# Frank F Flocke

## List of Publications by Citations



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| 152 papers | 7,928 citations | 53 h-index | 84 g-index |
| 166 ext. papers | 8,828 ext. citations | 6 avg, IF | 4.78 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 152 | Emissions from biomass burning in the Yucatan. *Atmospheric Chemistry and Physics*, **2009**, 9, 5785-5812 | 6.8 | 358 |
| 151 | Hydrogen radicals, nitrogen radicals, and the production of O3 in the upper troposphere. *Science*, **1998**, 279, 49-53 | 33.3 | 300 |
| 150 | Global atmospheric budget of acetaldehyde: 3-D model analysis and constraints from in-situ and satellite observations. *Atmospheric Chemistry and Physics*, **2010**, 10, 3405-3425 | 6.8 | 234 |
| 149 | Effect of petrochemical industrial emissions of reactive alkenes and NOx on tropospheric ozone formation in Houston, Texas. *Journal of Geophysical Research*, **2003**, 108, | | 225 |
| 148 | Distribution and fate of selected oxygenated organic species in the troposphere and lower stratosphere over the Atlantic. *Journal of Geophysical Research*, **2000**, 105, 3795-3805 | | 225 |
| 147 | A thermal dissociation□hemical ionization mass spectrometry (TD-CIMS) technique for the simultaneous measurement of peroxyacyl nitrates and dinitrogen pentoxide. *Journal of Geophysical Research*, **2004**, 109, | | 224 |
| 146 | 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 |
| 145 | Effects of changing power plant NOx emissions on ozone in the eastern United States: Proof of concept. *Journal of Geophysical Research*, **2006**, 111, | | 192 |
| 144 | Ozone production in transpacific Asian pollution plumes and implications for ozone air quality in California. *Journal of Geophysical Research*, **2004**, 109, | | 170 |
| 143 | Distributions of brominated organic compounds in the troposphere and lower stratosphere. *Journal of Geophysical Research*, **1999**, 104, 21513-21535 | | 167 |
| 142 | Evaluation of space-based constraints on global nitrogen oxide emissions with regional aircraft measurements over and downwind of eastern North America. *Journal of Geophysical Research*, **2006**, 111, | | 159 |
| 141 | A case study of transpacific warm conveyor belt transport: Influence of merging airstreams on trace gas import to North America. *Journal of Geophysical Research*, **2004**, 109, | | 148 |
| 140 | Observed OH and HO2 in the upper troposphere suggest a major source from convective injection of peroxides. *Geophysical Research Letters*, **1997**, 24, 3181-3184 | 4.9 | 143 |
| 139 | The Deep Convective Clouds and Chemistry (DC3) Field Campaign. *Bulletin of the American Meteorological Society*, **2015**, 96, 1281-1309 | 6.1 | 140 |
| 138 | On the origin of tropospheric ozone and NOx over the tropical South Pacific. *Journal of Geophysical Research*, **1999**, 104, 5829-5843 | | 123 |
| 137 | Nocturnal isoprene oxidation over the Northeast United States in summer and its impact on reactive nitrogen partitioning and secondary organic aerosol. *Atmospheric Chemistry and Physics*, **2009**, 9, 3027-3042 | 6.8 | 114 |
| 136 | Chemical evolution of volatile organic compounds in the outflow of the Mexico City Metropolitan area. *Atmospheric Chemistry and Physics*, **2010**, 10, 2353-2375 | 6.8 | 112 |

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| 135 | Tropospheric hydroxyl and atomic chlorine concentrations, and mixing timescales determined from hydrocarbon and halocarbon measurements made over the Southern Ocean. *Journal of Geophysical Research*, **1999**, 104, 21819-21828 | | 110 |
| 134 | A new interpretation of total column BrO during Arctic spring. *Geophysical Research Letters*, **2010**, 37, n/a-n/a | 4.9 | 102 |
| 133 | Concentrations and sources of organic carbon aerosols in the free troposphere over North America. *Journal of Geophysical Research*, **2006**, 111, | | 97 |
| 132 | Eddy covariance fluxes of peroxyacetyl nitrates (PANs) and NOy to a coniferous forest. *Journal of Geophysical Research*, **2006**, 111, | | 94 |
| 131 | Comparison of MkIV balloon and ER-2 aircraft measurements of atmospheric trace gases. *Journal of Geophysical Research*, **1999**, 104, 26779-26790 | | 91 |
| 130 | Observations of heterogeneous reactions between Asian pollution and mineral dust over the Eastern North Pacific during INTEX-B. *Atmospheric Chemistry and Physics*, **2009**, 9, 8283-8308 | 6.8 | 89 |
| 129 | Reactive nitrogen distribution and partitioning in the North American troposphere and lowermost stratosphere. *Journal of Geophysical Research*, **2007**, 112, | | 89 |
| 128 | Fast-response airborne in situ measurements of HNO3 during the Texas 2000 Air Quality Study. *Journal of Geophysical Research*, **2002**, 107, ACH 8-1 | | 89 |
| 127 | Measurements of alkyl nitrates in rural and polluted air masses. *Atmospheric Environment Part A General Topics*, **1991**, 25, 1951-1960 | | 86 |
| 126 | First direct measurements of formaldehyde flux via eddy covariance: implications for missing in-canopy formaldehyde sources. *Atmospheric Chemistry and Physics*, **2011**, 11, 10565-10578 | 6.8 | 85 |
| 125 | Is the Arctic Surface Layer a Source and Sink of NOx in Winter/Spring?. *Journal of Atmospheric Chemistry*, **2000**, 36, 1-22 | 3.2 | 82 |
| 124 | Aircraft measurements of the latitudinal, vertical, and seasonal variations of NMHCs, methyl nitrate, methyl halides, and DMS during the First Aerosol Characterization Experiment (ACE 1). *Journal of Geophysical Research*, **1999**, 104, 21803-21817 | | 80 |
| 123 | High levels of molecular chlorine in the Arctic atmosphere. *Nature Geoscience*, **2014**, 7, 91-94 | 18.3 | 79 |
| 122 | An investigation of the chemistry of ship emission plumes during ITCT 2002. *Journal of Geophysical Research*, **2005**, 110, | | 79 |
| 121 | Changes in the photochemical environment of the temperate North Pacific troposphere in response to increased Asian emissions. *Journal of Geophysical Research*, **2004**, 109, | | 74 |
| 120 | Measurements of bromine containing organic compounds at the tropical tropopause. *Geophysical Research Letters*, **1998**, 25, 317-320 | 4.9 | 74 |
| 119 | Impacts of biomass burning in Southeast Asia on ozone and reactive nitrogen over the western Pacific in spring. *Journal of Geophysical Research*, **2004**, 109, | | 73 |
| 118 | Coupled evolution of BrOx-ClOx-HOx-NOx chemistry during bromine-catalyzed ozone depletion events in the arctic boundary layer. *Journal of Geophysical Research*, **2003**, 108, | | 72 |

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| 117 | Gas-phase chemical characteristics of Asian emission plumes observed during ITCT 2K2 over the eastern North Pacific Ocean. *Journal of Geophysical Research*, **2004**, 109, | | 71 |
| 116 | Latitudinal, vertical, and seasonal variations of C1-C4 alkyl nitrates in the troposphere over the Pacific Ocean during PEM-Tropics A and B: Oceanic and continental sources. *Journal of Geophysical Research*, **2003**, 108, | | 71 |
| 115 | Export of anthropogenic reactive nitrogen and sulfur compounds from the East Asia region in spring. *Journal of Geophysical Research*, **2003**, 108, | | 71 |
| 114 | Reactive nitrogen transport and photochemistry in urban plumes over the North Atlantic Ocean. *Journal of Geophysical Research*, **2006**, 111, | | 70 |
| 113 | Upper tropospheric ozone production from lightning NOx-impacted convection: Smoke ingestion case study from the DC3 campaign. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 2505-2525 | 4.4 | 68 |
| 112 | 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 |
| 111 | Ozone depletion events observed in the high latitude surface layer during the TOPSE aircraft program. *Journal of Geophysical Research*, **2003**, 108, TOP 4-1 | | 67 |
| 110 | Synoptic-scale transport of reactive nitrogen over the western Pacific in spring. *Journal of Geophysical Research*, **2003**, 108, | | 63 |
| 109 | Long-term measurements of alkyl nitrates in southern Germany: 1. General behavior and seasonal and diurnal variation. *Journal of Geophysical Research*, **1998**, 103, 5729-5746 | | 60 |
| 108 | Ground-based measurements of peroxycarboxylic nitric anhydrides (PANs) during the 1999 Southern Oxidants Study Nashville Intensive. *Journal of Geophysical Research*, **2002**, 107, ACH 1-1-ACH 1-10 | | 59 |
| 107 | Observations of inorganic bromine (HOBr, BrO, and Br2) speciation at Barrow, Alaska, in spring 2009. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a | | 58 |
| 106 | Nitrous acid (HONO) during polar spring in Barrow, Alaska: A net source of OH radicals?. *Journal of Geophysical Research*, **2011**, 116, | | 58 |
| 105 | Large-scale latitudinal and vertical distributions of NMHCs and selected halocarbons in the troposphere over the Pacific Ocean during the March-April 1999 Pacific Exploratory Mission (PEM-Tropics B). *Journal of Geophysical Research*, **2001**, 106, 32627-32644 | | 58 |
| 104 | Seasonal variations of C2–C4 nonmethane hydrocarbons and C1–C4 alkyl nitrates at the Summit research station in Greenland. *Journal of Geophysical Research*, **2003**, 108, | | 57 |
| 103 | An examination of chemistry and transport processes in the tropical lower stratosphere using observations of long-lived and short-lived compounds obtained during STRAT and POLARIS. *Journal of Geophysical Research*, **1999**, 104, 26625-26642 | | 56 |
| 102 | Measurement of peroxycarboxylic nitric anhydrides (PANs) during the ITCT 2K2 aircraft intensive experiment. *Journal of Geophysical Research*, **2004**, 109, | | 54 |
| 101 | On the Measurement of PANs by Gas Chromatography and Electron Capture Detection. *Journal of Atmospheric Chemistry*, **2005**, 52, 19-43 | 3.2 | 54 |
| 100 | Influence of trans-Pacific pollution transport on acyl peroxy nitrate abundances and speciation at Mount Bachelor Observatory during INTEX-B. *Atmospheric Chemistry and Physics*, **2007**, 7, 5309-5325 | 6.8 | 53 |

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| 99 | Ozone, aerosol, potential vorticity, and trace gas trends observed at high-latitudes over North America from February to May 2000. *Journal of Geophysical Research*, **2003**, 108, | | 52 |
| 98 | Budgets for nocturnal VOC oxidation by nitrate radicals aloft during the 2006 Texas Air Quality Study. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a | | 50 |
| 97 | Testing fast photochemical theory during TRACE-P based on measurements of OH, HO2, and CH2O. *Journal of Geophysical Research*, **2004**, 109, | | 50 |
| 96 | Reactive nitrogen budget during the NASA SONEX Mission. *Geophysical Research Letters*, **1999**, 26, 3057-3060 | 4.9 | 50 |
| 95 | Evaluation of HO<sub>x</sub> sources and cycling using measurement-constrained model calculations in a 2-methyl-3-butene-2-ol (MBO) and monoterpene (MT) dominated ecosystem. *Atmospheric Chemistry and Physics*, **2013**, 13, 2031-2044 | 6.8 | 49 |
| 94 | Steady state free radical budgets and ozone photochemistry during TOPSE. *Journal of Geophysical Research*, **2003**, 108, | | 48 |
| 93 | Characterization of a thermal decomposition chemical ionization mass spectrometer for the measurement of peroxy acyl nitrates (PANs) in the atmosphere. *Atmospheric Chemistry and Physics*, **2011**, 11, 6529-6547 | 6.8 | 47 |
| 92 | Photochemical production and evolution of selected C2–C5 alkyl nitrates in tropospheric air influenced by Asian outflow. *Journal of Geophysical Research*, **2003**, 108, | | 47 |
| 91 | The seasonal evolution of NMHCs and light alkyl nitrates at middle to high northern latitudes during TOPSE. *Journal of Geophysical Research*, **2003**, 108, | | 46 |
| 90 | Summary of measurement intercomparisons during TRACE-P. *Journal of Geophysical Research*, **2003**, 108, | | 46 |
| 89 | Missing peroxy radical sources within a summertime ponderosa pine forest. *Atmospheric Chemistry and Physics*, **2014**, 14, 4715-4732 | 6.8 | 44 |
| 88 | Ozone dynamics and snow-atmosphere exchanges during ozone depletion events at Barrow, Alaska. *Journal of Geophysical Research*, **2012**, 117, | | 42 |
| 87 | Photochemistry in the arctic free troposphere: NOx budget and the role of odd nitrogen reservoir recycling. *Atmospheric Environment*, **2003**, 37, 3351-3364 | 5.3 | 42 |
| 86 | Evaluation of the role of heterogeneous oxidation of alkenes in the detection of atmospheric acetaldehyde. *Atmospheric Environment*, **2004**, 38, 6017-6028 | 5.3 | 41 |
| 85 | Lagrangian analysis of low altitude anthropogenic plume processing across the North Atlantic. *Atmospheric Chemistry and Physics*, **2008**, 8, 7737-7754 | 6.8 | 40 |
| 84 | Springtime photochemistry at northern mid and high latitudes. *Journal of Geophysical Research*, **2003**, 108, | | 40 |
| 83 | Long-term atmospheric measurements of C1–C5 alkyl nitrates in the Pearl River Delta region of southeast China. *Atmospheric Environment*, **2006**, 40, 1619-1632 | 5.3 | 39 |
| 82 | 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 |

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| 81 | Airborne flux measurements of methane and volatile organic compounds over the Haynesville and Marcellus shale gas production regions. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 6271-6289 | 4.4 | 37 |
| 80 | Tropospheric reactive odd nitrogen over the South Pacific in austral springtime. *Journal of Geophysical Research*, **2000**, 105, 6681-6694 | | 36 |
| 79 | Fraction and composition of NOy transported in air masses lofted from the North American continental boundary layer. *Journal of Geophysical Research*, **2004**, 109, | | 35 |
| 78 | Assessing the regional impacts of Mexico City emissions on air quality and chemistry. *Atmospheric Chemistry and Physics*, **2009**, 9, 3731-3743 | 6.8 | 33 |
| 77 | Changes in ozone and precursors during two aged wildfire smoke events in the Colorado Front Range in summer 2015. *Atmospheric Chemistry and Physics*, **2017**, 17, 10691-10707 | 6.8 | 32 |
| 76 | Late-spring increase of trans-Pacific pollution transport in the upper troposphere. *Geophysical Research Letters*, **2006**, 33, n/a-n/a | 4.9 | 32 |
| 75 | Observations of methyl nitrate in the lower stratosphere during STRAT: Implications for its gas phase production mechanisms. *Geophysical Research Letters*, **1998**, 25, 1891-1894 | 4.9 | 32 |
| 74 | Quantification of organic aerosol and brown carbon evolution in fresh wildfire plumes. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 29469-29477 | 11.5 | 31 |
| 73 | A biomass burning source of C1□4 alkyl nitrates. *Geophysical Research Letters*, **2002**, 29, 21-1-21-4 | 4.9 | 31 |
| 72 | Preparation of organic nitrates from alcohols and N2O5 for species identification in atmospheric samples. *Journal of Atmospheric Chemistry*, **1993**, 16, 349-359 | 3.2 | 31 |
| 71 | Long-Term Measurements of Light Hydrocarbons (C2□5) at Schauinsland (Black Forest). *Journal of Atmospheric Chemistry*, **1997**, 28, 135-171 | 3.2 | 30 |
| 70 | Mercury Emission Ratios from Coal-Fired Power Plants in the Southeastern United States during NOMADSS. *Environmental Science & Technology*, **2015**, 49, 10389-97 | 10.3 | 29 |
| 69 | Observation and modeling of the evolution of Texas power plant plumes. *Atmospheric Chemistry and Physics*, **2012**, 12, 455-468 | 6.8 | 29 |
| 68 | Relationship between photochemical ozone production and NOx oxidation in Houston, Texas. *Journal of Geophysical Research*, **2009**, 114, | | 29 |
| 67 | Atmospheric Acetaldehyde: Importance of Air-Sea Exchange and a Missing Source in the Remote Troposphere. *Geophysical Research Letters*, **2019**, 46, 5601-5613 | 4.9 | 28 |
| 66 | HONO Emissions from Western U.S. Wildfires Provide Dominant Radical Source in Fresh Wildfire Smoke. *Environmental Science & Technology*, **2020**, 54, 5954-5963 | 10.3 | 26 |
| 65 | Observations of APAN during TexAQS 2000. *Geophysical Research Letters*, **2001**, 28, 4195-4198 | 4.9 | 26 |
| 64 | Airborne quantification of upper tropospheric NOx production from lightning in deep convective storms over the United States Great Plains. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 2002-2028 | 4.4 | 24 |

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| 63 | Wet scavenging of soluble gases in DC3 deep convective storms using WRF-Chem simulations and aircraft observations. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 4233-4257 | 4.4 | 24 |
| 62 | The effect of entrainment through atmospheric boundary layer growth on observed and modeled surface ozone in the Colorado Front Range. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 6075-6093 | 4.4 | 24 |
| 61 | Clouds and trace gas distributions during TRACE-P. *Journal of Geophysical Research*, **2003**, 108, | | 24 |
| 60 | Using stable isotopes of hydrogen to quantify biogenic and thermogenic atmospheric methane sources: A case study from the Colorado Front Range. *Geophysical Research Letters*, **2016**, 43, 11,462 | 4.9 | 23 |
| 59 | A study of organic nitrates formation in an urban plume using a Master Chemical Mechanism. *Atmospheric Environment*, **2008**, 42, 5771-5786 | 5.3 | 23 |
| 58 | Convective transport of formaldehyde to the upper troposphere and lower stratosphere and associated scavenging in thunderstorms over the central United States during the 2012 DC3 study. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 7430-7460 | 4.4 | 23 |
| 57 | BrO and inferred Br<sub><i>y</i></sub> profiles over the western Pacific: relevance of inorganic bromine sources and a Br<sub><i>y</i></sub> minimum in the aged tropical tropopause layer. *Atmospheric Chemistry and Physics*, **2017**, 17, 15245-15270 | 6.8 | 22 |
| 56 | Interactions of bromine, chlorine, and iodine photochemistry during ozone depletions in Barrow, Alaska. *Atmospheric Chemistry and Physics*, **2015**, 15, 9651-9679 | 6.8 | 22 |
| 55 | Airborne Observations of Reactive Inorganic Chlorine and Bromine Species in the Exhaust of Coal-Fired Power Plants. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 11225-11237 | 4.4 | 21 |
| 54 | Comparison between DC-8 and ER-2 species measurements in the tropical middle troposphere: NO, NOy, O3, CO2, CH4, and N2O. *Journal of Geophysical Research*, **1998**, 103, 22087-22096 | | 20 |
| 53 | Impacts of the Denver Cyclone on regional air quality and aerosol formation in the Colorado Front Range during FRAPP 2014. *Atmospheric Chemistry and Physics*, **2016**, 16, 12039-12058 | 6.8 | 19 |
| 52 | Intercontinental transport of pollution manifested in the variability and seasonal trend of springtime O3 at northern middle and high latitudes. *Journal of Geophysical Research*, **2003**, 108, | | 19 |
| 51 | Using observations and source specific model tracers to characterize pollutant transport during FRAPP and DISCOVER-AQ. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 10510-10538 | 4.4 | 18 |
| 50 | The NO<sub><i>x</i></sub> dependence of bromine chemistry in the Arctic atmospheric boundary layer. *Atmospheric Chemistry and Physics*, **2015**, 15, 10799-10809 | 6.8 | 18 |
| 49 | Daytime Oxidized Reactive Nitrogen Partitioning in Western U.S. Wildfire Smoke Plumes. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD033484 | 4.4 | 18 |
| 48 | On the sources and sinks of atmospheric VOCs: an integrated analysis of recent aircraft campaigns over North America. *Atmospheric Chemistry and Physics*, **2019**, 19, 9097-9123 | 6.8 | 17 |
| 47 | Modeling ozone plumes observed downwind of New York City over the North Atlantic Ocean during the ICARTT field campaign. *Atmospheric Chemistry and Physics*, **2011**, 11, 7375-7397 | 6.8 | 17 |
| 46 | Contribution of particulate nitrate to airborne measurements of total reactive nitrogen. *Journal of Geophysical Research*, **2005**, 110, | | 16 |

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| 45 | Organic trace gases of oceanic origin observed at South Pole during ISCAT 2000. *Atmospheric Environment*, **2004**, 38, 5463-5472 | 5.3 | 16 |
| 44 | Airborne measurements of BrO and the sum of HOBr and Br2 over the Tropical West Pacific from 1 to 15 km during the CONvective TRansport of Active Species in the Tropics (CONTRAST) experiment. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 12,560-12,578 | 4.4 | 15 |
| 43 | 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 |
| 42 | Alkyl nitrate measurements during STERAO 1996 and NARE 1997: Intercomparison and survey of results. *Journal of Geophysical Research*, **2001**, 106, 23043-23053 | | 15 |
| 41 | Air Quality in the Northern Colorado Front Range Metro Area: The Front Range Air Pollution and Photochemistry Experiment (FRAPPÉ). *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD031197 | 4.4 | 14 |
| 40 | Emissions of Reactive Nitrogen From Western U.S. Wildfires During Summer 2018. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD032657 | 4.4 | 14 |
| 39 | Photochemistry in the Arctic Free Troposphere: Ozone Budget and Its Dependence on Nitrogen Oxides and the Production Rate of Free Radicals. *Journal of Atmospheric Chemistry*, **2004**, 47, 107-138 | 3.2 | 13 |
| 38 | Emissions of Trace Organic Gases From Western U.S. Wildfires Based on WE-CAN Aircraft Measurements. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD033838 | 4.4 | 13 |
| 37 | Secondary organic aerosols from anthropogenic volatile organic compounds contribute substantially to air pollution mortality. *Atmospheric Chemistry and Physics*, **2021**, 21, 11201-11224 | 6.8 | 12 |
| 36 | Observations of Acyl Peroxy Nitrates During the Front Range Air Pollution and Photochemistry Experiment (FRAPPÉ). *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 12,416-12,432 | 4.4 | 11 |
| 35 | Improving regional ozone modeling through systematic evaluation of errors using the aircraft observations during the International Consortium for Atmospheric Research on Transport and Transformation. *Journal of Geophysical Research*, **2007**, 112, | | 11 |
| 34 | Chemistry and transport of pollution over the Gulf of Mexico and the Pacific: Spring 2006 INTEX-B Campaign overview and first results | | 11 |
| 33 | Aerosol optical extinction during the Front Range Air Pollution and Photochemistry Experiment (FRAPPÉ) 2014 summertime field campaign, Colorado, USA. *Atmospheric Chemistry and Physics*, **2016**, 16, 11207-11217 | 6.8 | 10 |
| 32 | Arctic springtime observations of volatile organic compounds during the OASIS-2009 campaign. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 9789-9813 | 4.4 | 10 |
| 31 | Chemical Characteristics and Ozone Production in the Northern Colorado Front Range. *Journal of Geophysical Research D: Atmospheres*, **2019**, 124, 13397-13419 | 4.4 | 9 |
| 30 | Bromine atom production and chain propagation during springtime Arctic ozone depletion events in Barrow, Alaska. *Atmospheric Chemistry and Physics*, **2017**, 17, 3401-3421 | 6.8 | 9 |
| 29 | Sources and characteristics of summertime organic aerosol in the Colorado Front Range: perspective from measurements and WRF-Chem modeling. *Atmospheric Chemistry and Physics*, **2018**, 18, 8293-8312 | 6.8 | 9 |
| 28 | Variability and Time of Day Dependence of Ozone Photochemistry in Western Wildfire Plumes. *Environmental Science & Technology*, **2021**, 55, 10280-10290 | 10.3 | 9 |

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| 27 | NOy partitioning from measurements of nitrogen and hydrogen radicals in the upper troposphere. *Geophysical Research Letters*, **1999**, 26, 51-54 | 4.9 | 8 |
| 26 | Nighttime and daytime dark oxidation chemistry in wildfire plumes: an observation and model analysis of FIREX-AQ aircraft data. *Atmospheric Chemistry and Physics*, **2021**, 21, 16293-16317 | 6.8 | 8 |
| 25 | Impacts of physical parameterization on prediction of ethane concentrations for oil and gas emissions in WRF-Chem. *Atmospheric Chemistry and Physics*, **2018**, 18, 16863-16883 | 6.8 | 8 |
| 24 | Acyl Peroxy Nitrates Link Oil and Natural Gas Emissions to High Ozone Abundances in the Colorado Front Range During Summer 2015. *Journal of Geophysical Research D: Atmospheres*, **2019**, 124, 2336-2350 | 4.4 | 7 |
| 23 | Using TES retrievals to investigate PAN in North American biomass burning plumes. *Atmospheric Chemistry and Physics*, **2018**, 18, 5639-5653 | 6.8 | 5 |
| 22 | Chemical Tomography in a Fresh Wildland Fire Plume: A Large Eddy Simulation (LES) Study. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2021JD035203 | 4.4 | 5 |
| 21 | Chemical evolution of volatile organic compounds in the outflow of the Mexico City Metropolitan area | | 4 |
| 20 | Empirical Insights Into the Fate of Ammonia in Western U.S. Wildfire Smoke Plumes. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD033730 | 4.4 | 4 |
| 19 | The CU Airborne Solar Occultation Flux Instrument: Performance Evaluation during BB-FLUX. *ACS Earth and Space Chemistry*, | 3.2 | 3 |
| 18 | Emissions from biomass burning in the Yucatan | | 3 |
| 17 | The impact of aged wildfire smoke on atmospheric composition and ozone in the Colorado Front Range in summer 2015 **2017**, | | 2 |
| 16 | Novel Analysis to Quantify Plume Crosswind Heterogeneity Applied to Biomass Burning Smoke. *Environmental Science & Technology*, **2021**, 55, 15646-15657 | 10.3 | 2 |
| 15 | Impacts of the Denver Cyclone on Regional Air Quality and Aerosol Formation in the Colorado Front Range during FRAPP2014 | | 2 |
| 14 | First direct measurements of formaldehyde flux via eddy covariance: implications for missing in-canopy formaldehyde sources | | 2 |
| 13 | The NO<sub>x</sub> dependence of bromine chemistry in the Arctic atmospheric boundary layer | | 2 |
| 12 | Observations of heterogeneous reactions between Asian pollution and mineral dust over the Eastern North Pacific during INTEX-B | | 2 |
| 11 | Machine Learning Uncovers Aerosol Size Information From Chemistry and Meteorology to Quantify Potential Cloud-Forming Particles. *Geophysical Research Letters*, **2021**, 48, | 4.9 | 1 |
| 10 | Spatially Resolved Photochemistry Impacts Emissions Estimates in Fresh Wildfire Plumes. *Geophysical Research Letters*, **2021**, 48, e2021GL095443 | 4.9 | 1 |

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| 9 | Evolution of Acyl Peroxynitrates (PANs) in wildfire smoke plumes detected by the Cross-Track Infrared Sounder (CrIS) over the western U.S. during summer 2018. *Geophysical Research Letters*, | 4.9 | 1 |
| 8 | Interactions of bromine, chlorine, and iodine photochemistry during ozone depletions in Barrow, Alaska | | 1 |
| 7 | Assessing the regional impacts of Mexico City emissions on air quality and chemistry | | 1 |
| 6 | Global atmospheric budget of acetaldehyde: 3-D model analysis and constraints from in-situ and satellite observations | | 1 |
| 5 | Missing peroxy radical sources within a rural forest canopy | | 1 |
| 4 | Observations and Modeling of NOx Photochemistry and Fate in Fresh Wildfire Plumes. *ACS Earth and Space Chemistry*, | 3.2 | 1 |
| 3 | Wildfire-driven changes in the abundance of gas-phase pollutants in the city of Boise, ID during summer 2018. *Atmospheric Pollution Research*, **2022**, 13, 101269 | 4.5 | 0 |
| 2 | Measuring Photodissociation Product Quantum Yields Using Chemical Ionization Mass Spectrometry: A Case Study with Ketones. *Journal of Physical Chemistry A*, **2021**, 125, 6836-6844 | 2.8 | 0 |
| 1 | Reply to Comment on long-term atmospheric measurements of C1C5 alkyl nitrates in the Pearl River Delta region of southeast China *Atmospheric Environment*, **2007**, 41, 7371-7372 | 5.3 | |