Thomas B Ryerson

List of Publications by Year
in descending order

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216 papers	17,495 citations	9756 73 h-index	22102 113 g-index
273 all docs	273 docs citations	273 times ranked	10526 citing authors

#	Article	IF	Citations
1	Volatile chemical products emerging as largest petrochemical source of urban organic emissions. Science, 2018, 359, 760-764.	6.0	716
2	Review of flow rate estimates of the Deepwater Horizon oil spill. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20260-20267.	3.3	458
3	Measurement of the mixing state, mass, and optical size of individual black carbon particles in urban and biomass burning emissions. Geophysical Research Letters, 2008, 35, .	1.5	388
4	Hydrocarbon emissions characterization in the Colorado Front Range: A pilot study. Journal of Geophysical Research, 2012, 117, .	3.3	359
5	Variability in Nocturnal Nitrogen Oxide Processing and Its Role in Regional Air Quality. Science, 2006, 311, 67-70.	6.0	345
6	Biomass burning in Siberia and Kazakhstan as an important source for haze over the Alaskan Arctic in April 2008. Geophysical Research Letters, 2009, 36, .	1.5	289
7	Effect of petrochemical industrial emissions of reactive alkenes and NOxon tropospheric ozone formation in Houston, Texas. Journal of Geophysical Research, 2003, 108, .	3.3	263
8	Characteristics, sources, and transport of aerosols measured in spring 2008 during the aerosol, radiation, and cloud processes affecting Arctic Climate (ARCPAC) Project. Atmospheric Chemistry and Physics, 2011, 11, 2423-2453.	1.9	259
9	Observations of Ozone Formation in Power Plant Plumes and Implications for Ozone Control Strategies. Science, 2001, 292, 719-723.	6.0	258
10	Chemical data quantify Deepwater Horizon hydrocarbon flow rate and environmental distribution. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20246-20253.	3.3	258
11	An efficient photolysis system for fast-response NO2measurements. Journal of Geophysical Research, 2000, 105, 26447-26461.	3.3	239
12	Organic aerosol formation in urban and industrial plumes near Houston and Dallas, Texas. Journal of Geophysical Research, 2009, 114, .	3.3	230
13	Effects of changing power plant NOxemissions on ozone in the eastern United States: Proof of concept. Journal of Geophysical Research, 2006, 111, .	3.3	226
14	The 2010 California Research at the Nexus of Air Quality and Climate Change (CalNex) field study. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5830-5866.	1.2	199
15	A large and ubiquitous source of atmospheric formic acid. Atmospheric Chemistry and Physics, 2015, 15, 6283-6304.	1.9	197
16	Emissions lifetimes and ozone formation in power plant plumes. Journal of Geophysical Research, 1998, 103, 22569-22583.	3.3	192
17	A Bad Air Day in Houston. Bulletin of the American Meteorological Society, 2005, 86, 657-670.	1.7	191
18	Airborne measurements of western U.S. wildfire emissions: Comparison with prescribed burning and air quality implications. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6108-6129.	1.2	184

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19	Multiyear trends in volatile organic compounds in Los Angeles, California: Five decades of decreasing emissions. Journal of Geophysical Research, 2012, 117, .	3.3	183
20	Methane emissions from the 2015 Aliso Canyon blowout in Los Angeles, CA. Science, 2016, 351, 1317-1320.	6.0	183
21	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, .	3.3	181
22	Organic nitrate chemistry and its implications for nitrogen budgets in an isoprene- and monoterpene-rich atmosphere: constraints from aircraft (SEAC⁴RS) and ground-based (SOAS) observations in the Southeast US. Atmospheric Chemistry and Physics, 2016, 16, 5969-5991.	1.9	173
23	Quantifying sources of methane using light alkanes in the Los Angeles basin, California. Journal of Geophysical Research D: Atmospheres, 2013, 118, 4974-4990.	1.2	167
24	Study of Inlet Materials for Sampling Atmospheric Nitric Acid. Environmental Science & Technology, 1999, 33, 1133-1136.	4.6	165
25	The Deep Convective Clouds and Chemistry (DC3) Field Campaign. Bulletin of the American Meteorological Society, 2015, 96, 1281-1309.	1.7	165
26	Quantifying atmospheric methane emissions from the Haynesville, Fayetteville, and northeastern Marcellus shale gas production regions. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2119-2139.	1.2	164
27	Overview of the Second Texas Air Quality Study (TexAQS II) and the Gulf of Mexico Atmospheric Composition and Climate Study (GoMACCS). Journal of Geophysical Research, 2009, 114, .	3.3	162
28	Organic Aerosol Formation Downwind from the Deepwater Horizon Oil Spill. Science, 2011, 331, 1295-1299.	6.0	162
29	Primary and secondary sources of formaldehyde in urban atmospheres: Houston Texas region. Atmospheric Chemistry and Physics, 2012, 12, 3273-3288.	1.9	153
30	Atmospheric chemistry and distribution of formaldehyde and several multioxygenated carbonyl compounds during the 1995 Nashville/Middle Tennessee Ozone Study. Journal of Geophysical Research, 1998, 103, 22449-22462.	3.3	146
31	Top-down estimate of surface flux in the Los Angeles Basin using a mesoscale inverse modeling technique: assessing anthropogenic emissions of CO, NO_x and CO₂ and their impacts. Atmospheric Chemistry and Physics, 2013, 13, 3661-3677.	1.9	142
32	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.	1.9	128
33	Signatures of terminal alkene oxidation in airborne formaldehyde measurements during TexAQS 2000. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	126
34	Reactive uptake coefficients for N₂O₅ determined from aircraft measurements during the Second Texas Air Quality Study: Comparison to current model parameterizations. Journal of Geophysical Research, 2009, 114, .	3.3	124
35	Formaldehyde production from isoprene oxidation acrossÂNO_{<i>x</i>}Âregimes. Atmospheric Chemistry and Physics, 2016, 16, 2597-2610.	1.9	124
36	Trace gas signatures of the airstreams within North Atlantic cyclones: Case studies from the North Atlantic Regional Experiment (NARE â€™97) aircraft intensive. Journal of Geophysical Research, 2001, 106, 5437-5456.	3.3	121

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37	Evaluation of ultraviolet light-emitting diodes for detection of atmospheric NO2 by photolysis - chemiluminescence. Journal of Atmospheric Chemistry, 2010, 65, 111-125.	1.4	121
38	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.	3.3	118
39	A new interpretation of total column BrO during Arctic spring. Geophysical Research Letters, 2010, 37, .	1.5	116
40	Trends in ozone, its precursors, and related secondary oxidation products in Los Angeles, California: A synthesis of measurements from 1960 to 2010. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5893-5911.	1.2	115
41	Regional ozone from biogenic hydrocarbons deduced from airborne measurements of PAN, PPN, and MPAN. Geophysical Research Letters, 1997, 24, 1099-1102.	1.5	114
42	Ozone production from the 2004 North American boreal fires. Journal of Geophysical Research, 2006, 111, .	3.3	114
43	Evaluation of GOME satellite measurements of tropospheric NO2and HCHO using regional data from aircraft campaigns in the southeastern United States. Journal of Geophysical Research, 2004, 109, .	3.3	113
44	Diode laser-based cavity ring-down instrument for NO₃, N₂O₅, NO, NO₂ and O₃ from aircraft. Atmospheric Measurement Techniques, 2011, 4, 1227-1240.	1.2	113
45	Design and initial characterization of an inlet for gas-phase NOymeasurements from aircraft. Journal of Geophysical Research, 1999, 104, 5483-5492.	3.3	110
46	Ammonia sources in the California South Coast Air Basin and their impact on ammonium nitrate formation. Geophysical Research Letters, 2012, 39, .	1.5	110
47	Particle growth in urban and industrial plumes in Texas. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	109
48	Atmospheric emissions from the Deepwater Horizon spill constrain air-water partitioning, hydrocarbon fate, and leak rate. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	107
49	Measurements of PAN, PPN, and MPAN made during the 1994 and 1995 Nashville Intensives of the Southern Oxidant Study: Implications for regional ozone production from biogenic hydrocarbons. Journal of Geophysical Research, 1998, 103, 22473-22490.	3.3	106
50	A chemical ionization mass spectrometry technique for airborne measurements of ammonia. Journal of Geophysical Research, 2007, 112, .	3.3	106
51	Nitrogen oxides in the nocturnal boundary layer: Simultaneous in situ measurements of NO3, N2O5, NO2, NO, and O3. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	105
52	Ozone variability and halogen oxidation within the Arctic and sub-Arctic springtime boundary layer. Atmospheric Chemistry and Physics, 2010, 10, 10223-10236.	1.9	104
53	Bromine measurements in ozone depleted air over the Arctic Ocean. Atmospheric Chemistry and Physics, 2010, 10, 6503-6514.	1.9	101
54	Ozone photochemistry in an oil and natural gas extraction region during winter: simulations of a snow-free season in the Uintah Basin, Utah. Atmospheric Chemistry and Physics, 2013, 13, 8955-8971.	1.9	100

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55	The glyoxal budget and its contribution to organic aerosol for Los Angeles, California, during CalNex 2010. Journal of Geophysical Research, 2011, 116, .	3.3	99
56	Quantifying atmospheric methane emissions from oil and natural gas production in the Bakken shale region of North Dakota. Journal of Geophysical Research D: Atmospheres, 2016, 121, 6101-6111.	1.2	99
57	Volatile organic compound emissions from the oil and natural gas industry in the Uintah Basin, Utah: oil and gas well pad emissions compared to ambient air composition. Atmospheric Chemistry and Physics, 2014, 14, 10977-10988.	1.9	98
58	Airborne and groundâ€based observations of a weekend effect in ozone, precursors, and oxidation products in the California South Coast Air Basin. Journal of Geophysical Research, 2012, 117, .	3.3	97
59	Analysis of ozone and nitric acid in spring and summer Arctic pollution using aircraft, ground-based, satellite observations and MOZART-4 model: source attribution and partitioning. Atmospheric Chemistry and Physics, 2012, 12, 237-259.	1.9	96
60	Airborne measurements of organosulfates over the continental U.S.. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2990-3005.	1.2	96
61	Fast-response airborne in situ measurements of HNO3during the Texas 2000 Air Quality Study. Journal of Geophysical Research, 2002, 107, ACH 8-1.	3.3	94
62	Agricultural fires in the southeastern U.S. during SEAC⁴RS: Emissions of trace gases and particles and evolution of ozone, reactive nitrogen, and organic aerosol. Journal of Geophysical Research D: Atmospheres, 2016, 121, 7383-7414.	1.2	93
63	Airborne observations of ammonia and ammonium nitrate formation over Houston, Texas. Journal of Geophysical Research, 2010, 115, .	3.3	91
64	Airborne cloud condensation nuclei measurements during the 2006 Texas Air Quality Study. Journal of Geophysical Research, 2011, 116, .	3.3	91
65	Chlorine as a primary radical: evaluation of methods to understand its role in initiation of oxidative cycles. Atmospheric Chemistry and Physics, 2014, 14, 3427-3440.	1.9	90
66	Chemical composition of air masses transported from Asia to the U.S. West Coast during ITCT 2K2: Fossil fuel combustion versus biomass-burning signatures. Journal of Geophysical Research, 2004, 109, .	3.3	89
67	Biogenic emission measurement and inventories determination of biogenic emissions in the eastern United States and Texas and comparison with biogenic emission inventories. Journal of Geophysical Research, 2010, 115, .	3.3	89
68	Particle characteristics following cloud-modified transport from Asia to North America. Journal of Geophysical Research, 2004, 109, .	3.3	86
69	Influence of oil and gas emissions on summertime ozone in the Colorado Northern Front Range. Journal of Geophysical Research D: Atmospheres, 2016, 121, 8712-8729.	1.2	86
70	Particle growth in the plumes of coal-fired power plants. Journal of Geophysical Research, 2002, 107, AAC 9-1.	3.3	85
71	Variability in ammonium nitrate formation and nitric acid depletion with altitude and location over California. Journal of Geophysical Research, 2003, 108, .	3.3	84
72	Reactive nitrogen transport and photochemistry in urban plumes over the North Atlantic Ocean. Journal of Geophysical Research, 2006, 111, .	3.3	83

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73	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, .	3.3	82
74	Fugitive emissions from the Bakken shale illustrate role of shale production in global ethane shift. Geophysical Research Letters, 2016, 43, 4617-4623.	1.5	81
75	Gas-phase chemical characteristics of Asian emission plumes observed during ITCT 2K2 over the eastern North Pacific Ocean. Journal of Geophysical Research, 2004, 109, .	3.3	80
76	Air quality implications of theDeepwater Horizonoil spill. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20280-20285.	3.3	79
77	Emissions of nitrogenâ€containing organic compounds from the burning of herbaceous and arboraceous biomass: Fuel composition dependence and the variability of commonly used nitrile tracers. Geophysical Research Letters, 2016, 43, 9903-9912.	1.5	79
78	Constraints on Aerosol Nitrate Photolysis as a Potential Source of HONO and NO_x. Environmental Science & Technology, 2018, 52, 13738-13746.	4.6	79
79	Anthropogenic enhancements to production of highly oxygenated molecules from autoxidation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6641-6646.	3.3	78
80	Do emissions from ships have a significant impact on concentrations of nitrogen oxides in the marine boundary layer?. Geophysical Research Letters, 2000, 27, 2229-2232.	1.5	75
81	Nocturnal odd-oxygen budget and its implications for ozone loss in the lower troposphere. Geophysical Research Letters, 2006, 33, .	1.5	75
82	Vertical profiles in NO₃ and N₂O₅ measured from an aircraft: Results from the NOAA Pâ€3 and surface platforms during the New England Air Quality Study 2004. Journal of Geophysical Research, 2007, 112, .	3.3	75
83	Evaluation of the airborne quantum cascade laser spectrometer (QCLS) measurements of the carbon and greenhouse gas suite â€“ CO₂, CH₄, N₂O, and CO â€“ during the CalNex and HIPPO campaigns. Atmospheric Measurement Techniques, 2014, 7, 1509-1526.	1.2	75
84	Methane, Black Carbon, and Ethane Emissions from Natural Gas Flares in the Bakken Shale, North Dakota. Environmental Science & Technology, 2017, 51, 5317-5325.	4.6	74
85	Quantifying Methane and Ethane Emissions to the Atmosphere From Central and Western U.S. Oil and Natural Gas Production Regions. Journal of Geophysical Research D: Atmospheres, 2018, 123, 7725-7740.	1.2	74
86	Top-down estimate of anthropogenic emission inventories and their interannual variability in Houston using a mesoscale inverse modeling technique. Journal of Geophysical Research, 2011, 116, .	3.3	73
87	Trace gas composition of midlatitude cyclones over the western North Atlantic Ocean: A conceptual model. Journal of Geophysical Research, 2002, 107, ACH 1-1.	3.3	72
88	Nucleation and growth of sulfate aerosol in coal-fired power plant plumes: sensitivity to background aerosol and meteorology. Atmospheric Chemistry and Physics, 2012, 12, 189-206.	1.9	72
89	Aircraft observations of daytime NO3 and N2O5 and their implications for tropospheric chemistry. Journal of Photochemistry and Photobiology A: Chemistry, 2005, 176, 270-278.	2.0	70
90	An investigation of ammonia and inorganic particulate matter in California during the CalNex campaign. Journal of Geophysical Research D: Atmospheres, 2014, 119, 1883-1902.	1.2	69

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91	Analysis of longâ€term observations of NO_x and CO in megacities and application to constraining emissions inventories. Geophysical Research Letters, 2016, 43, 9920-9930.	1.5	69
92	Measurement of atmospheric NO2by pulsed cavity ring-down spectroscopy. Journal of Geophysical Research, 2006, 111, .	3.3	68
93	Aircraft observations of enhancement and depletion of black carbon mass in the springtime Arctic. Atmospheric Chemistry and Physics, 2010, 10, 9667-9680.	1.9	68
94	Nighttime Chemical Transformation in Biomass Burning Plumes: A Box Model Analysis Initialized with Aircraft Observations. Environmental Science & Technology, 2019, 53, 2529-2538.	4.6	68
95	Modeling Ozone in the Eastern U.S. using a Fuel-Based Mobile Source Emissions Inventory. Environmental Science & Technology, 2018, 52, 7360-7370.	4.6	64
96	Measurement of peroxycarboxylic nitric anhydrides (PANs) during the ITCT 2K2 aircraft intensive experiment. Journal of Geophysical Research, 2004, 109, .	3.3	63
97	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.	3.3	63
98	Analysis of satellite-derived Arctic tropospheric BrO columns in conjunction with aircraft measurements during ARCTAS and ARCPAC. Atmospheric Chemistry and Physics, 2012, 12, 1255-1285.	1.9	63
99	Convective transport of water vapor into the lower stratosphere observed during double-tropopause events. Journal of Geophysical Research D: Atmospheres, 2014, 119, 10,941-10,958.	1.2	63
100	On-road measurements of vehicle NO 2 /NO x emission ratios in Denver, Colorado, USA. Atmospheric Environment, 2017, 148, 182-189.	1.9	63
101	The Global Atmosphere Watch reactive gases measurement network. Elementa, 0, 3, .	1.1	63
102	Thunderstorms enhance tropospheric ozone by wrapping and shedding stratospheric air. Geophysical Research Letters, 2014, 41, 7785-7790.	1.5	62
103	Empirical correlations between black carbon aerosol and carbon monoxide in the lower and middle troposphere. Geophysical Research Letters, 2008, 35, .	1.5	60
104	A topâ€down analysis of emissions from selected Texas power plants during TexAQS 2000 and 2006. Journal of Geophysical Research, 2010, 115, .	3.3	60
105	Sensitivity to grid resolution in the ability of a chemical transport model to simulate observed oxidant chemistry under high-isoprene conditions. Atmospheric Chemistry and Physics, 2016, 16, 4369-4378.	1.9	60
106	Secondary organic aerosols from anthropogenic volatile organic compounds contribute substantially to air pollution mortality. Atmospheric Chemistry and Physics, 2021, 21, 11201-11224.	1.9	60
107	Emissions of organic carbon and methane from petroleum and dairy operations in California's San Joaquin Valley. Atmospheric Chemistry and Physics, 2014, 14, 4955-4978.	1.9	59
108	Instrumentation and measurement strategy for the NOAA SENEX aircraft campaign as part of the Southeast Atmosphere Study 2013. Atmospheric Measurement Techniques, 2016, 9, 3063-3093.	1.2	58

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109	Mapping hydroxyl variability throughout the global remote troposphere via synthesis of airborne and satellite formaldehyde observations. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11171-11180.	3.3	58
110	Airborne Measurements of Ethene from Industrial Sources Using Laser Photo-Acoustic Spectroscopy. Environmental Science & Technology, 2009, 43, 2437-2442.	4.6	57
111	Mixing of anthropogenic pollution with stratospheric ozone: A case study from the North Atlantic wintertime troposphere. Journal of Geophysical Research, 2000, 105, 24363-24374.	3.3	56
112	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.	1.2	56
113	Lightning NO_x Emissions: Reconciling Measured and Modeled Estimates With Updated NO_x Chemistry. Geophysical Research Letters, 2017, 44, 9479-9488.	1.5	56
114	Transition from high- to low-NOx control of night-time oxidation in the southeastern US. Nature Geoscience, 2017, 10, 490-495.	5.4	56
115	Reassessing the ratio of glyoxal to formaldehyde as an indicator of hydrocarbon precursor speciation. Atmospheric Chemistry and Physics, 2015, 15, 7571-7583.	1.9	55
116	Evolution of aerosol properties impacting visibility and direct climate forcing in an ammoniaâ€rich urban environment. Journal of Geophysical Research, 2012, 117, .	3.3	54
117	An improved, automated whole air sampler and gas chromatography mass spectrometry analysis system for volatile organic compounds in the atmosphere. Atmospheric Measurement Techniques, 2017, 10, 291-313.	1.2	54
118	Emissions of volatile organic compounds (VOCs) from concentrated animal feeding operations (CAFOs): chemical compositions and separation of sources. Atmospheric Chemistry and Physics, 2017, 17, 4945-4956.	1.9	53
119	Biogenic VOC oxidation and organic aerosol formation in an urban nocturnal boundary layer: aircraft vertical profiles in Houston, TX. Atmospheric Chemistry and Physics, 2013, 13, 11317-11337.	1.9	51
120	Modeling the weekly cycle of NO_x and CO emissions and their impacts on O₃ in the Los Angelesâ€South Coast Air Basin during the CalNex 2010 field campaign. Journal of Geophysical Research D: Atmospheres, 2016, 121, 1340-1360.	1.2	51
121	Large contribution of biomass burning emissions to ozone throughout the global remote troposphere. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	51
122	Airborne observations of methane emissions from rice cultivation in the Sacramento Valley of California. Journal of Geophysical Research, 2012, 117, .	3.3	50
123	In situ vertical profiles of aerosol extinction, mass, and composition over the southeast United States during SENEX and SEAC⁴RS: observations of a modest aerosol enhancement aloft. Atmospheric Chemistry and Physics, 2015, 15, 7085-7102.	1.9	50
124	Black Carbon Emissions from the Bakken Oil and Gas Development Region. Environmental Science and Technology Letters, 2015, 2, 281-285.	3.9	49
125	Sources of particulate matter in the northeastern United States in summer: 2. Evolution of chemical and microphysical properties. Journal of Geophysical Research, 2008, 113, .	3.3	48
126	Observational constraints on glyoxal production from isoprene oxidation and its contribution to organic aerosol over the Southeast United States. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9849-9861.	1.2	48

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127	Characterization of Ammonia, Methane, and Nitrous Oxide Emissions from Concentrated Animal Feeding Operations in Northeastern Colorado. Environmental Science & Technology, 2016, 50, 10885-10893.	4.6	48
128	Secondary organic aerosol (SOA) yields from NO₃ radical + isoprene based on nighttime aircraft power plant plume transects. Atmospheric Chemistry and Physics, 2018, 18, 11663-11682.	1.9	47
129	Calibration and Evaluation of Nitric Acid and Ammonia Permeation Tubes by UV Optical Absorption. Environmental Science & Technology, 2003, 37, 2975-2981.	4.6	46
130	Halocarbon Emissions from the United States and Mexico and Their Global Warming Potential. Environmental Science & Technology, 2009, 43, 1055-1060.	4.6	46
131	HONO emission and production determined from airborne measurements over the Southeast U.S.. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9237-9250.	1.2	46
132	Mass Spectral Analysis of Organic Aerosol Formed Downwind of the Deepwater Horizon Oil Spill: Field Studies and Laboratory Confirmations. Environmental Science & Technology, 2012, 46, 8025-8034.	4.6	45
133	Ozone chemistry in western U.S. wildfire plumes. Science Advances, 2021, 7, eabl3648.	4.7	45
134	Characterization of NO_x, SO₂, ethene, and propene from industrial emission sources in Houston, Texas. Journal of Geophysical Research, 2010, 115, .	3.3	44
135	A new inversion method to calculate emission inventories without a prior at mesoscale: Application to the anthropogenic CO₂ emission from Houston, Texas. Journal of Geophysical Research, 2012, 117, .	3.3	44
136	Observations of VOC emissions and photochemical products over US oil- and gas-producing regions using high-resolution H₃O⁺ CIMS (PTR-ToF-MS). Atmospheric Measurement Techniques, 2017, 10, 2941-2968.	1.2	44
137	Results from an informal intercomparison of ammonia measurement techniques. Journal of Geophysical Research, 2002, 107, ACH 28-1.	3.3	43
138	Comparisons of box model calculations and measurements of formaldehyde from the 1997 North Atlantic Regional Experiment. Journal of Geophysical Research, 2002, 107, ACH 3-1.	3.3	42
139	Mixing between a stratospheric intrusion and a biomass burning plume. Atmospheric Chemistry and Physics, 2007, 7, 4229-4235.	1.9	42
140	Characteristics of tropospheric ozone depletion events in the Arctic spring: analysis of the ARCTAS, ARCPAC, and ARCIONS measurements and satellite BrO observations. Atmospheric Chemistry and Physics, 2012, 12, 9909-9922.	1.9	42
141	Increasing atmospheric burden of ethanol in the United States. Geophysical Research Letters, 2012, 39, .	1.5	41
142	Atmospheric Acetaldehyde: Importance of Airâ€Sea Exchange and a Missing Source in the Remote Troposphere. Geophysical Research Letters, 2019, 46, 5601-5613.	1.5	41
143	Atmospheric in situ measurement of nitrate radical (NO3) and other photolysis rates using spectroradiometry and filter radiometry. Journal of Geophysical Research, 2007, 112, .	3.3	39
144	The NASA Atmospheric Tomography (ATom) Mission: Imaging the Chemistry of the Global Atmosphere. Bulletin of the American Meteorological Society, 2022, 103, E761-E790.	1.7	39

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145	Observations of ozone transport from the free troposphere to the Los Angeles basin. Journal of Geophysical Research, 2012, 117, .	3.3	38
146	Topâ€down estimate of methane emissions in California using a mesoscale inverse modeling technique: The South Coast Air Basin. Journal of Geophysical Research D: Atmospheres, 2015, 120, 6698-6711.	1.2	38
147	Emissions of Glyoxal and Other Carbonyl Compounds from Agricultural Biomass Burning Plumes Sampled by Aircraft. Environmental Science & Technology, 2017, 51, 11761-11770.	4.6	38
148	Fraction and composition of NOytransported in air masses lofted from the North American continental boundary layer. Journal of Geophysical Research, 2004, 109, .	3.3	37
149	Relationship between photochemical ozone production and NO_x oxidation in Houston, Texas. Journal of Geophysical Research, 2009, 114, .	3.3	36
150	Constraining remote oxidation capacity with ATom observations. Atmospheric Chemistry and Physics, 2020, 20, 7753-7781.	1.9	36
151	Quantifying wet scavenging processes in aircraft observations of nitric acid and cloud condensation nuclei. Journal of Geophysical Research, 2006, 111, .	3.3	35
152	Contributions of regional transport and local sources to ozone exceedances in Houston and Dallas: Comparison of results from a photochemical grid model to aircraft and surface measurements. Journal of Geophysical Research, 2009, 114, .	3.3	34
153	Characteristics of black carbon aerosol from a surface oil burn during the Deepwater Horizon oil spill. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	34
154	Observation and modeling of the evolution of Texas power plant plumes. Atmospheric Chemistry and Physics, 2012, 12, 455-468.	1.9	34
155	WRF-Chem simulation of NOx and O3 in the L.A. basin during CalNex-2010. Atmospheric Environment, 2013, 81, 421-432.	1.9	34
156	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.	1.9	34
157	Evaluating N₂O₅ heterogeneous hydrolysis parameterizations for CalNex 2010. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5051-5070.	1.2	33
158	Impact of evolving isoprene mechanisms on simulated formaldehyde: An inter-comparison supported by in situ observations from SENEX. Atmospheric Environment, 2017, 164, 325-336.	1.9	33
159	Methyl, Ethyl, and Propyl Nitrates: Global Distribution and Impacts on Reactive Nitrogen in Remote Marine Environments. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,429.	1.2	33
160	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.	1.9	32
161	Ozone Design Values in Southern California's Air Basins: Temporal Evolution and U.S. Background Contribution. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11,166.	1.2	31
162	Global-scale distribution of ozone in the remote troposphere from the ATom and HIPPO airborne field missions. Atmospheric Chemistry and Physics, 2020, 20, 10611-10635.	1.9	31

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163	Decadal changes in summertime reactive oxidized nitrogen and surface ozone over the Southeast United States. Atmospheric Chemistry and Physics, 2018, 18, 2341-2361.	1.9	30
164	City lights and urban air. Nature Geoscience, 2011, 4, 730-731.	5.4	29
165	Analysis of IASI tropospheric O₃ data over the Arctic during POLARCAT campaigns in 2008. Atmospheric Chemistry and Physics, 2012, 12, 7371-7389.	1.9	29
166	Measuring reactive nitrogen emissions from point sources using visible spectroscopy from aircraft. Journal of Environmental Monitoring, 2003, 5, 29-34.	2.1	28
167	Fossil-fueled power plants as a source of atmospheric carbon monoxide. Journal of Environmental Monitoring, 2003, 5, 35-39.	2.1	28
168	Injection of lightningâ€produced NO_x, water vapor, wildfire emissions, and stratospheric air to the UT/LS as observed from DC3 measurements. Journal of Geophysical Research D: Atmospheres, 2016, 121, 6638-6668.	1.2	28
169	Biomass burning nitrogen dioxide emissions derived from space with TROPOMI: methodology and validation. Atmospheric Measurement Techniques, 2021, 14, 7929-7957.	1.2	27
170	Topâ€down estimate of methane emissions in California using a mesoscale inverse modeling technique: The San Joaquin Valley. Journal of Geophysical Research D: Atmospheres, 2017, 122, 3686-3699.	1.2	26
171	Airborne quantification of upper tropospheric NO_x production from lightning in deep convective storms over the United States Great Plains. Journal of Geophysical Research D: Atmospheres, 2016, 121, 2002-2028.	1.2	25
172	Missing OH reactivity in the global marine boundary layer. Atmospheric Chemistry and Physics, 2020, 20, 4013-4029.	1.9	25
173	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.	1.2	24
174	Formaldehyde evolution in US wildfire plumes during the Fire Influence on Regional to Global Environments and Air Quality experiment (FIREX-AQ). Atmospheric Chemistry and Physics, 2021, 21, 18319-18331.	1.9	24
175	Observational Constraints on the Oxidation of NOx in the Upper Troposphere. Journal of Physical Chemistry A, 2016, 120, 1468-1478.	1.1	23
176	Exploring Oxidation in the Remote Free Troposphere: Insights From Atmospheric Tomography (ATom). Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031685.	1.2	23
177	Quantifying Methane and Ozone Precursor Emissions from Oil and Gas Production Regions across the Contiguous US. Environmental Science & Technology, 2021, 55, 9129-9139.	4.6	23
178	Nitric acid loss rates measured in power plant plumes. Journal of Geophysical Research, 2004, 109, .	3.3	22
179	Sulfur-Selective Detector for Liquid Chromatography Based on Sulfur Monoxide-Ozone Chemiluminescence. Analytical Chemistry, 1994, 66, 2841-2851.	3.2	21
180	Impact of Southern California anthropogenic emissions on ozone pollution in the mountain states: Model analysis and observational evidence from space. Journal of Geophysical Research D: Atmospheres, 2013, 118, 12,784.	1.2	21

#	Article	IF	Citations
181	Effects of NO_xcontrol and plume mixing on nighttime chemical processing of plumes from coalâ€fired power plants. Journal of Geophysical Research, 2012, 117, .	3.3	20
182	Development of a Fuel-Based Oil and Gas Inventory of Nitrogen Oxides Emissions. Environmental Science & Technology, 2018, 52, 10175-10185.	4.6	19
183	Atmospheric oxidation in the presence of clouds during the Deep Convective Clouds and Chemistry (DC3) study. Atmospheric Chemistry and Physics, 2018, 18, 14493-14510.	1.9	18
184	Inversion Estimates of Lognormally Distributed Methane Emission Rates From the Haynesvilleâ€Bossier Oil and Gas Production Region Using Airborne Measurements. Journal of Geophysical Research D: Atmospheres, 2019, 124, 3520-3531.	1.2	18
185	Single-photon laser-induced fluorescence detection of nitric oxide at sub-parts-per-trillion mixing ratios. Atmospheric Measurement Techniques, 2020, 13, 2425-2439.	1.2	18
186	Hydrogen peroxide dry deposition lifetime determined from observed loss rates in a power plant plume. Journal of Geophysical Research, 1998, 103, 22617-22628.	3.3	17
187	Heating rates and surface dimming due to black carbon aerosol absorption associated with a major U.S. city. Geophysical Research Letters, 2009, 36, .	1.5	17
188	Comparison between the TOPAZ Airborne Ozone Lidar and In Situ Measurements during TexAQS 2006. Journal of Atmospheric and Oceanic Technology, 2011, 28, 1243-1257.	0.5	17
189	Summertime tropospheric ozone enhancement associated with a cold front passage due to stratosphereâ€toâ€troposphere transport and biomass burning: Simultaneous groundâ€based lidar and airborne measurements. Journal of Geophysical Research D: Atmospheres, 2017, 122, 1293-1311.	1.2	17
190	Global Atmospheric Budget of Acetone: Airâ€Sea Exchange and the Contribution to Hydroxyl Radicals. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032553.	1.2	17
191	Ozone and alkyl nitrate formation from the Deepwater Horizon oil spill atmospheric emissions. Journal of Geophysical Research, 2012, 117, .	3.3	16
192	Changes in nitrogen oxides emissions in California during 2005â€“2010 indicated from topâ€down and bottomâ€up emission estimates. Journal of Geophysical Research D: Atmospheres, 2014, 119, 12,928.	1.2	16
193	Airborne measurements of the atmospheric emissions from a fuel ethanol refinery. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4385-4397.	1.2	16
194	Role of Criegee Intermediates in Secondary Sulfate Aerosol Formation in Nocturnal Power Plant Plumes in the Southeast US. ACS Earth and Space Chemistry, 2019, 3, 748-759.	1.2	16
195	Chemical Tomography in a Fresh Wildland Fire Plume: A Large Eddy Simulation (LES) Study. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035203.	1.2	16
196	Alkyl nitrate measurements during STERAO 1996 and NARE 1997: Intercomparison and survey of results. Journal of Geophysical Research, 2001, 106, 23043-23053.	3.3	15
197	Towards a satellite formaldehyde â€“ in situ hybrid estimate for organic aerosol abundance. Atmospheric Chemistry and Physics, 2019, 19, 2765-2785.	1.9	15
198	Characterizing sources of high surface ozone events in the southwestern US with intensive field measurements and two global models. Atmospheric Chemistry and Physics, 2020, 20, 10379-10400.	1.9	15

#	Article	IF	Citations
199	Ambient aerosol properties in the remote atmosphere from global-scale in situ measurements. Atmospheric Chemistry and Physics, 2021, 21, 15023-15063.	1.9	15
200	Selective chemiluminescence detection of sulfur-containing compounds coupled with nitrogenâ€"phosphorus detection for gas chromatography. Journal of Chromatography A, 1994, 670, 117-126.	1.8	11
201	Flow rate and source reservoir identification from airborne chemical sampling of the uncontrolled Elgin platform gas release. Atmospheric Measurement Techniques, 2018, 11, 1725-1739.	1.2	11
202	Novel Analysis to Quantify Plume Crosswind Heterogeneity Applied to Biomass Burning Smoke. Environmental Science & Technology, 2021, 55, 15646-15657.	4.6	11
203	Emission estimates of HCFCs and HFCs in California from the 2010 CalNex study. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2019-2030.	1.2	10
204	Hydrocarbon Removal in Power Plant Plumes Shows Nitrogen Oxide Dependence of Hydroxyl Radicals. Geophysical Research Letters, 2019, 46, 7752-7760.	1.5	9
205	UAS Chromatograph for Atmospheric Trace Species (UCATS) â€“ a versatile instrument for trace gas measurements on airborne platforms. Atmospheric Measurement Techniques, 2021, 14, 6795-6819.	1.2	9
206	Photochemical evolution of the 2013 California Rim Fire: synergistic impacts of reactive hydrocarbons and enhanced oxidants. Atmospheric Chemistry and Physics, 2022, 22, 4253-4275.	1.9	9
207	Simulating the Weekly Cycle of NO x â€VOCâ€HO x â€O 3 Photochemical System in the South Coast of California During CalNexâ€2010 Campaign. Journal of Geophysical Research D: Atmospheres, 2019, 124, 3532-3555.	1.2	8
208	Large hemispheric difference in nucleation mode aerosol concentrations in the lowermost stratosphere at mid- and high latitudes. Atmospheric Chemistry and Physics, 2021, 21, 9065-9088.	1.9	8
209	Evidence of Nighttime Production of Organic Nitrates During SEAC 4 RS, FRAPPÃ‰, and KORUSâ€AQ. Geophysical Research Letters, 2020, 47, e2020GL087860.	1.5	7
210	The <i>Fires, Asian, and Stratospheric Transport</i>â€"Las Vegas Ozone Study (<i>FAST</i>-LVOS). Atmospheric Chemistry and Physics, 2022, 22, 1707-1737.	1.9	7
211	An aerosol particle containing enriched uranium encountered in the remote upper troposphere. Journal of Environmental Radioactivity, 2018, 184-185, 95-100.	0.9	6
212	A cavity-enhanced ultraviolet absorption instrument for high-precision, fast-time-response ozone measurements. Atmospheric Measurement Techniques, 2020, 13, 6877-6887.	1.2	6
213	Impact of stratospheric air and surface emissions on tropospheric nitrous oxide during ATom. Atmospheric Chemistry and Physics, 2021, 21, 11113-11132.	1.9	5
214	Heterogeneity and chemical reactivity of the remote troposphere defined by aircraft measurements. Atmospheric Chemistry and Physics, 2021, 21, 13729-13746.	1.9	4
215	Corrigendum to "In situ vertical profiles of aerosol extinction, mass, and composition over the southeast United States during SENEX and SEAC⁴RS: observations of a modest aerosol enhancement aloft" published in Atmos. Chem. Phys., 15, 7085â€"7102, 2015. Atmospheric Chemistry and Physics, 2015, 15, 8455-8455.	1.9	1
216	Limited impact of sulfate-driven chemistry on black carbon aerosol aging in power plant plumes. AIMS Environmental Science, 2018, 5, 195-215.	0.7	1