Evaluation of simulated O3 production efficiency during the KORUS-AQ campaign: Implications for anthropogenic NOx emissions in Korea. *Elementa*, **2019**, 7, | 3.6 | 22 |
| 222 | Global sensitivity analysis of GEOS-Chem modeled ozone and hydrogen oxides during the INTEX campaigns. *Atmospheric Chemistry and Physics*, **2018**, 18, 2443-2460 | 6.8 | 4 |
| 221 | Effects of temperature-dependent NO<sub><i>x</i></sub> emissions on continental ozone production. *Atmospheric Chemistry and Physics*, **2018**, 18, 2601-2614 | 6.8 | 33 |
| 220 | Model Evaluation of New Techniques for Maintaining High-NO Conditions in Oxidation Flow Reactors for the Study of OH-Initiated Atmospheric Chemistry. *ACS Earth and Space Chemistry*, **2018**, 2, 72-86 | 3.2 | 23 |
| 219 | Southeast Atmosphere Studies: learning from model-observation syntheses. *Atmospheric Chemistry and Physics*, **2018**, 18, 2615-2651 | 6.8 | 31 |
| 218 | Bulk and molecular-level characterization of laboratory-aged biomass burning organic aerosol from oak leaf and heartwood fuels. *Atmospheric Chemistry and Physics*, **2018**, 18, 2199-2224 | 6.8 | 21 |
| 217 | Exposure of Lung Epithelial Cells to Photochemically Aged Secondary Organic Aerosol Shows Increased Toxic Effects. *Environmental Science and Technology Letters*, **2018**, 5, 424-430 | 11 | 55 |
| 216 | Atmospheric Reactivity of Fullerene (C60) Aerosols. *ACS Earth and Space Chemistry*, **2018**, 2, 95-102 | 3.2 | 3 |
| 215 | Intercomparison of OH and OH reactivity measurements in a high isoprene and low NO environment during the Southern Oxidant and Aerosol Study (SOAS). *Atmospheric Environment*, **2018**, 174, 227-236 | 5.3 | 18 |
| 214 | Photochemical aging of aerosol particles in different air masses arriving at Baengnyeong Island, Korea. *Atmospheric Chemistry and Physics*, **2018**, 18, 6661-6677 | 6.8 | 13 |
| 213 | Atmospheric oxidation in the presence of clouds during the Deep Convective Clouds and Chemistry (DC3) study. *Atmospheric Chemistry and Physics*, **2018**, 18, 14493-14510 | 6.8 | 8 |
| 212 | The 75th Anniversary of the Journal of the Atmospheric Sciences. *Journals of the Atmospheric Sciences*, **2018**, 75, 4069-4070 | 2.1 | |
| 211 | Constraints on Aerosol Nitrate Photolysis as a Potential Source of HONO and NO. *Environmental Science & Technology*, **2018**, 52, 13738-13746 | 10.3 | 43 |

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| 210 | Secondary organic aerosol production from local emissions dominates the organic aerosol budget over Seoul, South Korea, during KORUS-AQ. *Atmospheric Chemistry and Physics*, **2018**, 18, 17769-17800 | 6.8 | 71 |
| 209 | Reactive Oxygen Species Formed by Secondary Organic Aerosols in Water and Surrogate Lung Fluid. *Environmental Science & Technology*, **2018**, 52, 11642-11651 | 10.3 | 43 |
| 208 | Reactive oxygen species formed in aqueous mixtures of secondary organic aerosols and mineral dust influencing cloud chemistry and public health in the Anthropocene. *Faraday Discussions*, **2017**, 200, 251-270 | 3.6 | 35 |
| 207 | Secondary organic aerosol from VOC mixtures in an oxidation flow reactor. *Atmospheric Environment*, **2017**, 161, 210-220 | 5.3 | 33 |
| 206 | Ozone and OH-induced oxidation of monoterpenes: Changes in the thermal properties of secondary organic aerosol (SOA). *Journal of Aerosol Science*, **2017**, 114, 31-41 | 4.3 | 15 |
| 205 | Controlled nitric oxide production via O(<sup>1</sup>D) + N<sub>2</sub>O reactions for use in oxidation flow reactor studies. *Atmospheric Measurement Techniques*, **2017**, 10, 2283-2298 | 4 | 35 |
| 204 | Comparison of OH reactivity measurements in the atmospheric simulation chamber SAPHIR. *Atmospheric Measurement Techniques*, **2017**, 10, 4023-4053 | 4 | 52 |
| 203 | Photochemical aging of organic and inorganic ambient aerosol from the Potential Aerosol Mass (PAM) reactor experiment in East Asia **2017**, | | 2 |
| 202 | Primary and Secondary Sources of Gas-Phase Organic Acids from Diesel Exhaust. *Environmental Science & Technology*, **2017**, 51, 10872-10880 | 10.3 | 22 |
| 201 | Global sensitivity analysis of the GEOS-Chem chemical transport model: ozone and hydrogen oxides during ARCTAS (2008). *Atmospheric Chemistry and Physics*, **2017**, 17, 3769-3784 | 6.8 | 14 |
| 200 | Higher measured than modeled ozone production at increased NO<sub><i>x</i></sub> levels in the Colorado Front Range. *Atmospheric Chemistry and Physics*, **2017**, 17, 11273-11292 | 6.8 | 15 |
| 199 | Influence of fuel ethanol content on primary emissions and secondary aerosol formation potential for a modern flex-fuel gasoline vehicle. *Atmospheric Chemistry and Physics*, **2017**, 17, 5311-5329 | 6.8 | 38 |
| 198 | Hydroxyl radicals from secondary organic aerosol decomposition in water. *Atmospheric Chemistry and Physics*, **2016**, 16, 1761-1771 | 6.8 | 101 |
| 197 | In situ secondary organic aerosol formation from ambient pine forest air using an oxidation flow reactor. *Atmospheric Chemistry and Physics*, **2016**, 16, 2943-2970 | 6.8 | 98 |
| 196 | Convective transport and scavenging of peroxides by thunderstorms observed over the central U.S. during DC3. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 4272-4295 | 4.4 | 20 |
| 195 | Volatility and lifetime against OH heterogeneous reaction of ambient isoprene-epoxydiols-derived secondary organic aerosol (IEPOX-SOA). *Atmospheric Chemistry and Physics*, **2016**, 16, 11563-11580 | 6.8 | 60 |
| 194 | Non-OH chemistry in oxidation flow reactors for the study of atmospheric chemistry systematically examined by modeling. *Atmospheric Chemistry and Physics*, **2016**, 16, 4283-4305 | 6.8 | 90 |
| 193 | Real-time measurements of secondary organic aerosol formation and aging from ambient air in an oxidation flow reactor in the Los Angeles area. *Atmospheric Chemistry and Physics*, **2016**, 16, 7411-7433 | 6.8 | 97 |

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| 192 | The lifetime of nitrogen oxides in an isoprene-dominated forest. *Atmospheric Chemistry and Physics*, **2016**, 16, 7623-7637 | 6.8 | 49 |
| 191 | Understanding isoprene photooxidation using observations and modeling over a subtropical forest in the southeastern US. *Atmospheric Chemistry and Physics*, **2016**, 16, 7725-7741 | 6.8 | 18 |
| 190 | Time-resolved characterization of primary particle emissions and secondary particle formation from a modern gasoline passenger car. *Atmospheric Chemistry and Physics*, **2016**, 16, 8559-8570 | 6.8 | 58 |
| 189 | Speciation of OH reactivity above the canopy of an isoprene-dominated forest. *Atmospheric Chemistry and Physics*, **2016**, 16, 9349-9359 | 6.8 | 47 |
| 188 | Anthropogenic Sulfur Perturbations on Biogenic Oxidation: SO2 Additions Impact Gas-Phase OH Oxidation Products of □and □Pinene. *Environmental Science & Technology*, **2016**, 50, 1269-79 | 10.3 | 36 |
| 187 | Atmospheric fates of Criegee intermediates in the ozonolysis of isoprene. *Physical Chemistry Chemical Physics*, **2016**, 18, 10241-54 | 3.6 | 130 |
| 186 | Observational Constraints on the Oxidation of NOx in the Upper Troposphere. *Journal of Physical Chemistry A*, **2016**, 120, 1468-78 | 2.8 | 20 |
| 185 | Speciation of OH reactivity above the canopy of an isoprene-dominated forest **2016**, | | 2 |
| 184 | Influence of fuel ethanol content on primary emissions and secondary aerosol formation potential for a modern flex-fuel gasoline vehicle **2016**, | | 2 |
| 183 | The Lifetime of Nitrogen Oxides in an Isoprene Dominated Forest **2016**, | | 1 |
| 182 | Ozone production chemistry in the presence of urban plumes. *Faraday Discussions*, **2016**, 189, 169-89 | 3.6 | 37 |
| 181 | Isoprene suppression of new particle formation: Potential mechanisms and implications. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 14,621 | 4.4 | 26 |
| 180 | Testing Atmospheric Oxidation in an Alabama Forest. *Journals of the Atmospheric Sciences*, **2016**, 73, 4699-4710 | 2.1 | 42 |
| 179 | Inter-comparison of laboratory smog chamber and flow reactor systems on organic aerosol yield and composition **2015**, | | 2 |
| 178 | Formation of Low Volatility Organic Compounds and Secondary Organic Aerosol from Isoprene Hydroxyhydroperoxide Low-NO Oxidation. *Environmental Science & Technology*, **2015**, 49, 10330-9 | 10.3 | 139 |
| 177 | Modeling the radical chemistry in an oxidation flow reactor: radical formation and recycling, sensitivities, and the OH exposure estimation equation. *Journal of Physical Chemistry A*, **2015**, 119, 4418-32 | 2.8 | 104 |
| 176 | An Atmospheric Constraint on the NO2 Dependence of Daytime Near-Surface Nitrous Acid (HONO). *Environmental Science & Technology*, **2015**, 49, 12774-81 | 10.3 | 23 |
| 175 | Ultraviolet and visible complex refractive indices of secondary organic material produced by photooxidation of the aromatic compounds toluene and <i>m</i>-xylene. *Atmospheric Chemistry and Physics*, **2015**, 15, 1435-1446 | 6.8 | 94 |

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| 174 | Observation of isoprene hydroxynitrates in the southeastern United States and implications for the fate of NO<sub><i>x</i></sub>. *Atmospheric Chemistry and Physics*, **2015**, 15, 11257-11272 | 6.8 | 62 |
| 173 | Effect of oxidant concentration, exposure time, and seed particles on secondary organic aerosol chemical composition and yield. *Atmospheric Chemistry and Physics*, **2015**, 15, 3063-3075 | 6.8 | 134 |
| 172 | The Deep Convective Clouds and Chemistry (DC3) Field Campaign. *Bulletin of the American Meteorological Society*, **2015**, 96, 1281-1309 | 6.1 | 140 |
| 171 | HO<sub>x</sub> radical chemistry in oxidation flow reactors with low-pressure mercury lamps systematically examined by modeling. *Atmospheric Measurement Techniques*, **2015**, 8, 4863-4890 | 4 | 93 |
| 170 | Inter-comparison of laboratory smog chamber and flow reactor systems on organic aerosol yield and composition. *Atmospheric Measurement Techniques*, **2015**, 8, 2315-2332 | 4 | 90 |
| 169 | Gas and aerosol carbon in California: comparison of measurements and model predictions in Pasadena and Bakersfield. *Atmospheric Chemistry and Physics*, **2015**, 15, 5243-5258 | 6.8 | 37 |
| 168 | The ozone story: A model for addressing climate change?. *Bulletin of the Atomic Scientists*, **2015**, 71, 75-84 | 1.6 | 3 |
| 167 | Direct ozone production rate measurements and their use in assessing ozone source and receptor regions for Houston in 2013. *Atmospheric Environment*, **2015**, 114, 83-91 | 5.3 | 17 |
| 166 | HO<sub><i>x</i></sub> radical chemistry in oxidation flow reactors with low-pressure mercury lamps systematically examined by modeling **2015**, | | 5 |
| 165 | Impacts of Combustion Conditions and Photochemical Processing on the Light Absorption of Biomass Combustion Aerosol. *Environmental Science & Technology*, **2015**, 49, 14663-71 | 10.3 | 92 |
| 164 | Evidence for a nitrous acid (HONO) reservoir at the ground surface in Bakersfield, CA, during CalNex 2010. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 9093-9106 | 4.4 | 54 |
| 163 | Atmospheric amines and ammonia measured with a chemical ionization mass spectrometer (CIMS). *Atmospheric Chemistry and Physics*, **2014**, 14, 12181-12194 | 6.8 | 99 |
| 162 | Overview of the Focused Isoprene eXperiment at the California Institute of Technology (FIXCIT): mechanistic chamber studies on the oxidation of biogenic compounds. *Atmospheric Chemistry and Physics*, **2014**, 14, 13531-13549 | 6.8 | 50 |
| 161 | On the temperature dependence of organic reactivity, nitrogen oxides, ozone production, and the impact of emission controls in San Joaquin Valley, California. *Atmospheric Chemistry and Physics*, **2014**, 14, 3373-3395 | 6.8 | 61 |
| 160 | Relationship between oxidation level and optical properties of secondary organic aerosol. *Environmental Science & Technology*, **2013**, 47, 6349-57 | 10.3 | 222 |
| 159 | Laboratory studies on secondary organic aerosol formation from crude oil vapors. *Environmental Science & Technology*, **2013**, 47, 12566-74 | 10.3 | 36 |
| 158 | Secondary organic aerosol formation and primary organic aerosol oxidation from biomass-burning smoke in a flow reactor during FLAME-3. *Atmospheric Chemistry and Physics*, **2013**, 13, 11551-11571 | 6.8 | 186 |
| 157 | Observations of total RONO<sub>2</sub> over the boreal forest: NO<sub>x</sub> sinks and HNO<sub>3</sub> sources. *Atmospheric Chemistry and Physics*, **2013**, 13, 4543-4562 | 6.8 | 57 |

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| 156 | Modeling organic aerosol from the oxidation of α-pinene in a Potential Aerosol Mass (PAM) chamber. *Atmospheric Chemistry and Physics*, **2013**, 13, 5017-5031 | 6.8 | 21 |
| 155 | Atmospheric oxidation chemistry and ozone production: Results from SHARP 2009 in Houston, Texas. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 5770-5780 | 4.4 | 67 |
| 154 | Urban measurements of atmospheric nitrous acid: A caveat on the interpretation of the HONO photostationary state. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 12,274-12,281 | 4.4 | 30 |
| 153 | Global sensitivity analysis of ozone production and O3–NOx–VOC limitation based on field data. *Atmospheric Environment*, **2012**, 55, 288-296 | 5.3 | 21 |
| 152 | Transitions from functionalization to fragmentation reactions of laboratory secondary organic aerosol (SOA) generated from the OH oxidation of alkane precursors. *Environmental Science & Technology*, **2012**, 46, 5430-7 | 10.3 | 147 |
| 151 | Global sensitivity analysis of the regional atmospheric chemical mechanism: an application of random sampling-high dimensional model representation to urban oxidation chemistry. *Environmental Science & Technology*, **2012**, 46, 11162-70 | 10.3 | 13 |
| 150 | Airborne intercomparison of HO<sub>x</sub> measurements using laser-induced fluorescence and chemical ionization mass spectrometry during ARCTAS **2012**, | | 2 |
| 149 | Airborne intercomparison of HO<sub>x</sub> measurements using laser-induced fluorescence and chemical ionization mass spectrometry during ARCTAS. *Atmospheric Measurement Techniques*, **2012**, 5, 2025-2037 | 4 | 23 |
| 148 | Direct measurement of ozone production rates in Houston in 2009 and comparison with two estimation methods. *Atmospheric Chemistry and Physics*, **2012**, 12, 1203-1212 | 6.8 | 29 |
| 147 | Daytime HONO vertical gradients during SHARP 2009 in Houston, TX. *Atmospheric Chemistry and Physics*, **2012**, 12, 635-652 | 6.8 | 103 |
| 146 | Insights into hydroxyl measurements and atmospheric oxidation in a California forest. *Atmospheric Chemistry and Physics*, **2012**, 12, 8009-8020 | 6.8 | 175 |
| 145 | Emissions of black carbon, organic, and inorganic aerosols from biomass burning in North America and Asia in 2008. *Journal of Geophysical Research*, **2011**, 116, | | 166 |
| 144 | Correction to "Relationship between aerosol oxidation level and hygroscopic properties of laboratory generated secondary organic aerosol (SOA) particles" *Geophysical Research Letters*, **2011**, 38, n/a-n/a | 4.9 | 5 |
| 143 | Characterization of aerosol photooxidation flow reactors: heterogeneous oxidation, secondary organic aerosol formation and cloud condensation nuclei activity measurements. *Atmospheric Measurement Techniques*, **2011**, 4, 445-461 | 4 | 233 |
| 142 | Effects of aging on organic aerosol from open biomass burning smoke in aircraft and laboratory studies. *Atmospheric Chemistry and Physics*, **2011**, 11, 12049-12064 | 6.8 | 418 |
| 141 | Dependence of SOA oxidation on organic aerosol mass concentration and OH exposure: experimental PAM chamber studies. *Atmospheric Chemistry and Physics*, **2011**, 11, 1837-1852 | 6.8 | 90 |
| 140 | Laboratory studies of the chemical composition and cloud condensation nuclei (CCN) activity of secondary organic aerosol (SOA) and oxidized primary organic aerosol (OPOA). *Atmospheric Chemistry and Physics*, **2011**, 11, 8913-8928 | 6.8 | 247 |
| 139 | The Chemistry of Atmosphere-Forest Exchange (CAFE) Model – Part 2: Application to BEARPEX-2007 observations. *Atmospheric Chemistry and Physics*, **2011**, 11, 1269-1294 | 6.8 | 67 |

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| 138 | 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. *Atmospheric Chemistry and Physics*, **2011**, 11, 11867-11894 | 6.8 | 32 |
| 137 | Photochemical modeling of glyoxal at a rural site: observations and analysis from BEARPEX 2007. *Atmospheric Chemistry and Physics*, **2011**, 11, 8883-8897 | 6.8 | 39 |
| 136 | A Preliminary PAM Measurement of Ambient Air at Gosan, Jeju to Study the Secondary Aerosol Forming Potential. *Journal of Korean Society for Atmospheric Environment*, **2011**, 27, 534-544 | 1.5 | 3 |
| 135 | Characterization of aerosol photooxidation flow reactors: heterogeneous oxidation, secondary organic aerosol formation and cloud condensation nuclei activity measurements **2010**, | | 1 |
| 134 | Measurement of Ozone Production Sensor. *Atmospheric Measurement Techniques*, **2010**, 3, 545-555 | 4 | 30 |
| 133 | Relationship between aerosol oxidation level and hygroscopic properties of laboratory generated secondary organic aerosol (SOA) particles. *Geophysical Research Letters*, **2010**, 37, n/a-n/a | 4.9 | 227 |
| 132 | A regional scale modeling analysis of aerosol and trace gas distributions over the eastern Pacific during the INTEX-B field campaign. *Atmospheric Chemistry and Physics*, **2010**, 10, 2091-2115 | 6.8 | 37 |
| 131 | Chemistry of hydrogen oxide radicals (HO<sub>x</sub>) in the Arctic troposphere in spring. *Atmospheric Chemistry and Physics*, **2010**, 10, 5823-5838 | 6.8 | 184 |
| 130 | Observations of elevated formaldehyde over a forest canopy suggest missing sources from rapid oxidation of arboreal hydrocarbons. *Atmospheric Chemistry and Physics*, **2010**, 10, 8761-8781 | 6.8 | 44 |
| 129 | Atmospheric oxidation capacity in the summer of Houston 2006: Comparison with summer measurements in other metropolitan studies. *Atmospheric Environment*, **2010**, 44, 4107-4115 | 5.3 | 168 |
| 128 | A comparison of chemical mechanisms based on TRAMP-2006 field data. *Atmospheric Environment*, **2010**, 44, 4116-4125 | 5.3 | 54 |
| 127 | Deciphering the role of radical precursors during the Second Texas Air Quality Study. *Journal of the Air and Waste Management Association*, **2009**, 59, 1258-77 | 2.4 | 57 |
| 126 | Summertime buildup and decay of lightning NOx and aged thunderstorm outflow above North America. *Journal of Geophysical Research*, **2009**, 114, | | 29 |
| 125 | Airborne observations of total RONO<sub>2</sub>: new constraints on the yield and lifetime of isoprene nitrates. *Atmospheric Chemistry and Physics*, **2009**, 9, 1451-1463 | 6.8 | 80 |
| 124 | Airborne measurement of OH reactivity during INTEX-B. *Atmospheric Chemistry and Physics*, **2009**, 9, 1636-1683 | 6.8 | 225 |
| 123 | Chemistry and transport of pollution over the Gulf of Mexico and the Pacific: spring 2006 INTEX-B campaign overview and first results. *Atmospheric Chemistry and Physics*, **2009**, 9, 2301-2318 | 6.8 | 206 |
| 122 | Performance evaluation of an air quality forecast modeling system for a summer and winter season Photochemical oxidants and their precursors. *Atmospheric Environment*, **2008**, 42, 8585-8599 | 5.3 | 28 |
| 121 | HOx chemistry during INTEX-A 2004: Observation, model calculation, and comparison with previous studies. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a | | 142 |

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| 120 | Role of convection in redistributing formaldehyde to the upper troposphere over North America and the North Atlantic during the summer 2004 INTEX campaign. *Journal of Geophysical Research*, **2008**, 113, | | 31 |
| 119 | Unique isoprene oxidation products demonstrate chlorine atom chemistry occurs in the Houston, Texas urban area. *Journal of Atmospheric Chemistry*, **2008**, 61, 227-242 | 3.2 | 14 |
| 118 | Influence of lateral and top boundary conditions on regional air quality prediction: A multiscale study coupling regional and global chemical transport models. *Journal of Geophysical Research*, **2007**, 112, | | 68 |
| 117 | Measurement of HO2NO2 in the free troposphere during the Intercontinental Chemical Transport Experiment North America 2004. *Journal of Geophysical Research*, **2007**, 112, | | 60 |
| 116 | Characterization of Wintertime Reactive Oxygen Species Concentrations in Flushing, New York. *Aerosol Science and Technology*, **2007**, 41, 97-111 | 3.4 | 70 |
| 115 | Air quality in North America's most populous city overview of the MCMA-2003 campaign. *Atmospheric Chemistry and Physics*, **2007**, 7, 2447-2473 | 6.8 | 257 |
| 114 | Introducing the concept of Potential Aerosol Mass (PAM). *Atmospheric Chemistry and Physics*, **2007**, 7, 5727-5744 | 6.8 | 221 |
| 113 | Behavior of OH and HO2 in the winter atmosphere in New York City. *Atmospheric Environment*, **2006**, 40, 252-263 | 5.3 | 132 |
| 112 | OH, HO2, and OH reactivity during the PMTACS NY Whiteface Mountain 2002 campaign: Observations and model comparison. *Journal of Geophysical Research*, **2006**, 111, n/a-n/a | | 79 |
| 111 | A reevaluation of airborne HOx observations from NASA field campaigns. *Journal of Geophysical Research*, **2006**, 111, n/a-n/a | | 63 |
| 110 | On the flux of oxygenated volatile organic compounds from organic aerosol oxidation. *Geophysical Research Letters*, **2006**, 33, | 4.9 | 47 |
| 109 | Large upper tropospheric ozone enhancements above midlatitude North America during summer: In situ evidence from the IONS and MOZAIC ozone measurement network. *Journal of Geophysical Research*, **2006**, 111, | | 102 |
| 108 | Overview of the summer 2004 Intercontinental Chemical Transport Experiment North America (INTEX-A). *Journal of Geophysical Research*, **2006**, 111, | | 209 |
| 107 | Atmospheric oxidation in the Mexico City Metropolitan Area (MCMA) during April 2003. *Atmospheric Chemistry and Physics*, **2006**, 6, 2753-2765 | 6.8 | 183 |
| 106 | Variability of active chlorine in the lowermost Arctic stratosphere. *Journal of Geophysical Research*, **2005**, 110, | | 7 |
| 105 | DOAS measurement of glyoxal as an indicator for fast VOC chemistry in urban air. *Geophysical Research Letters*, **2005**, 32, | 4.9 | 189 |
| 104 | Hydroxyl and Peroxy Radical Chemistry in a Rural Area of Central Pennsylvania: Observations and Model Comparisons. *Journal of Atmospheric Chemistry*, **2005**, 52, 231-257 | 3.2 | 51 |
| 103 | Missing OH reactivity in a forest: evidence for unknown reactive biogenic VOCs. *Science*, **2004**, 304, 722-5 | 33.3 | 384 |

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| 102 | A Laser-induced Fluorescence Instrument for Detecting Tropospheric OH and HO2: Characteristics and Calibration. *Journal of Atmospheric Chemistry*, **2004**, 47, 139-167 | 3.2 | 144 |
| 101 | Interference Testing for Atmospheric HOx Measurements by Laser-induced Fluorescence. *Journal of Atmospheric Chemistry*, **2004**, 47, 169-190 | 3.2 | 49 |
| 100 | Testing fast photochemical theory during TRACE-P based on measurements of OH, HO2, and CH2O. *Journal of Geophysical Research*, **2004**, 109, | | 50 |
| 99 | Measuring atmospheric naphthalene with laser-induced fluorescence. *Atmospheric Chemistry and Physics*, **2004**, 4, 563-569 | 6.8 | 24 |
| 98 | OH and HO2 Chemistry in the urban atmosphere of New York City. *Atmospheric Environment*, **2003**, 37, 3639-3651 | 5.3 | 249 |
| 97 | On the relative role of convection, chemistry, and transport over the South Pacific Convergence Zone during PEM-Tropics B: A case study. *Journal of Geophysical Research*, **2003**, 108, PEM 4-1 | | 17 |
| 96 | In situ observations of ClO near the winter polar tropopause. *Journal of Geophysical Research*, **2003**, 108, | | 18 |
| 95 | Large-scale ozone and aerosol distributions, air mass characteristics, and ozone fluxes over the western Pacific Ocean in late winter/early spring. *Journal of Geophysical Research*, **2003**, 108, | | 42 |
| 94 | Oxygenated volatile organic chemicals in the oceans: Inferences and implications based on atmospheric observations and air-sea exchange models. *Geophysical Research Letters*, **2003**, 30, | 4.9 | 77 |
| 93 | OH and HO2 concentrations, sources, and loss rates during the Southern Oxidants Study in Nashville, Tennessee, summer 1999. *Journal of Geophysical Research*, **2003**, 108, | | 152 |
| 92 | Intercomparison of peroxy radical measurements at a rural site using laser-induced fluorescence and Peroxy Radical Chemical Ionization Mass Spectrometer (PerCIMS) techniques. *Journal of Geophysical Research*, **2003**, 108, | | 29 |
| 91 | Peroxy radical behavior during the Transport and Chemical Evolution over the Pacific (TRACE-P) campaign as measured aboard the NASA P-3B aircraft. *Journal of Geophysical Research*, **2003**, 108, | | 39 |
| 90 | Sources of upper tropospheric HOx over the South Pacific Convergence Zone: A case study. *Journal of Geophysical Research*, **2003**, 108, PEM 1-1 | | 5 |
| 89 | Direct measurements of urban OH reactivity during Nashville SOS in summer 1999. *Journal of Environmental Monitoring*, **2003**, 5, 68-74 | | 87 |
| 88 | Chapter 14 Chemistry of HOx radicals in the upper troposphere. *Developments in Environmental Science*, **2002**, 1, 393-433 | | 1 |
| 87 | Deep convection as a source of new particles in the midlatitude upper troposphere. *Journal of Geophysical Research*, **2002**, 107, AAC 6-1-AAC 6-10 | | 77 |
| 86 | Loss of isoprene and sources of nighttime OH radicals at a rural site in the United States: Results from photochemical models. *Journal of Geophysical Research*, **2002**, 107, ACH 2-1-ACH 2-14 | | 25 |
| 85 | Ozone production rates as a function of NOx abundances and HOx production rates in the Nashville urban plume. *Journal of Geophysical Research*, **2002**, 107, ACH 7-1 | | 178 |

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| 28 | Observations of elevated formaldehyde over a forest canopy suggest missing sources from rapid oxidation of arboreal hydrocarbons | | 1 |
| 27 | Effects of aging on organic aerosol from open biomass burning smoke in aircraft and lab studies | | 20 |
| 26 | Laboratory studies of the chemical composition and cloud condensation nuclei (CCN) activity of secondary organic aerosol (SOA) and oxidized primary organic aerosol (OPOA) | | 4 |
| 25 | Photochemical modeling of glyoxal at a rural site: observations and analysis from BEARPEX 2007 | | 2 |
| 24 | 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 |
| 23 | Insights into hydroxyl measurements and atmospheric oxidation in a California forest | | 15 |
| 22 | Secondary organic aerosol formation and primary organic aerosol oxidation from biomass burning smoke in a flow reactor during FLAME-3 | | 4 |
| 21 | Observations of total RONO<sub>2</sub> over the boreal forest: NO<sub>x</sub> sinks and HNO<sub>3</sub> sources | | 5 |
| 20 | On the temperature dependence of organic reactivity, nitrogen oxides, ozone production, and the impact of emission controls in San Joaquin Valley California | | 1 |
| 19 | Atmospheric amines and ammonia measured with a Chemical Ionization Mass Spectrometer (CIMS) | | 4 |
| 18 | Ultraviolet and visible complex refractive indices of secondary organic material produced by photooxidation of the aromatic compounds toluene and <i>m</i>-Xylene | | 2 |
| 17 | Overview of the Focused Isoprene eXperiments at California Institute of Technology (FIXCIT): mechanistic chamber studies on the oxidation of biogenic compounds | | 2 |
| 16 | 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 |
| 15 | Observation of isoprene hydroxynitrates in the Southeastern United States and implications for the fate of NO<sub><i>x</i></sub> | | 1 |
| 14 | Real-time measurements of secondary organic aerosol formation and aging from ambient air in an oxidation flow reactor in the Los Angeles area | | 10 |
| 13 | Non-OH chemistry in oxidation flow reactors for the study of atmospheric chemistry systematically examined by modeling | | 4 |

# List of Publications

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| 12 | In situ secondary organic aerosol formation from ambient pine forest air using an oxidation flow reactor | 4 |
| 11 | Understanding isoprene photo-oxidation using observations and modelling over a subtropical forest in the Southeast US | 1 |
| 10 | Time-resolved characterization of primary and secondary particle emissions of a modern gasoline passenger car | 3 |
| 9 | Introducing the concept of Potential Aerosol Mass (PAM) | 6 |
| 8 | Airborne observations of total RONO<sub>2</sub>: new constraints on the yield and lifetime of isoprene nitrates | 2 |
| 7 | Airborne measurement of OH reactivity during INTEX-B | 2 |
| 6 | Chemistry and transport of pollution over the Gulf of Mexico and the Pacific: Spring 2006 INTEX-B Campaign overview and first results | 11 |
| 5 | Comparison of OH reactivity measurements in the atmospheric simulation chamber SAPHIR | 3 |
| 4 | Trans-Pacific transport and evolution of aerosols and trace gases from Asia during the INTEX-B field campaign | 1 |
| 3 | Measurement of ozone production sensor | 1 |
| 2 | Chemistry of hydrogen oxide radicals (HO<sub>x</sub>) in the Arctic troposphere in spring | 1 |
| 1 | Daytime HONO Vertical Gradients during SHARP 2009 in Houston, TX | 2 |