Patrick R Veres

List of Publications by Year
in descending order

94 papers	6,440 citations	66234 42 h-index	76769 74 g-index
167 all docs	167 docs citations	167 times ranked	5559 citing authors

#	Article	IF	Citations
1	Biomass burning in Siberia and Kazakhstan as an important source for haze over the Alaskan Arctic in April 2008. Geophysical Research Letters, 2009, 36, .	1.5	289
2	Coupling field and laboratory measurements to estimate the emission factors of identified and unidentified trace gases for prescribed fires. Atmospheric Chemistry and Physics, 2013, 13, 89-116.	1.9	266
3	Characterization of biomass burning emissions from cooking fires, peat, crop residue, and other fuels with high-resolution proton-transfer-reaction time-of-flight mass spectrometry. Atmospheric Chemistry and Physics, 2015, 15, 845-865.	1.9	266
4	High winter ozone pollution from carbonyl photolysis in an oil and gas basin. Nature, 2014, 514, 351-354.	13.7	265
5	Characteristics, sources, and transport of aerosols measured in spring 2008 during the aerosol, radiation, and cloud processes affecting Arctic Climate (ARCPAC) Project. Atmospheric Chemistry and Physics, 2011, 11, 2423-2453.	1.9	259
6	Laboratory measurements of trace gas emissions from biomass burning of fuel types from the southeastern and southwestern United States. Atmospheric Chemistry and Physics, 2010, 10, 11115-11130.	1.9	218
7	Development of negative-ion proton-transfer chemical-ionization mass spectrometry (NI-PT-CIMS) for the measurement of gas-phase organic acids in the atmosphere. International Journal of Mass Spectrometry, 2008, 274, 48-55.	0.7	193
8	Biomass burning emissions and potential air quality impacts of volatile organic compounds and other trace gases from fuels common in the US. Atmospheric Chemistry and Physics, 2015, 15, 13915-13938.	1.9	177
9	Fine particle pH and gasâ€“particle phase partitioning of inorganic species in Pasadena, California, during the 2010 CalNex campaign. Atmospheric Chemistry and Physics, 2017, 17, 5703-5719.	1.9	168
10	Isocyanic acid in the atmosphere and its possible link to smoke-related health effects. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8966-8971.	3.3	166
11	Measurements of gasâ€phase inorganic and organic acids from biomass fires by negativeâ€ion protonâ€transfer chemicalâ€ionization mass spectrometry. Journal of Geophysical Research, 2010, 115, .	3.3	161
12	Understanding high wintertime ozone pollution events in an oil- and natural gas-producing region of the western US. Atmospheric Chemistry and Physics, 2015, 15, 411-429.	1.9	154
13	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.	1.2	152
14	Vertically Resolved Measurements of Nighttime Radical Reservoirs in Los Angeles and Their Contribution to the Urban Radical Budget. Environmental Science & Technology, 2012, 46, 10965-10973.	4.6	127
15	Formaldehyde production from isoprene oxidation acrossÂNO_{<i>x</i>}Âregimes. Atmospheric Chemistry and Physics, 2016, 16, 2597-2610.	1.9	124
16	VOC identification and inter-comparison from laboratory biomass burning using PTR-MS and PIT-MS. International Journal of Mass Spectrometry, 2011, 303, 6-14.	0.7	123
17	Isoprene emission from terrestrial ecosystems in response to global change: minding the gap between models and observations. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 1677-1695.	1.6	121
18	Multi-instrument comparison and compilation of non-methane organic gas emissions from biomass burning and implications for smoke-derived secondary organic aerosol precursors. Atmospheric Chemistry and Physics, 2017, 17, 1471-1489.	1.9	119

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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.	3.3	118
20	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.	1.2	103
21	Chlorine as a primary radical: evaluation of methods to understand its role in initiation of oxidative cycles. Atmospheric Chemistry and Physics, 2014, 14, 3427-3440.	1.9	90
22	Evidence of rapid production of organic acids in an urban air mass. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	89
23	An MCM modeling study of nitryl chloride (ClNO₂) impacts on oxidation, ozone production and nitrogen oxide partitioning in polluted continental outflow. Atmospheric Chemistry and Physics, 2014, 14, 3789-3800.	1.9	87
24	Measurements of hydroxyl and hydroperoxy radicals during CalNexâ€ŁA: Model comparisons and radical budgets. Journal of Geophysical Research D: Atmospheres, 2016, 121, 4211-4232.	1.2	81
25	Airborne formaldehyde measurements using PTR-MS: calibration, humidity dependence, inter-comparison and initial results. Atmospheric Measurement Techniques, 2011, 4, 2345-2358.	1.2	80
26	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.	1.5	80
27	Emissions of nitrogenâ€containing organic compounds from the burning of herbaceous and arboraceous biomass: Fuel composition dependence and the variability of commonly used nitrile tracers. Geophysical Research Letters, 2016, 43, 9903-9912.	1.5	79
28	A Measurement of Total Reactive Nitrogen, NO_y, together with NO₂, NO, and O₃ via Cavity Ring-down Spectroscopy. Environmental Science & Technology, 2014, 48, 9609-9615.	4.6	75
29	Diurnal Variability and Emission Pattern of Decamethylcyclopentasiloxane (D₅) from the Application of Personal Care Products in Two North American Cities. Environmental Science & Technology, 2018, 52, 5610-5618.	4.6	72
30	Nighttime Chemical Transformation in Biomass Burning Plumes: A Box Model Analysis Initialized with Aircraft Observations. Environmental Science & Technology, 2019, 53, 2529-2538.	4.6	68
31	Heterogeneous formation of nitryl chloride and its role as a nocturnal NO_x reservoir species during CalNexâ€ŁA 2010. Journal of Geophysical Research D: Atmospheres, 2013, 118, 10,638.	1.2	65
32	Anthropogenic sources of VOC in a football stadium: Assessing human emissions in the atmosphere. Atmospheric Environment, 2013, 77, 1052-1059.	1.9	62
33	Development and validation of a portable gas phase standard generation and calibration system for volatile organic compounds. Atmospheric Measurement Techniques, 2010, 3, 683-691.	1.2	61
34	Dimethyl sulfide in the Amazon rain forest. Global Biogeochemical Cycles, 2015, 29, 19-32.	1.9	58
35	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.	1.2	58
36	Investigation of secondary formation of formic acid: urban environment vs. oil and gas producing region. Atmospheric Chemistry and Physics, 2015, 15, 1975-1993.	1.9	57

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37	Global tropospheric halogen (Cl, Br, I) chemistry and its impact on oxidants. Atmospheric Chemistry and Physics, 2021, 21, 13973-13996.	1.9	57
38	Transition from high- to low-NOx control of night-time oxidation in the southeastern US. Nature Geoscience, 2017, 10, 490-495.	5.4	56
39	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.	1.2	51
40	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.	1.2	49
41	Evaluation of NO⁺ reagent ion chemistry for online measurements of atmospheric volatile organic compounds. Atmospheric Measurement Techniques, 2016, 9, 2909-2925.	1.2	48
42	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
43	HONO emission and production determined from airborne measurements over the Southeast U.S.. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9237-9250.	1.2	46
44	Effects of gasâ€“wall interactions on measurements of semivolatile compounds and small polar molecules. Atmospheric Measurement Techniques, 2019, 12, 3137-3149.	1.2	45
45	Ozone chemistry in western U.S. wildfire plumes. Science Advances, 2021, 7, eabl3648.	4.7	45
46	Observations of VOC emissions and photochemical products over US oil- and gas-producing regions using high-resolution H₃O⁺ CIMS (PTR-ToF-MS). Atmospheric Measurement Techniques, 2017, 10, 2941-2968.	1.2	44
47	Chemistry of Volatile Organic Compounds in the Los Angeles Basin: Formation of Oxygenated Compounds and Determination of Emission Ratios. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2298-2319.	1.2	43
48	A dualâ€chamber method for quantifying the effects of atmospheric perturbations on secondary organic aerosol formation from biomass burning emissions. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6043-6058.	1.2	41
49	Using total OH reactivity to assess isoprene photooxidation via measurement and model. Atmospheric Environment, 2014, 89, 453-463.	1.9	40
50	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.	1.2	39
51	The NASA Atmospheric Tomography (ATom) Mission: Imaging the Chemistry of the Global Atmosphere. Bulletin of the American Meteorological Society, 2022, 103, E761-E790.	1.7	39
52	Volatile organic compounds in northern New England marine and continental environments during the ICARTT 2004 campaign. Journal of Geophysical Research, 2008, 113, .	3.3	38
53	WRF-Chem simulation of NOx and O3 in the L.A. basin during CalNex-2010. Atmospheric Environment, 2013, 81, 421-432.	1.9	34
54	New insights into atmospheric sources and sinks of isocyanic acid, HNCO, from recent urban and regional observations. Journal of Geophysical Research D: Atmospheres, 2014, 119, 1060-1072.	1.2	34

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55	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.	1.9	34
56	Peroxynitric acid (HO₂NO₂) measurements during the UBWOS 2013 and 2014 studies using iodide ion chemical ionization mass spectrometry. Atmospheric Chemistry and Physics, 2015, 15, 8101-8114.	1.9	33
57	Impact of evolving isoprene mechanisms on simulated formaldehyde: An inter-comparison supported by in situ observations from SENEX. Atmospheric Environment, 2017, 164, 325-336.	1.9	33
58	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.	1.2	33
59	Exploring dimethyl sulfide (DMS) oxidation and implications for global aerosol radiative forcing. Atmospheric Chemistry and Physics, 2022, 22, 1549-1573.	1.9	33
60	Investigating diesel engines as an atmospheric source of isocyanic acid in urban areas. Atmospheric Chemistry and Physics, 2017, 17, 8959-8970.	1.9	32
61	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.	1.9	32
62	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.	1.2	31
63	Decadal changes in summertime reactive oxidized nitrogen and surface ozone over the Southeast United States. Atmospheric Chemistry and Physics, 2018, 18, 2341-2361.	1.9	30
64	PTR-QMS versus PTR-TOF comparison in a region with oil and natural gas extraction industry in the Uintah Basin in 2013. Atmospheric Measurement Techniques, 2015, 8, 411-420.	1.2	29
65	Photochemical processing of diesel fuel emissions as a large secondary source of isocyanic acid (HNCO). Geophysical Research Letters, 2016, 43, 4033-4041.	1.5	29
66	Anthropogenic Control Over Wintertime Oxidation of Atmospheric Pollutants. Geophysical Research Letters, 2019, 46, 14826-14835.	1.5	28
67	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, .	3.3	28
68	Measurements of hydrogen sulfide (H₂S) using PTR-MS: calibration, humidity dependence, inter-comparison and results from field studies in an oil and gas production region. Atmospheric Measurement Techniques, 2014, 7, 3597-3610.	1.2	26
69	An Atmospheric Constraint on the NO₂ Dependence of Daytime Near-Surface Nitrous Acid (HONO). Environmental Science & Technology, 2015, 49, 12774-12781.	4.6	26
70	Anthropogenic sources of aerosol particles in a football stadium: Real-time characterization of emissions from cigarette smoking, cooking, hand flares, and color smoke bombs by high-resolution aerosol mass spectrometry. Atmospheric Environment, 2013, 77, 1043-1051.	1.9	25
71	Isocyanic acid in a global chemistry transport model: Tropospheric distribution, budget, and identification of regions with potential health impacts. Journal of Geophysical Research, 2012, 117, .	3.3	24
72	Reactive nitrogen partitioning and its relationship to winter ozone events in Utah. Atmospheric Chemistry and Physics, 2016, 16, 573-583.	1.9	24

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73	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.	1.9	24
74	Exploring Oxidation in the Remote Free Troposphere: Insights From Atmospheric Tomography (ATom). Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031685.	1.2	23
75	Characterisation of NO production and consumption: new insights by an improved laboratory dynamic chamber technique. Biogeosciences, 2014, 11, 5463-5492.	1.3	22
76	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.	1.2	18
77	Multi-satellite sensor study on precipitation-induced emission pulses of NO_{<i>x</i>} from soils in semi-arid ecosystems. Atmospheric Chemistry and Physics, 2016, 16, 9457-9487.	1.9	17
78	Airborne measurements of the atmospheric emissions from a fuel ethanol refinery. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4385-4397.	1.2	16
79	Chemical Tomography in a Fresh Wildland Fire Plume: A Large Eddy Simulation (LES) Study. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035203.	1.2	16
80	Inorganic and black carbon aerosols in the Los Angeles Basin during CalNex. Journal of Geophysical Research D: Atmospheres, 2013, 118, 1777-1803.	1.2	15
81	Airborne Emission Rate Measurements Validate Remote Sensing Observations and Emission Inventories of Western U.S. Wildfires. Environmental Science & Technology, 2022, 56, 7564-7577.	4.6	15
82	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.	1.2	14
83	A portable, robust, stable, and tunable calibration source for gas-phase nitrous acid (HONO). Atmospheric Measurement Techniques, 2020, 13, 5873-5890.	1.2	14
84	HCOOH in the Remote Atmosphere: Constraints from Atmospheric Tomography (ATom) Airborne Observations. ACS Earth and Space Chemistry, 2021, 5, 1436-1454.	1.2	13
85	Novel Analysis to Quantify Plume Crosswind Heterogeneity Applied to Biomass Burning Smoke. Environmental Science & Technology, 2021, 55, 15646-15657.	4.6	11
86	Quantifying Nitrous Acid Formation Mechanisms Using Measured Vertical Profiles During the CalNex 2010 Campaign and 1D Column Modeling. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034689.	1.2	10
87	Hydrocarbon Removal in Power Plant Plumes Shows Nitrogen Oxide Dependence of Hydroxyl Radicals. Geophysical Research Letters, 2019, 46, 7752-7760.	1.5	9
88	Validation of a new cavity ring-down spectrometer for measuring tropospheric gaseous hydrogen chloride. Atmospheric Measurement Techniques, 2021, 14, 5859-5871.	1.2	7
89	A versatile vacuum ultraviolet ion source for reduced pressure bipolar chemical ionization mass spectrometry. Atmospheric Measurement Techniques, 2022, 15, 1159-1169.	1.2	7
90	Correction for Roberts et al., Isocyanic acid in the atmosphere and its possible link to smoke-related health effects. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17234-17234.	3.3	6

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91	Development of a photochemical source for the production and calibration of acyl peroxynitrate compounds. Atmospheric Measurement Techniques, 2015, 8, 2225-2231.	1.2	6
92	Atmospheric chemistry, sources and sinks of carbon suboxide, C₃O₂. Atmospheric Chemistry and Physics, 2017, 17, 8789-8804.	1.9	6
93	Measurements of Total OH Reactivity During CalNexâ€LA. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD032988.	1.2	5
94	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.	1.2	1