Jennifer G Murphy

List of Publications by Year
in descending order

98 papers	4,968 citations	66343 42 h-index	118850 62 g-index
148 all docs	148 docs citations	148 times ranked	5826 citing authors

#	Article	IF	Citations
1	Field inter-comparison of eleven atmospheric ammonia measurement techniques. Atmospheric Measurement Techniques, 2010, 3, 91-112.	3.1	215
2	Isoprene emissions in Africa inferred from OMI observations of formaldehyde columns. Atmospheric Chemistry and Physics, 2012, 12, 6219-6235.	4.9	166
3	The weekend effect within and downwind of Sacramento â€“ Part 1: Observations of ozone, nitrogen oxides, and VOC reactivity. Atmospheric Chemistry and Physics, 2007, 7, 5327-5339.	4.9	161
4	The complex chemical effects of COVID-19 shutdowns on air quality. Nature Chemistry, 2020, 12, 777-779.	13.6	154
5	Overview paper: New insights into aerosol and climate in the Arctic. Atmospheric Chemistry and Physics, 2019, 19, 2527-2560.	4.9	134
6	Understanding ozoneâ€•meteorology correlations: A role for dry deposition. Geophysical Research Letters, 2017, 44, 2922-2931.	4.0	116
7	Understanding the role of the ground surface in HONO vertical structure: High resolution vertical profiles during NACHTTâ€11. Journal of Geophysical Research D: Atmospheres, 2013, 118, 10,155.	3.3	111
8	Improved Characterization of Gasâ€“Particle Partitioning for Per- and Polyfluoroalkyl Substances in the Atmosphere Using Annular Diffusion Denuder Samplers. Environmental Science & Technology, 2012, 46, 7199-7206.	10.0	105
9	Characterizing a Quantum Cascade Tunable Infrared Laser Differential Absorption Spectrometer (QC-TILDAS) for measurements of atmospheric ammonia. Atmospheric Measurement Techniques, 2010, 3, 397-406.	3.1	97
10	Total Peroxy Nitrates (Î£PNs) in the atmosphere: the Thermal Dissociation-Laser Induced Fluorescence (TD-LIF) technique and comparisons to speciated PAN measurements. Atmospheric Measurement Techniques, 2010, 3, 593-607.	3.1	95
11	Chemical and aerosol characterisation of the troposphere over West Africa during the monsoon period as part of AMMA. Atmospheric Chemistry and Physics, 2010, 10, 7575-7601.	4.9	93
12	Size distribution of alkyl amines in continental particulate matter and their online detection in the gas and particle phase. Atmospheric Chemistry and Physics, 2011, 11, 4319-4332.	4.9	89
13	Nocturnal loss and daytime source of nitrous acid through reactive uptake and displacement. Nature Geoscience, 2015, 8, 55-60.	12.9	89
14	The influence of gas-particle partitioning and surface-atmosphere exchange on ammonia during BAQS-Met. Atmospheric Chemistry and Physics, 2011, 11, 133-145.	4.9	88
15	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.	3.3	86
16	Secondary organic aerosol from biogenic VOCs over West Africa during AMMA. Atmospheric Chemistry and Physics, 2009, 9, 3841-3850.	4.9	85
17	Long term changes in nitrogen oxides and volatile organic compounds in Toronto and the challenges facing local ozone control. Atmospheric Environment, 2009, 43, 3407-3415.	4.1	81
18	Contribution of Arctic seabird-colony ammonia to atmospheric particles and cloud-albedo radiative effect. Nature Communications, 2016, 7, 13444.	12.8	81

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19	An Odd Oxygen Framework for Wintertime Ammonium Nitrate Aerosol Pollution in Urban Areas: NO_x and VOC Control as Mitigation Strategies. Geophysical Research Letters, 2019, 46, 4971-4979.	4.0	80
20	Measurements of volatile organic compounds over West Africa. Atmospheric Chemistry and Physics, 2010, 10, 5281-5294.	4.9	78
21	Observations of the diurnal and seasonal trends in nitrogen oxides in the western Sierra Nevada. Atmospheric Chemistry and Physics, 2006, 6, 5321-5338.	4.9	73
22	Characterization and optimization of an online system for the simultaneous measurement of atmospheric water-soluble constituents in the gas and particle phases. Journal of Environmental Monitoring, 2012, 14, 1872.	2.1	72
23	Observational constraints on particle acidity using measurements and modelling of particles and gases. Faraday Discussions, 2017, 200, 379-395.	3.2	72
24	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
25	Dimethyl sulfide in the summertime Arctic atmosphere: measurements and source sensitivity simulations. Atmospheric Chemistry and Physics, 2016, 16, 6665-6680.	4.9	66
26	Gas Phase Oxidation of Monoethanolamine (MEA) with OH Radical and Ozone: Kinetics, Products, and Particles. Environmental Science & Technology, 2013, 47, 6377-6383.	10.0	65
27	Experimental and Theoretical Understanding of the Gas Phase Oxidation of Atmospheric Amides with OH Radicals: Kinetics, Products, and Mechanisms. Journal of Physical Chemistry A, 2015, 119, 4298-4308.	2.5	65
28	Photochemical Production and Release of Gaseous NO2from Nitrate-Doped Water Ice. Journal of Physical Chemistry A, 2005, 109, 8520-8525.	2.5	64
29	Kinetics of NO and NO2Evolution from Illuminated Frozen Nitrate Solutions. Journal of Physical Chemistry A, 2006, 110, 3578-3583.	2.5	63
30	HO_x observations over West Africa during AMMA: impact of isoprene and NO_x. Atmospheric Chemistry and Physics, 2010, 10, 9415-9429.	4.9	59
31	Evidence for a nitrous acid (HONO) reservoir at the ground surface in Bakersfield, CA, during CalNex 2010. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9093-9106.	3.3	59
32	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.	4.9	59
33	Impact of mesoscale vegetation heterogeneities on the dynamical and thermodynamic properties of the planetary boundary layer. Journal of Geophysical Research, 2010, 115, .	3.3	58
34	Insights into Secondary Organic Aerosol Formation Mechanisms from Measured Gas/Particle Partitioning of Specific Organic Tracer Compounds. Environmental Science & Technology, 2013, 47, 3781-3787.	10.0	58
35	Methane fluxes measured by eddy covariance and static chamber techniques at a temperate forest in central Ontario, Canada. Biogeosciences, 2013, 10, 4371-4382.	3.3	58
36	Ammonia in the summertime Arctic marine boundary layer: sources, sinks, and implications. Atmospheric Chemistry and Physics, 2016, 16, 1937-1953.	4.9	57

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37	The role of dew as a night-time reservoir and morning source for atmospheric ammonia. Atmospheric Chemistry and Physics, 2016, 16, 7435-7449.	4.9	54
38	Organic Peroxides and Sulfur Dioxide in Aerosol: Source of Particulate Sulfate. Environmental Science & Technology, 2019, 53, 10695-10704.	10.0	53
39	Improved model of isoprene emissions in Africa using Ozone Monitoring Instrument (OMI) satellite observations of formaldehyde: implications for oxidants and particulate matter. Atmospheric Chemistry and Physics, 2014, 14, 7693-7703.	4.9	52
40	Formation and growth of ultrafine particles from secondary sources in Bakersfield, California. Journal of Geophysical Research, 2012, 117, .	3.3	51
41	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
42	Measurements of the sum of HO₂NO₂ and CH₃O₂NO<sub>2</sub&a in the remote troposphere. Atmospheric Chemistry and Physics, 2004, 4, 377-384.	4.9	49
43	Ion chromatographic separation and quantitation of alkyl methylamines and ethylamines in atmospheric gas and particulate matter using preconcentration and suppressed conductivity detection. Journal of Chromatography A, 2012, 1252, 74-83.	3.7	49
44	Gas Phase Oxidation of Nicotine by OH Radicals: Kinetics, Mechanisms, and Formation of HNCO. Environmental Science and Technology Letters, 2016, 3, 327-331.	8.7	49
45	Ice nucleating particles in the marine boundary layer in the Canadian Arctic during summer 2014. Atmospheric Chemistry and Physics, 2019, 19, 1027-1039.	4.9	48
46	On the gasâ€particle partitioning of soluble organic aerosol in two urban atmospheres with contrasting emissions: 2. Gas and particle phase formic acid. Journal of Geophysical Research, 2012, 117, .	3.3	47
47	Laboratory Investigation of Renoxification from the Photolysis of Inorganic Particulate Nitrate. Environmental Science & Technology, 2021, 55, 854-861.	10.0	46
48	Organic Condensation and Particle Growth to CCN Sizes in the Summertime Marine Arctic Is Driven by Materials More Semivolatile Than at Continental Sites. Geophysical Research Letters, 2017, 44, 10,725.	4.0	45
49	Gas-Phase Mechanisms of the Reactions of Reduced Organic Nitrogen Compounds with OH Radicals. Environmental Science & Technology, 2016, 50, 11723-11734.	10.0	41
50	Solubility and reactivity of HNCO in water: insights into HNCO's fate in the atmosphere. Atmospheric Chemistry and Physics, 2016, 16, 703-714.	4.9	39
51	Factors controlling the distribution of ozone in the West African lower troposphere during the AMMA (African Monsoon Multidisciplinary Analysis) wet season campaign. Atmospheric Chemistry and Physics, 2009, 9, 6135-6155.	4.9	38
52	The sensitivity of PM_{2.5} acidity to meteorological parameters and chemical composition changes: 10-year records from six Canadian monitoring sites. Atmospheric Chemistry and Physics, 2019, 19, 9309-9320.	4.9	38
53	Arctic marine secondary organic aerosol contributes significantly to summertime particle size distributions in the Canadian Arctic Archipelago. Atmospheric Chemistry and Physics, 2019, 19, 2787-2812.	4.9	38
54	Impact of lake breezes on ozone and nitrogen oxides in the Greater Toronto Area. Atmospheric Environment, 2015, 109, 52-60.	4.1	37

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55	Observations of reactive nitrogen oxide fluxes by eddy covariance above two midlatitude North American mixed hardwood forests. Atmospheric Chemistry and Physics, 2014, 14, 2939-2957.	4.9	36
56	Soilâ€“atmosphere exchange of ammonia in a non-fertilized grassland: measured emission potentials and inferred fluxes. Biogeosciences, 2014, 11, 5675-5686.	3.3	35
57	Airborne and ground-based observations of ammonium-nitrate-dominated aerosols in a shallow boundary layer during intense winter pollution episodes in northern Utah. Atmospheric Chemistry and Physics, 2018, 18, 17259-17276.	4.9	33
58	On the contribution of nocturnal heterogeneous reactive nitrogen chemistry to particulate matter formation during wintertime pollution events in Northern Utah. Atmospheric Chemistry and Physics, 2019, 19, 9287-9308.	4.9	33
59	The impacts of precursor reduction and meteorology on ground-level ozone in the Greater Toronto Area. Atmospheric Chemistry and Physics, 2014, 14, 8197-8207.	4.9	32
60	Inverting the maximum carboxylation rate (V cmax) from the sunlit leaf photosynthesis rate derived from measured light response curves at tower flux sites. Agricultural and Forest Meteorology, 2017, 236, 48-66.	4.8	31
61	Contributions of natural and anthropogenic sources to ambient ammonia in the Athabasca Oil Sands and north-western Canada. Atmospheric Chemistry and Physics, 2018, 18, 2011-2034.	4.9	31
62	The Mechanisms Responsible for the Interactions among Oxalate, pH, and Fe Dissolution in PM_{2.5}. ACS Earth and Space Chemistry, 2019, 3, 2259-2265.	2.7	31
63	Isocyanic acid (HNCO) and its fate in the atmosphere: a review. Environmental Sciences: Processes and Impacts, 2019, 21, 793-808.	3.5	31
64	Atmospheric Evolution of Sulfur Emissions from KÄ±Ì...lauea: Real-Time Measurements of Oxidation, Dilution, and Neutralization within a Volcanic Plume. Environmental Science & Technology, 2015, 49, 4129-4137.	10.0	29
65	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
66	An Atmospheric Constraint on the NO₂ Dependence of Daytime Near-Surface Nitrous Acid (HONO). Environmental Science & Technology, 2015, 49, 12774-12781.	10.0	26
67	Tall Tower Vertical Profiles and Diurnal Trends of Ammonia in the Colorado Front Range. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,468.	3.3	26
68	High gas-phase mixing ratios of formic and acetic acid in the High Arctic. Atmospheric Chemistry and Physics, 2018, 18, 10237-10254.	4.9	25
69	Measurements and quality control of ammonia eddy covariance fluxes: a new strategy for high-frequency attenuation correction. Atmospheric Measurement Techniques, 2019, 12, 6059-6078.	3.1	24
70	Photochemistry of NO2 in Earth's Stratosphere:â€‰ Constraints from Observations. Chemical Reviews, 2003, 103, 4985-4998.	47.7	23
71	Isoprene emissions modelling for West Africa: MEGAN model evaluation and sensitivity analysis. Atmospheric Chemistry and Physics, 2010, 10, 8453-8467.	4.9	22
72	Atmospheric composition of West Africa: highlights from the AMMA international program. Atmospheric Science Letters, 2011, 12, 13-18.	1.9	21

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73	Biases in long-term NO2 averages inferred from satellite observations due to cloud selection criteria. Remote Sensing of Environment, 2012, 124, 210-216.	11.0	20
74	Net ecosystem exchange of an uneven-aged managed forest in central Ontario, and the impact of a spring heat wave event. Agricultural and Forest Meteorology, 2014, 198-199, 105-115.	4.8	19
75	Measurements and modeling of the inorganic chemical composition of fine particulate matter and associated precursor gases in California's San Joaquin Valley during CalNex 2010. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6853-6866.	3.3	18
76	Warning diagnostics for inductively coupled plasma-mass spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2000, 55, 311-326.	2.9	16
77	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
78	Wintertime spatial distribution of ammonia and its emission sources in the Great Salt Lake region. Atmospheric Chemistry and Physics, 2019, 19, 15691-15709.	4.9	15
79	Observations of Acyl Peroxy Nitrates During the Front Range Air Pollution and Photochemistry Ã‰xperiment (FRAPPÃ‰). Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,416.	3.3	14
80	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
81	Evidence for the Importance of Semivolatile Organic Ammonium Salts in Ambient Particulate Matter. Environmental Science & Technology, 2019, 53, 108-116.	10.0	14
82	Coupled Air Quality and Boundary-Layer Meteorology in Western U.S. Basins during Winter: Design and Rationale for a Comprehensive Study. Bulletin of the American Meteorological Society, 2021, 102, E2012-E2033.	3.3	14
83	The effect of meteorological and chemical factors on the agreement between observations and predictions of fine aerosol composition in southwestern Ontario during BAQS-Met. Atmospheric Chemistry and Physics, 2011, 11, 3195-3210.	4.9	13
84	Characterization of the Î´ 13 C signatures of anthropogenic CO 2 emissions in the Greater Toronto Area, Canada. Applied Geochemistry, 2017, 83, 171-180.	3.0	13
85	High-resolution quantification of atmospheric CO₂ mixing ratios in the Greater Toronto Area, Canada. Atmospheric Chemistry and Physics, 2018, 18, 3387-3401.	4.9	12
86	Exploring the Global Importance of Atmospheric Ammonia Oxidation. ACS Earth and Space Chemistry, 2021, 5, 1674-1685.	2.7	11
87	Nitrate Photolysis in Salty Snow. Journal of Physical Chemistry A, 2016, 120, 7902-7908.	2.5	10
88	The role of coarse aerosol particles as a sink of HNO₃ in wintertime pollution events in the Salt Lake Valley. Atmospheric Chemistry and Physics, 2021, 21, 8111-8126.	4.9	9
89	Kinetics and Products of the Aqueous Phase Oxidation of Triethylamine by OH. ACS Earth and Space Chemistry, 2021, 5, 1889-1895.	2.7	8
90	Simple Framework to Quantify the Contributions from Different Factors Influencing Aerosol pH Based on NH_x Phase-Partitioning Equilibrium. Environmental Science & Technology, 2021, 55, 10310-10319.	10.0	8

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91	Summertime Soil-Atmosphere Ammonia Exchange in the Colorado Rocky Mountain Front Range Pine Forest. Soil Systems, 2019, 3, 15.	2.6	7
92	Kinetics of the oxidation of ammonia and amines with hydroxyl radicals in the aqueous phase. Environmental Sciences: Processes and Impacts, 2021, 23, 1906-1913.	3.5	7
93	Fostering multidisciplinary research on interactions between chemistry, biology, and physics within the coupled cryosphere-atmosphere system. Elementa, 2019, 7, .	3.2	6
94	FORest Canopy Atmosphere Transfer (FORCAsT) 2.0: model updates and evaluation with observations at a mixed forest site. Geoscientific Model Development, 2021, 14, 6309-6329.	3.6	4
95	Towards understanding the variability in source contribution of CO2 using high-resolution simulations of atmospheric Î´13CO2 signatures in the Greater Toronto Area, Canada. Atmospheric Environment, 2019, 214, 116877.	4.1	2
96	Atmospheric Ammonia: Measurements, Modeling, and Chemistryâ€“Climate Interactions. , 2019, , 1-82.		2
97	The air we breathe: Past, present, and future: general discussion. Faraday Discussions, 2017, 200, 501-527.	3.2	1
98	Hydrogen chloride (HCl) at ground sites during CalNex 2010 and insight into its thermodynamic properties. Journal of Geophysical Research D: Atmospheres, 2022, 127, 1-16.	3.3	1