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	Why do models overestimate surface ozone in the Southeast United States?. Atmospheric Chemistry and Physics, 2016, 16, 13561-13577.	4.9	320
2	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
3	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
4	Organic aerosol formation in urban and industrial plumes near Houston and Dallas, Texas. Journal of Geophysical Research, 2009, 114, .	3.3	230
5	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
6	Ozone production in transpacific Asian pollution plumes and implications for ozone air quality in California. Journal of Geophysical Research, 2004, 109, .	3.3	197
7	A large and ubiquitous source of atmospheric formic acid. Atmospheric Chemistry and Physics, 2015, 15, 6283-6304.	4.9	197
8	Study of Inlet Materials for Sampling Atmospheric Nitric Acid. Environmental Science & Technology, 1999, 33, 1133-1136.	10.0	165
9	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
10	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
11	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
12	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
13	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
14	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
15	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
16	A new interpretation of total column BrO during Arctic spring. Geophysical Research Letters, 2010, 37, .	4.0	116
17	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
18	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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19	Design and initial characterization of an inlet for gas-phase NOymeasurements from aircraft. Journal of Geophysical Research, 1999, 104, 5483-5492.	3.3	110
20	Ammonia sources in the California South Coast Air Basin and their impact on ammonium nitrate formation. Geophysical Research Letters, 2012, 39, .	4.0	110
21	Particle growth in urban and industrial plumes in Texas. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	109
22	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
23	A chemical ionization mass spectrometry technique for airborne measurements of ammonia. Journal of Geophysical Research, 2007, 112, .	3.3	106
24	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
25	High levels of molecular chlorine in the Arctic atmosphere. Nature Geoscience, 2014, 7, 91-94.	12.9	105
26	An investigation of the chemistry of ship emission plumes during ITCT 2002. Journal of Geophysical Research, 2005, 110, .	3.3	103
27	Bromine measurements in ozone depleted air over the Arctic Ocean. Atmospheric Chemistry and Physics, 2010, 10, 6503-6514.	4.9	101
28	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
29	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
30	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
31	Airborne observations of ammonia and ammonium nitrate formation over Houston, Texas. Journal of Geophysical Research, 2010, 115, .	3.3	91
32	Towards validation of ammonia (NH₃) measurements from the IASI satellite. Atmospheric Measurement Techniques, 2015, 8, 1575-1591.	3.1	90
33	Particle characteristics following cloud-modified transport from Asia to North America. Journal of Geophysical Research, 2004, 109, .	3.3	86
34	Variability in ammonium nitrate formation and nitric acid depletion with altitude and location over California. Journal of Geophysical Research, 2003, 108, .	3.3	84
35	Reactive nitrogen transport and photochemistry in urban plumes over the North Atlantic Ocean. Journal of Geophysical Research, 2006, 111, .	3.3	83
36	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

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37	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
38	Nocturnal odd-oxygen budget and its implications for ozone loss in the lower troposphere. Geophysical Research Letters, 2006, 33, .	4.0	75
39	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
40	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
41	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
42	Observations of inorganic bromine (HOBr, BrO, and Br₂) speciation at Barrow, Alaska, in spring 2009. Journal of Geophysical Research, 2012, 117, .	3.3	71
43	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
44	Measurement of peroxycarboxylic nitric anhydrides (PANs) during the ITCT 2K2 aircraft intensive experiment. Journal of Geophysical Research, 2004, 109, .	3.3	63
45	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
46	On-road measurements of vehicle NO 2 /NO x emission ratios in Denver, Colorado, USA. Atmospheric Environment, 2017, 148, 182-189.	4.1	63
47	A comparison of observations and model simulations of NOx/NOyin the lower stratosphere. Geophysical Research Letters, 1999, 26, 1153-1156.	4.0	61
48	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
49	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
50	Global tropospheric halogen (Cl, Br, I) chemistry and its impact on oxidants. Atmospheric Chemistry and Physics, 2021, 21, 13973-13996.	4.9	57
51	Transition from high- to low-NOx control of night-time oxidation in the southeastern US. Nature Geoscience, 2017, 10, 490-495.	12.9	56
52	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
53	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
54	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

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55	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
56	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
57	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
58	Lagrangian analysis of low altitude anthropogenic plume processing across the North Atlantic. Atmospheric Chemistry and Physics, 2008, 8, 7737-7754.	4.9	48
59	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
60	Interannual variability of ammonia concentrations over the United States: sources and implications. Atmospheric Chemistry and Physics, 2016, 16, 12305-12328.	4.9	48
61	Calibration and Evaluation of Nitric Acid and Ammonia Permeation Tubes by UV Optical Absorption. Environmental Science & Technology, 2003, 37, 2975-2981.	10.0	46
62	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
63	Ozone chemistry in western U.S. wildfire plumes. Science Advances, 2021, 7, eabl3648.	10.3	45
64	Mixing between a stratospheric intrusion and a biomass burning plume. Atmospheric Chemistry and Physics, 2007, 7, 4229-4235.	4.9	42
65	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
66	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
67	Observations of ozone transport from the free troposphere to the Los Angeles basin. Journal of Geophysical Research, 2012, 117, .	3.3	38
68	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
69	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
70	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
71	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
72	Relationship between photochemical ozone production and NO_x oxidation in Houston, Texas. Journal of Geophysical Research, 2009, 114, .	3.3	36

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73	Quantifying wet scavenging processes in aircraft observations of nitric acid and cloud condensation nuclei. Journal of Geophysical Research, 2006, 111, .	3.3	35
74	Observation and modeling of the evolution of Texas power plant plumes. Atmospheric Chemistry and Physics, 2012, 12, 455-468.	4.9	34
75	WRF-Chem simulation of NOx and O3 in the L.A. basin during CalNex-2010. Atmospheric Environment, 2013, 81, 421-432.	4.1	34
76	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
77	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
78	Chemical transport models often underestimate inorganic aerosol acidity in remote regions of the atmosphere. Communications Earth & Environment, 2021, 2, .	6.8	32
79	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
80	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
81	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
82	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
83	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
84	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
85	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
86	Exploring Oxidation in the Remote Free Troposphere: Insights From Atmospheric Tomography (ATom). Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031685.	3.3	23
87	Variability of Ammonia and Methane Emissions from Animal Feeding Operations in Northeastern Colorado. Environmental Science & Technology, 2020, 54, 11015-11024.	10.0	23
88	Nitric acid loss rates measured in power plant plumes. Journal of Geophysical Research, 2004, 109, .	3.3	22
89	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
90	Robust highâ€temperature sapphire cell for metal vapors. Review of Scientific Instruments, 1995, 66, 3021-3023.	1.3	21

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91	Energy-pooling collisions in barium. Physical Review A, 1994, 50, 1292-1300.	2.5	20
92	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
93	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
94	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
95	Ozone and alkyl nitrate formation from the Deepwater Horizon oil spill atmospheric emissions. Journal of Geophysical Research, 2012, 117, .	3.3	16
96	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
97	Airborne measurements of the atmospheric emissions from a fuel ethanol refinery. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4385-4397.	3.3	16
98	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
99	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
100	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
101	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
102	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
103	A portable, robust, stable, and tunable calibration source for gas-phase nitrous acid (HONO). Atmospheric Measurement Techniques, 2020, 13, 5873-5890.	3.1	14
104	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
105	HCOOH in the Remote Atmosphere: Constraints from Atmospheric Tomography (ATom) Airborne Observations. ACS Earth and Space Chemistry, 2021, 5, 1436-1454.	2.7	13
106	Novel Analysis to Quantify Plume Crosswind Heterogeneity Applied to Biomass Burning Smoke. Environmental Science & Technology, 2021, 55, 15646-15657.	10.0	11
107	Computer-controlled Teflon flow control valve. Review of Scientific Instruments, 1999, 70, 4732-4733.	1.3	10
108	Hydrocarbon Removal in Power Plant Plumes Shows Nitrogen Oxide Dependence of Hydroxyl Radicals. Geophysical Research Letters, 2019, 46, 7752-7760.	4.0	9

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109	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
110	Validation of a new cavity ring-down spectrometer for measuring tropospheric gaseous hydrogen chloride. Atmospheric Measurement Techniques, 2021, 14, 5859-5871.	3.1	7
111	A versatile vacuum ultraviolet ion source for reduced pressure bipolar chemical ionization mass spectrometry. Atmospheric Measurement Techniques, 2022, 15, 1159-1169.	3.1	7
112	Biomass burning in Siberia as a source of BrO to the Arctic free troposphere. Atmospheric Environment, 2012, 62, 416-423.	4.1	6
113	Velocity dependence of energy pooling collisions in strontium. Physical Review A, 1997, 56, 432-442.	2.5	5
114	JNO2at high solar zenith angles in the lower stratosphere. Geophysical Research Letters, 2001, 28, 2405-2408.	4.0	5
115	Effects of alignment on strontium energy pooling collisions. Physical Review A, 1998, 57, 2231-2234.	2.5	2
116	Meteorological Influences on Trace Gas Transport along the North Atlantic Coast during ICARTT 2004. Atmosphere, 2014, 5, 973-1001.	2.3	2