Paul B Shepson

List of Publications by Year
in descending order

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Version: 2024-02-01

84 papers	6,315 citations	66234 42 h-index	71532 76 g-index
84 all docs	84 docs citations	84 times ranked	5785 citing authors

#	Article	IF	Citations
1	Assessment of methane emissions from the U.S. oil and gas supply chain. Science, 2018, 361, 186-188.	6.0	519
2	Evidence of NOxproduction within or upon ice particles in the Greenland snowpack. Geophysical Research Letters, 1999, 26, 695-698.	1.5	337
3	Toward a better understanding and quantification of methane emissions from shale gas development. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6237-6242.	3.3	296
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.	3.3	269
5	Highâ€resolution atmospheric inversion of urban CO₂ emissions during the dormant season of the Indianapolis Flux Experiment (INFLUX). Journal of Geophysical Research D: Atmospheres, 2016, 121, 5213-5236.	1.2	219
6	Reconciling divergent estimates of oil and gas methane emissions. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15597-15602.	3.3	209
7	Nitric acid photolysis on forest canopy surface as a source for tropospheric nitrous acid. Nature Geoscience, 2011, 4, 440-443.	5.4	200
8	Aircraft-Based Estimate of Total Methane Emissions from the Barnett Shale Region. Environmental Science & Technology, 2015, 49, 8124-8131.	4.6	190
9	NMR Investigation of the Quasi-Brine Layer in Ice/Brine Mixtures. Journal of Physical Chemistry B, 2002, 106, 11226-11232.	1.2	187
10	Photochemical production of molecular bromine in Arctic surface snowpacks. Nature Geoscience, 2013, 6, 351-356.	5.4	175
11	Aircraft-Based Measurements of the Carbon Footprint of Indianapolis. Environmental Science & Technology, 2009, 43, 7816-7823.	4.6	167
12	Modeling the Current and Future Roles of Particulate Organic Nitrates in the Southeastern United States. Environmental Science & Technology, 2015, 49, 14195-14203.	4.6	147
13	Toward quantification and source sector identification of fossil fuel CO₂ emissions from an urban area: Results from the INFLUX experiment. Journal of Geophysical Research D: Atmospheres, 2015, 120, 292-312.	1.2	140
14	Constructing a Spatially Resolved Methane Emission Inventory for the Barnett Shale Region. Environmental Science & Technology, 2015, 49, 8147-8157.	4.6	133
15	Photochemistry and nature of organic matter in Arctic and Antarctic snow. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	1.9	123
16	Assessment of uncertainties of an aircraft-based mass balance approach for quantifying urban greenhouse gas emissions. Atmospheric Chemistry and Physics, 2014, 14, 9029-9050.	1.9	109
17	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
18	High levels of molecular chlorine in the Arctic atmosphere. Nature Geoscience, 2014, 7, 91-94.	5.4	105

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19	The photochemical production of organic nitrates from Î±-pinene and loss via acid-dependent particle phase hydrolysis. Atmospheric Environment, 2015, 100, 193-201.	1.9	105
20	Molecular dynamics simulations of ice growth from supercooled water. Molecular Physics, 2005, 103, 2957-2967.	0.8	98
21	Direct Measurement of pH in Individual Particles via Raman Microspectroscopy and Variation in Acidity with Relative Humidity. Journal of Physical Chemistry A, 2016, 120, 911-917.	1.1	95
22	Aircraft-Based Measurements of Point Source Methane Emissions in the Barnett Shale Basin. Environmental Science & Technology, 2015, 49, 7904-7913.	4.6	93
23	Direct and Indirect Measurements and Modeling of Methane Emissions in Indianapolis, Indiana. Environmental Science & Technology, 2016, 50, 8910-8917.	4.6	91
24	Aircraft measurement of HONO vertical profiles over a forested region. Geophysical Research Letters, 2009, 36, .	1.5	77
25	An Airborne and Wind Tunnel Evaluation of a Wind Turbulence Measurement System for Aircraft-Based Flux Measurements*. Journal of Atmospheric and Oceanic Technology, 2006, 23, 1696-1708.	0.5	72
26	Bouncier Particles at Night: Biogenic Secondary Organic Aerosol Chemistry and Sulfate Drive Diel Variations in the Aerosol Phase in a Mixed Forest. Environmental Science & Technology, 2019, 53, 4977-4987.	4.6	72
27	Processing of atmospheric nitrogen by clouds above a forest environment. Journal of Geophysical Research, 2007, 112, .	3.3	71
28	Observations of inorganic bromine (HOBr, BrO, and Br₂) speciation at Barrow, Alaska, in spring 2009. Journal of Geophysical Research, 2012, 117, .	3.3	71
29	An investigation of the interaction of carbonyl compounds with the snowpack. Geophysical Research Letters, 2000, 27, 2241-2244.	1.5	68
30	Direct detection of atmospheric atomic bromine leading to mercury and ozone depletion. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14479-14484.	3.3	68
31	Active molecular iodine photochemistry in the Arctic. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10053-10058.	3.3	63
32	Synthesis of the Southeast Atmosphere Studies: Investigating Fundamental Atmospheric Chemistry Questions. Bulletin of the American Meteorological Society, 2018, 99, 547-567.	1.7	62
33	Comparison of the measured and simulated isoprene nitrate distributions above a forest canopy. Journal of Geophysical Research, 2005, 110, .	3.3	61
34	The relative importance of chlorine and bromine radicals in the oxidation of atmospheric mercury at Barrow, Alaska. Journal of Geophysical Research, 2012, 117, .	3.3	59
35	A surface-stabilized ozonide triggers bromide oxidation at the aqueous solution-vapour interface. Nature Communications, 2017, 8, 700.	5.8	59
36	The Indianapolis Flux Experiment (INFLUX): A test-bed for developing urban greenhouse gas emission measurements. Elementa, 2017, 5, .	1.1	59

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37	Inland Sea Spray Aerosol Transport and Incomplete Chloride Depletion: Varying Degrees of Reactive Processing Observed during SOAS. Environmental Science & Technology, 2017, 51, 9533-9542.	4.6	56
38	Assessing the Methane Emissions from Natural Gas-Fired Power Plants and Oil Refineries. Environmental Science & Technology, 2017, 51, 3373-3381.	4.6	55
39	Black Carbon Emissions from Associated Natural Gas Flaring. Environmental Science & Technology, 2016, 50, 2075-2081.	4.6	54
40	Ozone dynamics and snowâ€atmosphere exchanges during ozone depletion events at Barrow, Alaska. Journal of Geophysical Research, 2012, 117, .	3.3	52
41	Synthesis of Urban CO₂ Emission Estimates from Multiple Methods from the Indianapolis Flux Project (INFLUX). Environmental Science & Technology, 2019, 53, 287-295.	4.6	50
42	Quantification and source apportionment of the methane emission flux from the city of Indianapolis. Elementa, 2015, 3, .	1.1	50
43	Chlorine and bromine atom ratios in the springtime Arctic troposphere as determined from measurements of halogenated volatile organic compounds. Journal of Geophysical Research, 2006, 111, .	3.3	48
44	Assessing the optimized precision of the aircraft mass balance method for measurement of urban greenhouse gas emission rates through averaging. Elementa, 2017, 5, .	1.1	46
45	A study of the vertical scale of halogen chemistry in the Arctic troposphere during Polar Sunrise at Barrow, Alaska. Journal of Geophysical Research, 2007, 112, .	3.3	45
46	Doppler Lidar Observations of the Mixing Height in Indianapolis Using an Automated Composite Fuzzy Logic Approach. Journal of Atmospheric and Oceanic Technology, 2018, 35, 473-490.	0.5	44
47	Field and satellite observations of the formation and distribution of Arctic atmospheric bromine above a rejuvenated sea ice cover. Journal of Geophysical Research, 2012, 117, .	3.3	43
48	Methane Emissions From the Baltimoreâ€Washington Area Based on Airborne Observations: Comparison to Emissions Inventories. Journal of Geophysical Research D: Atmospheres, 2018, 123, 8869-8882.	1.2	43
49	Analysis of atmospheric inputs of nitrate to a temperate forest ecosystem from Î”¹⁷O isotope ratio measurements. Geophysical Research Letters, 2011, 38, .	1.5	42
50	Spatiotemporal Variability of Methane Emissions at Oil and Natural Gas Operations in the Eagle Ford Basin. Environmental Science & Technology, 2017, 51, 8001-8009.	4.6	42
51	Foliar uptake of atmospheric organic nitrates. Geophysical Research Letters, 2008, 35, .	1.5	39
52	Topâ€Down Estimates of NO_x and CO Emissions From Washington, D.C.â€Baltimore During the WINTER Campaign. Journal of Geophysical Research D: Atmospheres, 2018, 123, 7705-7724.	1.2	35
53	Aerosol production from the surface of the Great Lakes. Geophysical Research Letters, 2010, 37, .	1.5	33
54	Studies of Peroxyacetyl nitrate (PAN) and its interaction with the snowpack at Summit, Greenland. Journal of Geophysical Research, 2002, 107, ACH 6-1-ACH 6-10.	3.3	32

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55	A comparison of isoprene nitrate concentrations at two forest-impacted sites. Journal of Geophysical Research, 2004, 109, .	3.3	32
56	A study of the NOxdependence of isoprene oxidation. Journal of Geophysical Research, 2004, 109, .	3.3	31
57	Loss of isoprene and sources of nighttime OH radicals at a rural site in the United States: Results from photochemical models. Journal of Geophysical Research, 2002, 107, ACH 2-1-ACH 2-14.	3.3	30
58	Constraints on Arctic Atmospheric Chlorine Production through Measurements and Simulations of Cl₂ and ClO. Environmental Science & Technology, 2016, 50, 12394-12400.	4.6	30
59	Springtime Nitrogen Oxide-Influenced Chlorine Chemistry in the Coastal Arctic. Environmental Science & Technology, 2019, 53, 8057-8067.	4.6	28
60	Reconciling the differences between a bottom-up and inverse-estimated FFCO2 emissions estimate in a large US urban area. Elementa, 2017, 5, .	1.1	28
61	Investigation of the role of the snowpack on atmospheric formaldehyde chemistry at Summit, Greenland. Journal of Geophysical Research, 2002, 107, ACH 9-1.	3.3	27
62	Peroxyacetyl nitrate photochemistry and interactions with the Arctic surface. Journal of Geophysical Research, 2004, 109, .	3.3	27
63	Methane Emissions from the Marcellus Shale in Southwestern Pennsylvania and Northern West Virginia Based on Airborne Measurements. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1862-1878.	1.2	26
64	The production of organic nitrates from various anthropogenic volatile organic compounds. International Journal of Chemical Kinetics, 2005, 37, 675-685.	1.0	25
65	Wintertime CO₂, CH₄, and CO Emissions Estimation for the Washington, DCâ€“Baltimore Metropolitan Area Using an Inverse Modeling Technique. Environmental Science & Technology, 2020, 54, 2606-2614.	4.6	25
66	Measurement of wet deposition of inorganic and organic nitrogen in a forest environment. Journal of Geophysical Research, 2005, 110, n/a-n/a.	3.3	22
67	The production of organic nitrates from atmospheric oxidation of ethers and glycol ethers. International Journal of Chemical Kinetics, 2005, 37, 686-699.	1.0	19
68	Observations of Methane Emissions from Natural Gas-Fired Power Plants. Environmental Science & Technology, 2019, 53, 8976-8984.	4.6	19
69	Urban emissions of water vapor in winter. Journal of Geophysical Research D: Atmospheres, 2017, 122, 9467-9484.	1.2	18
70	Vertical profile observations of water vapor deuterium excess in the lower troposphere. Atmospheric Chemistry and Physics, 2019, 19, 11525-11543.	1.9	17
71	Arctic springtime observations of volatile organic compounds during the OASISâ€2009 campaign. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9789-9813.	1.2	16
72	Chemical Imaging of Fine Mode Atmospheric Particles Collected from a Research Aircraft over Agricultural Fields. ACS Earth and Space Chemistry, 2020, 4, 2171-2184.	1.2	16

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73	Field measurements and modeling to resolve m2 to km2 CH4 emissions for a complex urban source: An Indiana landfill study. Elementa, 2017, 5, .	1.1	14
74	Proton affinity of peroxyacetyl nitrate sampled by membrane introduction mass spectrometry. , 1998, 12, 328-334.		11
75	Lake Spray Aerosol Incorporated into Great Lakes Clouds. ACS Earth and Space Chemistry, 2019, 3, 2765-2774.	1.2	11
76	Fluxes of Atmospheric Greenhouseâ€Gases in Maryland (FLAGGâ€MD): Emissions of Carbon Dioxide in the Baltimore, MDâ€Washington, D.C. Area. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032004.	1.2	11
77	Chemical characterization of Î±â€pinene secondary organic aerosol constituents using gas chromatography, liquid chromatography, and paper sprayâ€based mass spectrometry techniques. Rapid Communications in Mass Spectrometry, 2016, 30, 1627-1638.	0.7	9
78	Bromine Chloride in the Coastal Arctic: Diel Patterns and Production Mechanisms. ACS Earth and Space Chemistry, 2020, 4, 620-630.	1.2	9
79	Arctic Reactive Bromine Events Occur in Two Distinct Sets of Environmental Conditions: A Statistical Analysis of 6ÂYears of Observations. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032139.	1.2	9
80	New York City greenhouse gas emissions estimated with inverse modeling of aircraft measurements. Elementa, 2022, 10, .	1.1	8
81	Relative flux measurements of biogenic and natural gas-derived methane for seven U.S. cities. Elementa, 2021, 9, .	1.1	7
82	Carbon Monoxide Emissions from the Washington, DC, and Baltimore Metropolitan Area: Recent Trend and COVID-19 Anomaly. Environmental Science & Technology, 2022, 56, 2172-2180.	4.6	7
83	Fluxes of Atmospheric Greenhouse-Gases in Maryland (FLAGG-MD): Emissions of Carbon Dioxide in the Baltimore, MD-Washington, D.C. area. Journal of Geophysical Research D: Atmospheres, 2020, 125, .	1.2	0
84	A spatially explicit inventory scaling approach to estimate urban CO2 emissions. Elementa, 2022, 10, .	1.1	0