

Patrick R Veres

List of Publications by Year in descending order

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94
papers

6,440
citations

66234

42
h-index

76769

74
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167
all docs

167
docs citations

167
times ranked

5559
citing authors

#	ARTICLE	IF	CITATIONS
1	The NASA Atmospheric Tomography (ATom) Mission: Imaging the Chemistry of the Global Atmosphere. <i>Bulletin of the American Meteorological Society</i> , 2022, 103, E761-E790.	1.7	39
2	Exploring dimethyl sulfide (DMS) oxidation and implications for global aerosol radiative forcing. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 1549-1573.	1.9	33
3	A versatile vacuum ultraviolet ion source for reduced pressure bipolar chemical ionization mass spectrometry. <i>Atmospheric Measurement Techniques</i> , 2022, 15, 1159-1169.	1.2	7
4	Hydrogen chloride (HCl) at ground sites during CalNex 2010 and insight into its thermodynamic properties. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, 1-16.	1.2	1
5	Airborne Emission Rate Measurements Validate Remote Sensing Observations and Emission Inventories of Western U.S. Wildfires. <i>Environmental Science & Technology</i> , 2022, 56, 7564-7577.	4.6	15
6	HCOOH in the Remote Atmosphere: Constraints from Atmospheric Tomography (ATom) Airborne Observations. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 1436-1454.	1.2	13
7	Quantifying Nitrous Acid Formation Mechanisms Using Measured Vertical Profiles During the CalNex 2010 Campaign and 1D Column Modeling. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD034689.	1.2	10
8	Measurements of Total OH Reactivity During CalNexâ€LA. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD032988.	1.2	5
9	Validation of a new cavity ring-down spectrometer for measuring tropospheric gaseous hydrogen chloride. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 5859-5871.	1.2	7
10	Global tropospheric halogen (Cl, Br, I) chemistry and its impact on oxidants. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 13973-13996.	1.9	57
11	Chemical Tomography in a Fresh Wildland Fire Plume: A Large Eddy Simulation (LES) Study. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD035203.	1.2	16
12	Rapid cloud removal of dimethyl sulfide oxidation products limits SO ₂ and cloud condensation nuclei production in the marine atmosphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	28
13	Nighttime and daytime dark oxidation chemistry in wildfire plumes: an observation and model analysis of FIREX-AQ aircraft data. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 16293-16317.	1.9	34
14	Novel Analysis to Quantify Plume Crosswind Heterogeneity Applied to Biomass Burning Smoke. <i>Environmental Science & Technology</i> , 2021, 55, 15646-15657.	4.6	11
15	Ozone chemistry in western U.S. wildfire plumes. <i>Science Advances</i> , 2021, 7, eabl3648.	4.7	45
16	Formaldehyde evolution in US wildfire plumes during the Fire Influence on Regional to Global Environments and Air Quality experiment (FIREX-AQ). <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 18319-18331.	1.9	24
17	Exploring Oxidation in the Remote Free Troposphere: Insights From Atmospheric Tomography (ATom). <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD031685.	1.2	23
18	Global airborne sampling reveals a previously unobserved dimethyl sulfide oxidation mechanism in the marine atmosphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 4505-4510.	3.3	118

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19	A vacuum ultraviolet ion source (VUV-IS) for iodide chemical ionization mass spectrometry: a substitute for radioactive ion sources. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 3683-3696.	1.2	14
20	A portable, robust, stable, and tunable calibration source for gas-phase nitrous acid (HONO). <i>Atmospheric Measurement Techniques</i> , 2020, 13, 5873-5890.	1.2	14
21	Effects of gas-wall interactions on measurements of semivolatile compounds and small polar molecules. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 3137-3149.	1.2	45
22	On the sources and sinks of atmospheric VOCs: an integrated analysis of recent aircraft campaigns over North America. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 9097-9123.	1.9	32
23	Nighttime Chemical Transformation in Biomass Burning Plumes: A Box Model Analysis Initialized with Aircraft Observations. <i>Environmental Science & Technology</i> , 2019, 53, 2529-2538.	4.6	68
24	Hydrocarbon Removal in Power Plant Plumes Shows Nitrogen Oxide Dependence of Hydroxyl Radicals. <i>Geophysical Research Letters</i> , 2019, 46, 7752-7760.	1.5	9
25	An Odd Oxygen Framework for Wintertime Ammonium Nitrate Aerosol Pollution in Urban Areas: NO _x and VOC Control as Mitigation Strategies. <i>Geophysical Research Letters</i> , 2019, 46, 4971-4979.	1.5	80
26	Anthropogenic Control Over Wintertime Oxidation of Atmospheric Pollutants. <i>Geophysical Research Letters</i> , 2019, 46, 14826-14835.	1.5	28
27	Diurnal Variability and Emission Pattern of Decamethylcyclopentasiloxane (D ₅) from the Application of Personal Care Products in Two North American Cities. <i>Environmental Science & Technology</i> , 2018, 52, 5610-5618.	4.6	72
28	Heterogeneous N ₂ O ₅ Uptake During Winter: Aircraft Measurements During the 2015 WINTER Campaign and Critical Evaluation of Current Parameterizations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 4345-4372.	1.2	103
29	Chemistry of Volatile Organic Compounds in the Los Angeles Basin: Formation of Oxygenated Compounds and Determination of Emission Ratios. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 2298-2319.	1.2	43
30	Decadal changes in summertime reactive oxidized nitrogen and surface ozone over the Southeast United States. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 2341-2361.	1.9	30
31	ClNO ₂ Yields From Aircraft Measurements During the 2015 WINTER Campaign and Critical Evaluation of the Current Parameterization. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 12,994.	1.2	31
32	Nitrogen Oxides Emissions, Chemistry, Deposition, and Export Over the Northeast United States During the WINTER Aircraft Campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 12,368.	1.2	49
33	Airborne Observations of Reactive Inorganic Chlorine and Bromine Species in the Exhaust of Coal-Fired Power Plants. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 11225-11237.	1.2	33
34	Flight Deployment of a High-Resolution Time-of-Flight Chemical Ionization Mass Spectrometer: Observations of Reactive Halogen and Nitrogen Oxide Species. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 7670-7686.	1.2	39
35	A dual-chamber method for quantifying the effects of atmospheric perturbations on secondary organic aerosol formation from biomass burning emissions. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 6043-6058.	1.2	41
36	Transition from high- to low-NO _x control of night-time oxidation in the southeastern US. <i>Nature Geoscience</i> , 2017, 10, 490-495.	5.4	56

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37	Impact of evolving isoprene mechanisms on simulated formaldehyde: An inter-comparison supported by in situ observations from SENEX. <i>Atmospheric Environment</i> , 2017, 164, 325-336.	1.9	33
38	Multi-instrument comparison and compilation of non-methane organic gas emissions from biomass burning and implications for smoke-derived secondary organic aerosol precursors. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 1471-1489.	1.9	119
39	Investigating diesel engines as an atmospheric source of isocyanic acid in urban areas. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 8959-8970.	1.9	32
40	Fine particle pH and gas-aqueous particle phase partitioning of inorganic species in Pasadena, California, during the 2010 CalNex campaign. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 5703-5719.	1.9	168
41	Atmospheric chemistry, sources and sinks of carbon suboxide, C ₃ O ₂ . <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 8789-8804.	1.9	6
42	Observations of VOC emissions and photochemical products over US oil- and gas-producing regions using high-resolution H ₂ O ⁺ CIMS (PTR-ToF-MS). <i>Atmospheric Measurement Techniques</i> , 2017, 10, 2941-2968.	1.2	44
43	Evaluation of the accuracy of thermal dissociation CRDS and LIF techniques for atmospheric measurement of reactive nitrogen species. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 1911-1926.	1.2	18
44	Instrumentation and measurement strategy for the NOAA SENEX aircraft campaign as part of the Southeast Atmosphere Study 2013. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 3063-3093.	1.2	58
45	Evaluation of NO ⁺ reagent ion chemistry for online measurements of atmospheric volatile organic compounds. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 2909-2925.	1.2	48
46	Photochemical processing of diesel fuel emissions as a large secondary source of isocyanic acid (HNCO). <i>Geophysical Research Letters</i> , 2016, 43, 4033-4041.	1.5	29
47	Measurements of hydroxyl and hydroperoxy radicals during CalNex: Model comparisons and radical budgets. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 4211-4232.	1.2	81
48	Emissions of nitrogen-containing organic compounds from the burning of herbaceous and arboraceous biomass: Fuel composition dependence and the variability of commonly used nitrile tracers. <i>Geophysical Research Letters</i> , 2016, 43, 9903-9912.	1.5	79
49	HONO emission and production determined from airborne measurements over the Southeast U.S.. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 9237-9250.	1.2	46
50	Reactive nitrogen partitioning and its relationship to winter ozone events in Utah. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 573-583.	1.9	24
51	Formaldehyde production from isoprene oxidation across NO ₂ regimes. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 2597-2610.	1.9	124
52	Multi-satellite sensor study on precipitation-induced emission pulses of NO ₂ from soils in semi-arid ecosystems. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 9457-9487.	1.9	17
53	Dimethyl sulfide in the Amazon rain forest. <i>Global Biogeochemical Cycles</i> , 2015, 29, 19-32.	1.9	58
54	Understanding high wintertime ozone pollution events in an oil- and natural gas-producing region of the western US. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 411-429.	1.9	154

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55	Biomass burning emissions and potential air quality impacts of volatile organic compounds and other trace gases from fuels common in the US. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 13915-13938.	1.9	177
56	Investigation of secondary formation of formic acid: urban environment vs. oil and gas producing region. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 1975-1993.	1.9	57
57	Peroxynitric acid (HO<sub>2</sub>NO<sub>2</sub>) measurements during the UBWOS 2013 and 2014 studies using iodide ion chemical ionization mass spectrometry. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 8101-8114.	1.9	33
58	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. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 845-865.	1.9	266
59	Development of a photochemical source for the production and calibration of acyl peroxyoxynitrate compounds. <i>Atmospheric Measurement Techniques</i> , 2015, 8, 2225-2231.	1.2	6
60	PTR-QMS versus PTR-TOF comparison in a region with oil and natural gas extraction industry in the Uintah Basin in 2013. <i>Atmospheric Measurement Techniques</i> , 2015, 8, 411-420.	1.2	29
61	Airborne measurements of the atmospheric emissions from a fuel ethanol refinery. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 4385-4397.	1.2	16
62	An Atmospheric Constraint on the NO ₂ Dependence of Daytime Near-Surface Nitrous Acid (HONO). <i>Environmental Science & Technology</i> , 2015, 49, 12774-12781.	4.6	26
63	Characterisation of NO production and consumption: new insights by an improved laboratory dynamic chamber technique. <i>Biogeosciences</i> , 2014, 11, 5463-5492.	1.3	22
64	Measurements of hydrogen sulfide (H<sub>2</sub>S) using PTR-MS: calibration, humidity dependence, inter-comparison and results from field studies in an oil and gas production region. <i>Atmospheric Measurement Techniques</i> , 2014, 7, 3597-3610.	1.2	26
65	New insights into atmospheric sources and sinks of isocyanic acid, HNCO, from recent urban and regional observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 1060-1072.	1.2	34
66	Using total OH reactivity to assess isoprene photooxidation via measurement and model. <i>Atmospheric Environment</i> , 2014, 89, 453-463.	1.9	40
67	High winter ozone pollution from carbonyl photolysis in an oil and gas basin. <i>Nature</i> , 2014, 514, 351-354.	13.7	265
68	A Measurement of Total Reactive Nitrogen, NO _x , together with NO ₂ , NO, and O ₃ via Cavity Ring-down Spectroscopy. <i>Environmental Science & Technology</i> , 2014, 48, 9609-9615.	4.6	75
69	Fine-scale simulation of ammonium and nitrate over the South Coast Air Basin and San Joaquin Valley of California during CalNex-2010. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 3600-3614.	1.2	51
70	Chlorine as a primary radical: evaluation of methods to understand its role in initiation of oxidative cycles. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 3427-3440.	1.9	90
71	An MCM modeling study of nitryl chloride (ClNO<sub>2</sub>) impacts on oxidation, ozone production and nitrogen oxide partitioning in polluted continental outflow. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 3789-3800.	1.9	87
72	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. <i>Atmospheric Environment</i> , 2013, 77, 1043-1051.	1.9	25

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73	Anthropogenic sources of VOC in a football stadium: Assessing human emissions in the atmosphere. <i>Atmospheric Environment</i> , 2013, 77, 1052-1059.	1.9	62
74	WRF-Chem simulation of NO _x and O ₃ in the L.A. basin during CalNex-2010. <i>Atmospheric Environment</i> , 2013, 81, 421-432.	1.9	34
75	Coupling field and laboratory measurements to estimate the emission factors of identified and unidentified trace gases for prescribed fires. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 89-116.	1.9	266
76	Heterogeneous formation of nitryl chloride and its role as a nocturnal NO _x reservoir species during CalNex-2010. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 10,638.	1.2	65
77	Inorganic and black carbon aerosols in the Los Angeles Basin during CalNex. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 1777-1803.	1.2	15
78	Vertically Resolved Measurements of Nighttime Radical Reservoirs in Los Angeles and Their Contribution to the Urban Radical Budget. <i>Environmental Science & Technology</i> , 2012, 46, 10965-10973.	4.6	127
79	Isocyanic acid in a global chemistry transport model: Tropospheric distribution, budget, and identification of regions with potential health impacts. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	24
80	On the gas-particle partitioning of soluble organic aerosol in two urban atmospheres with contrasting emissions: 2. Gas and particle phase formic acid. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	47
81	Evidence of rapid production of organic acids in an urban air mass. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	89
82	Characteristics, sources, and transport of aerosols measured in spring 2008 during the aerosol, radiation, and cloud processes affecting Arctic Climate (ARCPAC) Project. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 2423-2453.	1.9	259
83	VOC identification and inter-comparison from laboratory biomass burning using PTR-MS and PIT-MS. <i>International Journal of Mass Spectrometry</i> , 2011, 303, 6-14.	0.7	123
84	Isocyanic acid in the atmosphere and its possible link to smoke-related health effects. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 8966-8971.	3.3	166
85	Correction for Roberts et al., Isocyanic acid in the atmosphere and its possible link to smoke-related health effects. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 17234-17234.	3.3	6
86	Airborne formaldehyde measurements using PTR-MS: calibration, humidity dependence, inter-comparison and initial results. <i>Atmospheric Measurement Techniques</i> , 2011, 4, 2345-2358.	1.2	80
87	Laboratory measurements of trace gas emissions from biomass burning of fuel types from the southeastern and southwestern United States. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 11115-11130.	1.9	218
88	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. <i>Atmospheric Measurement Techniques</i> , 2010, 3, 981-990.	1.2	152
89	Development and validation of a portable gas phase standard generation and calibration system for volatile organic compounds. <i>Atmospheric Measurement Techniques</i> , 2010, 3, 683-691.	1.2	61
90	Measurements of gas-phase inorganic and organic acids from biomass fires by negative-ion proton-transfer chemical-ionization mass spectrometry. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	161

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91	Biomass burning in Siberia and Kazakhstan as an important source for haze over the Alaskan Arctic in April 2008. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	289
92	Development of negative-ion proton-transfer chemical-ionization mass spectrometry (NI-PT-CIMS) for the measurement of gas-phase organic acids in the atmosphere. <i>International Journal of Mass Spectrometry</i> , 2008, 274, 48-55.	0.7	193
93	Volatile organic compounds in northern New England marine and continental environments during the ICARTT 2004 campaign. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	38
94	Isoprene emission from terrestrial ecosystems in response to global change: minding the gap between models and observations. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2007, 365, 1677-1695.	1.6	121