Ben H Lee

List of Publications by Year
in descending order

63 papers	5,558 citations	126907 33 h-index	118850 62 g-index
72 all docs	72 docs citations	72 times ranked	4867 citing authors

#	Article	IF	Citations
1	A large source of low-volatility secondary organic aerosol. Nature, 2014, 506, 476-479.	27.8	1,448
2	An Iodide-Adduct High-Resolution Time-of-Flight Chemical-Ionization Mass Spectrometer: Application to Atmospheric Inorganic and Organic Compounds. Environmental Science & Technology, 2014, 48, 6309-6317.	10.0	406
3	Nitrate radicals and biogenic volatile organic compounds: oxidation, mechanisms, and organic aerosol. Atmospheric Chemistry and Physics, 2017, 17, 2103-2162.	4.9	307
4	Highly functionalized organic nitrates in the southeast United States: Contribution to secondary organic aerosol and reactive nitrogen budgets. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1516-1521.	7.1	269
5	A large and ubiquitous source of atmospheric formic acid. Atmospheric Chemistry and Physics, 2015, 15, 6283-6304.	4.9	197
6	Monoterpenes are the largest source of summertime organic aerosol in the southeastern United States. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2038-2043.	7.1	186
7	The role of chlorine in global tropospheric chemistry. Atmospheric Chemistry and Physics, 2019, 19, 3981-4003.	4.9	160
8	Molecular Composition and Volatility of Organic Aerosol in the Southeastern U.S.: Implications for IEPOX Derived SOA. Environmental Science & Technology, 2016, 50, 2200-2209.	10.0	141
9	Constraining the sensitivity of iodide adduct chemical ionization mass spectrometry to multifunctional organic molecules using the collision limit and thermodynamic stability of iodide ion adducts. Atmospheric Measurement Techniques, 2016, 9, 1505-1512.	3.1	132
10	Organic nitrate aerosol formation via NO₃ + biogenic volatile organic compounds in the southeastern United States. Atmospheric Chemistry and Physics, 2015, 15, 13377-13392.	4.9	124
11	Formaldehyde production from isoprene oxidation acrossÂNO_{<i>x</i>}Âregimes. Atmospheric Chemistry and Physics, 2016, 16, 2597-2610.	4.9	124
12	Chemical feedbacks weaken the wintertime response of particulate sulfate and nitrate to emissions reductions over the eastern United States. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8110-8115.	7.1	118
13	Heterogeneous N₂O₅ Uptake During Winter: Aircraft Measurements During the 2015 WINTER Campaign and Critical Evaluation of Current Parameterizations. Journal of Geophysical Research D: Atmospheres, 2018, 123, 4345-4372.	3.3	103
14	Efficient Isoprene Secondary Organic Aerosol Formation from a Non-IEPOX Pathway. Environmental Science & Technology, 2016, 50, 9872-9880.	10.0	100
15	Quantification of organic aerosol and brown carbon evolution in fresh wildfire plumes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29469-29477.	7.1	100
16	Modeling the Detection of Organic and Inorganic Compounds Using Iodide-Based Chemical Ionization. Journal of Physical Chemistry A, 2016, 120, 576-587.	2.5	93
17	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
18	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.	7.1	78

#	Article	IF	Citations
19	Molecular composition and volatility of isoprene photochemicalÂoxidationÂsecondaryÂorganic aerosolÂunderÂlow-ÂandÂhigh-NO_{<i>x</i>}ÂconditionsÂ. Atmospheric Chemistry and Physics, 2017, 17, 159-174.	4.9	70
20	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
21	Global tropospheric halogen (Cl, Br, I) chemistry and its impact on oxidants. Atmospheric Chemistry and Physics, 2021, 21, 13973-13996.	4.9	57
22	Simultaneous measurements of atmospheric HONO and NO2 viaÂabsorption spectroscopy using tunable mid-infrared continuous-wave quantum cascade lasers. Applied Physics B: Lasers and Optics, 2011, 102, 417-423.	2.2	56
23	Emissions of isoprenoids and oxygenated biogenic volatile organic compounds from a New England mixed forest. Atmospheric Chemistry and Physics, 2011, 11, 4807-4831.	4.9	54
24	NO_x Lifetime and NO_y Partitioning During WINTER. Journal of Geophysical Research D: Atmospheres, 2018, 123, 9813-9827.	3.3	52
25	HONO Emissions from Western U.S. Wildfires Provide Dominant Radical Source in Fresh Wildfire Smoke. Environmental Science & Technology, 2020, 54, 5954-5963.	10.0	51
26	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
27	Nitrogen Oxides Emissions, Chemistry, Deposition, and Export Over the Northeast United States During the WINTER Aircraft Campaign. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,368.	3.3	49
28	Semi-volatile and highly oxygenated gaseous and particulate organic compounds observed above a boreal forest canopy. Atmospheric Chemistry and Physics, 2018, 18, 11547-11562.	4.9	39
29	Flight Deployment of a Highâ€Resolution Timeâ€ofâ€Flight Chemical Ionization Mass Spectrometer: Observations of Reactive Halogen and Nitrogen Oxide Species. Journal of Geophysical Research D: Atmospheres, 2018, 123, 7670-7686.	3.3	39
30	Chamber-based insights into the factors controlling epoxydiol (IEPOX) secondary organic aerosol (SOA) yield, composition, and volatility. Atmospheric Chemistry and Physics, 2019, 19, 11253-11265.	4.9	38
31	Intercomparison of field measurements of nitrous acid (HONO) during the SHARP campaign. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5583-5601.	3.3	36
32	High upward fluxes of formic acid from a boreal forest canopy. Geophysical Research Letters, 2016, 43, 9342-9351.	4.0	36
33	Evaluating Organic Aerosol Sources and Evolution with a Combined Molecular Composition and Volatility Framework Using the Filter Inlet for Gases and Aerosols (FIGAERO). Accounts of Chemical Research, 2020, 53, 1415-1426.	15.6	36
34	Photolysis Controls Atmospheric Budgets of Biogenic Secondary Organic Aerosol. Environmental Science & Technology, 2020, 54, 3861-3870.	10.0	36
35	Urban measurements of atmospheric nitrous acid: A caveat on the interpretation of the HONO photostationary state. Journal of Geophysical Research D: Atmospheres, 2013, 118, 12,274.	3.3	34
36	Identifying precursors and aqueous organic aerosol formation pathways during the SOAS campaign. Atmospheric Chemistry and Physics, 2016, 16, 14409-14420.	4.9	33

#	Article	IF	Citations
37	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
38	Airborne Observations of Reactive Inorganic Chlorine and Bromine Species in the Exhaust of Coalâ€Fired Power Plants. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11225-11237.	3.3	33
39	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
40	ClNO₂ Yields From Aircraft Measurements During the 2015 WINTER Campaign and Critical Evaluation of the Current Parameterization. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,994.	3.3	31
41	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
42	Biomass Burning Markers and Residential Burning in the WINTER Aircraft Campaign. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1846-1861.	3.3	30
43	Anthropogenic emissions of nonmethane hydrocarbons in the northeastern United States: Measured seasonal variations from 1992â€“1996 and 1999â€“2001. Journal of Geophysical Research, 2006, 111, .	3.3	29
44	Mass fluxes and isofluxes of methane (CH₄) at a New Hampshire fen measured by a continuous wave quantum cascade laser spectrometer. Journal of Geophysical Research, 2012, 117, .	3.3	28
45	Anthropogenic Control Over Wintertime Oxidation of Atmospheric Pollutants. Geophysical Research Letters, 2019, 46, 14826-14835.	4.0	28
46	Detecting Fugitive Emissions of 1,3-Butadiene and Styrene from a Petrochemical Facility: An Application of a Mobile Laboratory and a Modified Proton Transfer Reaction Mass Spectrometer. Industrial & Engineering Chemistry Research, 2012, 51, 12706-12711.	3.7	26
47	Widespread Pollution From Secondary Sources of Organic Aerosols During Winter in the Northeastern United States. Geophysical Research Letters, 2019, 46, 2974-2983.	4.0	25
48	Aircraft Emissions of Methane and Nitrous Oxide during the Alternative Aviation Fuel Experiment. Environmental Science & Technology, 2011, 45, 7075-7082.	10.0	24
49	Wintertime Gasâ€Particle Partitioning and Speciation of Inorganic Chlorine in the Lower Troposphere Over the Northeast United States and Coastal Ocean. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,897.	3.3	21
50	Infrared QC laser applications to field measurements of atmospheric trace gas sources and sinks in environmental research: enhanced capabilities using continuous wave QCLs. Proceedings of SPIE, 2009, , .	0.8	20
51	Combustion and Destruction/Removal Efficiencies of In-Use Chemical Flares in the Greater Houston Area. Industrial & Engineering Chemistry Research, 2012, 51, 12685-12696.	3.7	20
52	Measurements of Nitrous Acid in Commercial Aircraft Exhaust at the Alternative Aviation Fuel Experiment. Environmental Science & Technology, 2011, 45, 7648-7654.	10.0	19
53	Observational Constraints on the Formation of Cl₂ From the Reactive Uptake of ClNO₂ on Aerosols in the Polluted Marine Boundary Layer. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8851-8869.	3.3	19
54	Resolving Ambient Organic Aerosol Formation and Aging Pathways with Simultaneous Molecular Composition and Volatility Observations. ACS Earth and Space Chemistry, 2020, 4, 391-402.	2.7	19

#	Article	IF	Citations
55	Observations and Modeling of NO_x Photochemistry and Fate in Fresh Wildfire Plumes. ACS Earth and Space Chemistry, 2021, 5, 2652-2667.	2.7	17
56	Effective line strengths of trans-nitrous acid near 1275 cmâ¯1 and cis-nitrous acid at 1660 cmâ¯1. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1905-1912.	2.3	16
57	Wintertime Overnight NO_x Removal in a Southeastern United States Coalâ€fired Power Plant Plume: A Model for Understanding Winter NO_x Processing and its Implications. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1412-1425.	3.3	14
58	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
59	A Four Carbon Organonitrate as a Significant Product of Secondary Isoprene Chemistry. Geophysical Research Letters, 2022, 49, .	4.0	8
60	Comparison of Airborne Reactive Nitrogen Measurements During WINTER. Journal of Geophysical Research D: Atmospheres, 2019, 124, 10483-10502.	3.3	7
61	Global simulations of monoterpene-derived peroxy radical fates and the distributions of highly oxygenated organic molecules (HOMs) and accretion products. Atmospheric Chemistry and Physics, 2022, 22, 5477-5494.	4.9	6
62	Formation and Evolution of Catechol-Derived SOA Mass, Composition, Volatility, and Light Absorption. ACS Earth and Space Chemistry, 0, , .	2.7	3
63	Reactive Chemistry in Aircraft Exhaust. Transportation Research Record, 2011, 2206, 19-23.	1.9	2