J Andrew Neuman

List of Publications by Year
in descending order

116	7,725	36303	64796
papers	citations	51 h-index	79 g-index

160	160	160	5822
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The NASA Atmospheric Tomography (ATom) Mission: Imaging the Chemistry of the Global Atmosphere. Bulletin of the American Meteorological Society, 2022, 103, E761-E790.	3.3	39
2	A versatile vacuum ultraviolet ion source for reduced pressure bipolar chemical ionization mass spectrometry. Atmospheric Measurement Techniques, 2022, 15, 1159-1169.	3.1	7
3	Airborne Emission Rate Measurements Validate Remote Sensing Observations and Emission Inventories of Western U.S. Wildfires. Environmental Science & Technology, 2022, 56, 7564-7577.	10.0	15
4	HCOOH in the Remote Atmosphere: Constraints from Atmospheric Tomography (ATom) Airborne Observations. ACS Earth and Space Chemistry, 2021, 5, 1436-1454.	2.7	13
5	Validation of IASI Satellite Ammonia Observations at the Pixel Scale Using In Situ Vertical Profiles. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033475.	3.3	28
6	Chemical transport models often underestimate inorganic aerosol acidity in remote regions of the atmosphere. Communications Earth & Environment, 2021, 2, .	6.8	32
7	Validation of a new cavity ring-down spectrometer for measuring tropospheric gaseous hydrogen chloride. Atmospheric Measurement Techniques, 2021, 14, 5859-5871.	3.1	7
8	Global tropospheric halogen (Cl, Br, I) chemistry and its impact on oxidants. Atmospheric Chemistry and Physics, 2021, 21, 13973-13996.	4.9	57
9	Chemical Tomography in a Fresh Wildland Fire Plume: A Large Eddy Simulation (LES) Study. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035203.	3.3	16
10	Rapid cloud removal of dimethyl sulfide oxidation products limits SO ₂ and cloud condensation nuclei production in the marine atmosphere. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	28
11	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.	4.9	34
12	Novel Analysis to Quantify Plume Crosswind Heterogeneity Applied to Biomass Burning Smoke. Environmental Science & Technology, 2021, 55, 15646-15657.	10.0	11
13	Ozone chemistry in western U.S. wildfire plumes. Science Advances, 2021, 7, eabl3648.	10.3	45
14	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, .	7.1	51
15	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.	4.9	24
16	Exploring Oxidation in the Remote Free Troposphere: Insights From Atmospheric Tomography (ATom). Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031685.	3.3	23
17	Variability of Ammonia and Methane Emissions from Animal Feeding Operations in Northeastern Colorado. Environmental Science & Technology, 2020, 54, 11015-11024.	10.0	23
18	Modeling air quality in the San Joaquin valley of California during the 2013 Discover-AQ field campaign. Atmospheric Environment: X, 2020, 5, 100067.	1.4	9

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19	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.	7.1	118
20	AÂvacuum ultraviolet ion source (VUV-IS) for iodideâ€“chemical ionization mass spectrometry: a substitute for radioactive ion sources. Atmospheric Measurement Techniques, 2020, 13, 3683-3696.	3.1	14
21	A portable, robust, stable, and tunable calibration source for gas-phase nitrous acid (HONO). Atmospheric Measurement Techniques, 2020, 13, 5873-5890.	3.1	14
22	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.	4.9	32
23	Hydrocarbon Removal in Power Plant Plumes Shows Nitrogen Oxide Dependence of Hydroxyl Radicals. Geophysical Research Letters, 2019, 46, 7752-7760.	4.0	9
24	Decadal changes in summertime reactive oxidized nitrogen and surface ozone over the Southeast United States. Atmospheric Chemistry and Physics, 2018, 18, 2341-2361.	4.9	30
25	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.	3.3	74
26	Emissions of Glyoxal and Other Carbonyl Compounds from Agricultural Biomass Burning Plumes Sampled by Aircraft. Environmental Science & Technology, 2017, 51, 11761-11770.	10.0	38
27	Transition from high- to low-NOx control of night-time oxidation in the southeastern US. Nature Geoscience, 2017, 10, 490-495.	12.9	56
28	On-road measurements of vehicle NO 2 /NO x emission ratios in Denver, Colorado, USA. Atmospheric Environment, 2017, 148, 182-189.	4.1	63
29	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.	3.3	26
30	Modeling the diurnal variability of agricultural ammonia in Bakersfield, California, during the CalNex campaign. Atmospheric Chemistry and Physics, 2017, 17, 2721-2739.	4.9	14
31	Evaluation of the accuracy of thermal dissociation CRDS and LIF techniques for atmospheric measurement of reactive nitrogen species. Atmospheric Measurement Techniques, 2017, 10, 1911-1926.	3.1	18
32	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.	3.1	58
33	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.	3.3	51
34	Characterization of Ammonia, Methane, and Nitrous Oxide Emissions from Concentrated Animal Feeding Operations in Northeastern Colorado. Environmental Science & Technology, 2016, 50, 10885-10893.	10.0	48
35	HONO emission and production determined from airborne measurements over the Southeast U.S.. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9237-9250.	3.3	46
36	Enhanced formation of isopreneâ€derived organic aerosol in sulfurâ€rich power plant plumes during Southeast Nexus. Journal of Geophysical Research D: Atmospheres, 2016, 121, 11,137.	3.3	50

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37	Interannual variability of ammonia concentrations over the United States: sources and implications. Atmospheric Chemistry and Physics, 2016, 16, 12305-12328.	4.9	48
38	Why do models overestimate surface ozone in the Southeast United States?. Atmospheric Chemistry and Physics, 2016, 16, 13561-13577.	4.9	320
39	Validation of TES ammonia observations at the single pixel scale in the San Joaquin Valley during DISCOVERâ€AQ. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5140-5154.	3.3	31
40	A large and ubiquitous source of atmospheric formic acid. Atmospheric Chemistry and Physics, 2015, 15, 6283-6304.	4.9	197
41	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.	3.3	164
42	Towards validation of ammonia (NH₃) measurements from the IASI satellite. Atmospheric Measurement Techniques, 2015, 8, 1575-1591.	3.1	90
43	Airborne measurements of the atmospheric emissions from a fuel ethanol refinery. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4385-4397.	3.3	16
44	Meteorological Influences on Trace Gas Transport along the North Atlantic Coast during ICARTT 2004. Atmosphere, 2014, 5, 973-1001.	2.3	2
45	High levels of molecular chlorine in the Arctic atmosphere. Nature Geoscience, 2014, 7, 91-94.	12.9	105
46	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.	3.3	16
47	Fine-scale simulation of ammonium and nitrate over the South Coast Air Basin and San Joaquin Valley of California during CalNex-2010. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3600-3614.	3.3	51
48	An investigation of ammonia and inorganic particulate matter in California during the CalNex campaign. Journal of Geophysical Research D: Atmospheres, 2014, 119, 1883-1902.	3.3	69
49	WRF-Chem simulation of NOx and O3 in the L.A. basin during CalNex-2010. Atmospheric Environment, 2013, 81, 421-432.	4.1	34
50	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.	4.9	142
51	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.	3.3	115
52	Revised UV absorption spectra, ozone depletion potentials, and global warming potentials for the ozoneâ€depleting substances CF₂Br₂, CF₂ClBr, and CF₂BrCF₂Br. Geophysical Research Letters, 2013, 40, 464-469.	4.0	17
53	Inorganic and black carbon aerosols in the Los Angeles Basin during CalNex. Journal of Geophysical Research D: Atmospheres, 2013, 118, 1777-1803.	3.3	15
54	Characterization of soluble bromide measurements and a case study of BrO observations during ARCTAS. Atmospheric Chemistry and Physics, 2012, 12, 1327-1338.	4.9	27

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55	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.	4.9	42
56	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.	4.9	63
57	Observation and modeling of the evolution of Texas power plant plumes. Atmospheric Chemistry and Physics, 2012, 12, 455-468.	4.9	34
58	Biomass burning in Siberia as a source of BrO to the Arctic free troposphere. Atmospheric Environment, 2012, 62, 416-423.	4.1	6
59	Air quality implications of theDeepwater Horizonoil spill. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20280-20285.	7.1	79
60	Observations of inorganic bromine (HOBr, BrO, and Br₂) speciation at Barrow, Alaska, in spring 2009. Journal of Geophysical Research, 2012, 117, .	3.3	71
61	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
62	Observations of ozone transport from the free troposphere to the Los Angeles basin. Journal of Geophysical Research, 2012, 117, .	3.3	38
63	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
64	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
65	Ozone and alkyl nitrate formation from the Deepwater Horizon oil spill atmospheric emissions. Journal of Geophysical Research, 2012, 117, .	3.3	16
66	Ammonia sources in the California South Coast Air Basin and their impact on ammonium nitrate formation. Geophysical Research Letters, 2012, 39, .	4.0	110
67	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.	4.0	107
68	A comparison of Arctic BrO measurements by chemical ionization mass spectrometry and long path-differential optical absorption spectroscopy. Journal of Geophysical Research, 2011, 116, .	3.3	105
69	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.	4.9	22
70	Dependence of daily peak O3 concentrations near Houston, Texas on environmental factors: Wind speed, temperature, and boundary-layer depth. Atmospheric Environment, 2011, 45, 162-173.	4.1	60
71	Bromine measurements in ozone depleted air over the Arctic Ocean. Atmospheric Chemistry and Physics, 2010, 10, 6503-6514.	4.9	101
72	Measurement of HONO, HNCO, and other inorganic acids by negative-ion proton-transfer chemical-ionization mass spectrometry (NI-PT-CIMS): application to biomass burning emissions. Atmospheric Measurement Techniques, 2010, 3, 981-990.	3.1	152

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73	A new interpretation of total column BrO during Arctic spring. Geophysical Research Letters, 2010, 37, .	4.0	116
74	Airborne observations of ammonia and ammonium nitrate formation over Houston, Texas. Journal of Geophysical Research, 2010, 115, .	3.3	91
75	Organic aerosol formation in urban and industrial plumes near Houston and Dallas, Texas. Journal of Geophysical Research, 2009, 114, .	3.3	230
76	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
77	Relationship between photochemical ozone production and NO_x oxidation in Houston, Texas. Journal of Geophysical Research, 2009, 114, .	3.3	36
78	A case study of ozone production, nitrogen oxides, and the radical budget in Mexico City. Atmospheric Chemistry and Physics, 2009, 9, 2499-2516.	4.9	75
79	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.	4.9	128
80	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
81	Lagrangian analysis of low altitude anthropogenic plume processing across the North Atlantic. Atmospheric Chemistry and Physics, 2008, 8, 7737-7754.	4.9	48
82	Mixing between a stratospheric intrusion and a biomass burning plume. Atmospheric Chemistry and Physics, 2007, 7, 4229-4235.	4.9	42
83	A chemical ionization mass spectrometry technique for airborne measurements of ammonia. Journal of Geophysical Research, 2007, 112, .	3.3	106
84	Surface and lightning sources of nitrogen oxides over the United States: Magnitudes, chemical evolution, and outflow. Journal of Geophysical Research, 2007, 112, .	3.3	279
85	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
86	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
87	Reactive nitrogen transport and photochemistry in urban plumes over the North Atlantic Ocean. Journal of Geophysical Research, 2006, 111, .	3.3	83
88	Analysis of urban gas phase ammonia measurements from the 2002 Atlanta Aerosol Nucleation and Real-Time Characterization Experiment (ANARChE). Journal of Geophysical Research, 2006, 111, .	3.3	95
89	Quantifying wet scavenging processes in aircraft observations of nitric acid and cloud condensation nuclei. Journal of Geophysical Research, 2006, 111, .	3.3	35
90	Concentrations and sources of organic carbon aerosols in the free troposphere over North America. Journal of Geophysical Research, 2006, 111, .	3.3	111

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91	Nocturnal odd-oxygen budget and its implications for ozone loss in the lower troposphere. Geophysical Research Letters, 2006, 33, .	4.0	75
92	An investigation of the chemistry of ship emission plumes during ITCT 2002. Journal of Geophysical Research, 2005, 110, .	3.3	103
93	Particle characteristics following cloud-modified transport from Asia to North America. Journal of Geophysical Research, 2004, 109, .	3.3	86
94	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
95	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
96	Measurement of peroxycarboxylic nitric anhydrides (PANs) during the ITCT 2K2 aircraft intensive experiment. Journal of Geophysical Research, 2004, 109, .	3.3	63
97	Ozone production in transpacific Asian pollution plumes and implications for ozone air quality in California. Journal of Geophysical Research, 2004, 109, .	3.3	197
98	Nitric acid loss rates measured in power plant plumes. Journal of Geophysical Research, 2004, 109, .	3.3	22
99	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
100	Particle growth in urban and industrial plumes in Texas. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	109
101	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
102	Variability in ammonium nitrate formation and nitric acid depletion with altitude and location over California. Journal of Geophysical Research, 2003, 108, .	3.3	84
103	Calibration and Evaluation of Nitric Acid and Ammonia Permeation Tubes by UV Optical Absorption. Environmental Science & Technology, 2003, 37, 2975-2981.	10.0	46
104	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
105	The emission and chemistry of reactive nitrogen species in the plume of an Athena II solid-fuel rocket motor. Geophysical Research Letters, 2002, 29, 34-1-34-4.	4.0	13
106	JNO2at high solar zenith angles in the lower stratosphere. Geophysical Research Letters, 2001, 28, 2405-2408.	4.0	5
107	A fast-response chemical ionization mass spectrometer for in situ measurements of HNO[sub 3] in the upper troposphere and lower stratosphere. Review of Scientific Instruments, 2000, 71, 3886.	1.3	36
108	Computer-controlled Teflon flow control valve. Review of Scientific Instruments, 1999, 70, 4732-4733.	1.3	10

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109	Design and initial characterization of an inlet for gas-phase NOymeasurements from aircraft. Journal of Geophysical Research, 1999, 104, 5483-5492.	3.3	110
110	A comparison of observations and model simulations of NOx/NOyin the lower stratosphere. Geophysical Research Letters, 1999, 26, 1153-1156.	4.0	61
111	Comparison of modeled and observed values of NO2and JNO2during the Photochemistry of Ozone Loss in the Arctic Region in Summer (POLARIS) mission. Journal of Geophysical Research, 1999, 104, 26687-26703.	3.3	36
112	Study of Inlet Materials for Sampling Atmospheric Nitric Acid. Environmental Science & Technology, 1999, 33, 1133-1136.	10.0	165
113	Effects of alignment on strontium energy pooling collisions. Physical Review A, 1998, 57, 2231-2234.	2.5	2
114	Velocity dependence of energy pooling collisions in strontium. Physical Review A, 1997, 56, 432-442.	2.5	5
115	Robust highâ€temperature sapphire cell for metal vapors. Review of Scientific Instruments, 1995, 66, 3021-3023.	1.3	21
116	Energy-pooling collisions in barium. Physical Review A, 1994, 50, 1292-1300.	2.5	20