Eric Apel

List of Publications by Year
in descending order

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80 papers	3,445 citations	126708 33 h-index	168136 53 g-index
85 all docs	85 docs citations	85 times ranked	3649 citing authors

#	Article	IF	Citations
1	Evolution of Asian aerosols during transpacific transport in INTEX-B. Atmospheric Chemistry and Physics, 2009, 9, 7257-7287.	1.9	170
2	The Deep Convective Clouds and Chemistry (DC3) Field Campaign. Bulletin of the American Meteorological Society, 2015, 96, 1281-1309.	1.7	165
3	Hydrocarbon source signatures in Houston, Texas: Influence of the petrochemical industry. Journal of Geophysical Research, 2004, 109, .	3.3	145
4	Chemical evolution of volatile organic compounds in the outflow of the Mexico City Metropolitan area. Atmospheric Chemistry and Physics, 2010, 10, 2353-2375.	1.9	131
5	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
6	A fast-GC/MS system to measure C2to C4carbonyls and methanol aboard aircraft. Journal of Geophysical Research, 2003, 108, .	3.3	106
7	High levels of molecular chlorine in the Arctic atmosphere. Nature Geoscience, 2014, 7, 91-94.	5.4	105
8	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
9	Measurement and interpretation of isoprene fluxes and isoprene, methacrolein, and methyl vinyl ketone mixing ratios at the PROPHET site during the 1998 Intensive. Journal of Geophysical Research, 2002, 107, ACH 7-1.	3.3	100
10	Active and widespread halogen chemistry in the tropical and subtropical free troposphere. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9281-9286.	3.3	91
11	Rate coefficients and mechanisms of the reaction of cl-atoms with a series of unsaturated hydrocarbons under atmospheric conditions. International Journal of Chemical Kinetics, 2003, 35, 334-353.	1.0	89
12	Upper tropospheric ozone production from lightning NO_xâ€impacted convection: Smoke ingestion case study from the DC3 campaign. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2505-2523.	1.2	88
13	Observations of nonmethane organic compounds during ARCTAS â˜ Part 1: Biomass burning emissions and plume enhancements. Atmospheric Chemistry and Physics, 2011, 11, 11103-11130.	1.9	80
14	Intercomparison of oxygenated volatile organic compound measurements at the SAPHIR atmosphere simulation chamber. Journal of Geophysical Research, 2008, 113, .	3.3	78
15	Widespread biomass burning smoke throughout the remote troposphere. Nature Geoscience, 2020, 13, 422-427.	5.4	72
16	Sources and Secondary Production of Organic Aerosols in the Northeastern United States during WINTER. Journal of Geophysical Research D: Atmospheres, 2018, 123, 7771-7796.	1.2	71
17	Atmospheric benzene observations from oil and gas production in the Denverâ€Julesburg Basin in July and August 2014. Journal of Geophysical Research D: Atmospheres, 2016, 121, 11,055.	1.2	70
18	Hazardous Air Pollutants in Fresh and Aged Western US Wildfire Smoke and Implications for Long-Term Exposure. Environmental Science & Technology, 2020, 54, 11838-11847.	4.6	69

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19	The POLARCAT Model Intercomparison Project (POLMIP): overview and evaluation with observations. Atmospheric Chemistry and Physics, 2015, 15, 6721-6744.	1.9	62
20	Airborne flux measurements of methane and volatile organic compounds over the Haynesville and Marcellus shale gas production regions. Journal of Geophysical Research D: Atmospheres, 2015, 120, 6271-6289.	1.2	56
21	Aerosol transport and wet scavenging in deep convective clouds: A case study and model evaluation using a multiple passive tracer analysis approach. Journal of Geophysical Research D: Atmospheres, 2015, 120, 8448-8468.	1.2	56
22	Emissions of Trace Organic Gases From Western U.S. Wildfires Based on WEâ€CAN Aircraft Measurements. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033838.	1.2	54
23	HONO Emissions from Western U.S. Wildfires Provide Dominant Radical Source in Fresh Wildfire Smoke. Environmental Science & Technology, 2020, 54, 5954-5963.	4.6	51
24	Large contribution of biomass burning emissions to ozone throughout the global remote troposphere. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	51
25	The Convective Transport of Active Species in the Tropics (CONTRAST) Experiment. Bulletin of the American Meteorological Society, 2017, 98, 106-128.	1.7	50
26	An examination of the chemistry of peroxycarboxylic nitric anhydrides and related volatile organic compounds during Texas Air Quality Study 2000 using ground-based measurements. Journal of Geophysical Research, 2003, 108, ACH 4-1-ACH 4-12.	3.3	48
27	Atmospheric Acetaldehyde: Importance of Airâ€Sea Exchange and a Missing Source in the Remote Troposphere. Geophysical Research Letters, 2019, 46, 5601-5613.	1.5	41
28	Observation of Road Salt Aerosol Driving Inland Wintertime Atmospheric Chlorine Chemistry. ACS Central Science, 2020, 6, 684-694.	5.3	41
29	Tropospheric methanol observations from space: retrieval evaluation and constraints on the seasonality of biogenic emissions. Atmospheric Chemistry and Physics, 2012, 12, 5897-5912.	1.9	39
30	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
31	Quantifying global terrestrial methanol emissions using observations from the TES satellite sensor. Atmospheric Chemistry and Physics, 2014, 14, 2555-2570.	1.9	36
32	Importance of reactive halogens in the tropical marine atmosphere: aÂregional modelling study using WRF-Chem. Atmospheric Chemistry and Physics, 2019, 19, 3161-3189.	1.9	36
33	Daytime Oxidized Reactive Nitrogen Partitioning in Western U.S. Wildfire Smoke Plumes. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033484.	1.2	36
34	Constraining remote oxidation capacity with ATom observations. Atmospheric Chemistry and Physics, 2020, 20, 7753-7781.	1.9	36
35	Analysis of the isoprene chemistry observed during the New England Air Quality Study (NEAQS) 2002 intensive experiment. Journal of Geophysical Research, 2006, 111, .	3.3	34
36	Impact of the deep convection of isoprene and other reactive trace species on radicals and ozone in the upper troposphere. Atmospheric Chemistry and Physics, 2012, 12, 1135-1150.	1.9	33

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37	A pervasive role for biomass burning in tropical high ozone/low water structures. Nature Communications, 2016, 7, 10267.	5.8	33
38	BrO and inferred Br_{<i>y</i>} profiles over the western Pacific: relevance of inorganic bromine sources and a Br_{<i>y</i>} minimum in the aged tropical tropopause layer. Atmospheric Chemistry and Physics, 2017, 17, 15245-15270.	1.9	33
39	Exploring dimethyl sulfide (DMS) oxidation and implications for global aerosol radiative forcing. Atmospheric Chemistry and Physics, 2022, 22, 1549-1573.	1.9	33
40	A comparison of isoprene nitrate concentrations at two forest-impacted sites. Journal of Geophysical Research, 2004, 109, .	3.3	32
41	Formaldehyde in the Tropical Western Pacific: Chemical Sources and Sinks, Convective Transport, and Representation in CAMâ€Chem and the CCMI Models. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11201-11226.	1.2	32
42	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
43	Observations of APAN during TexAQS 2000. Geophysical Research Letters, 2001, 28, 4195-4198.	1.5	31
44	The Global Budget of Atmospheric Methanol: New Constraints on Secondary, Oceanic, and Terrestrial Sources. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033439.	1.2	31
45	Quality Assurance of Hydrocarbon Measurements for the German Tropospheric Research Focus (TFS). Journal of Atmospheric Chemistry, 2002, 42, 255-279.	1.4	30
46	Interactions of bromine, chlorine, and iodine photochemistry during ozone depletions in Barrow, Alaska. Atmospheric Chemistry and Physics, 2015, 15, 9651-9679.	1.9	29
47	The O2/N2 Ratio and CO2 Airborne Southern Ocean Study. Bulletin of the American Meteorological Society, 2018, 99, 381-402.	1.7	28
48	A comparison of very short lived halocarbon (VSLS) and DMS aircraft measurements in the tropical west Pacific from CAST, ATTREX and CONTRAST. Atmospheric Measurement Techniques, 2016, 9, 5213-5225.	1.2	27
49	Airborne quantification of upper tropospheric NO_x production from lightning in deep convective storms over the United States Great Plains. Journal of Geophysical Research D: Atmospheres, 2016, 121, 2002-2028.	1.2	25
50	Missing OH reactivity in the global marine boundary layer. Atmospheric Chemistry and Physics, 2020, 20, 4013-4029.	1.9	25
51	Hydrocarbon Measurements During the 1992 Southern Oxidants Study Atlanta Intensive: Protocol and Quality Assurance. Journal of the Air and Waste Management Association, 1995, 45, 521-528.	0.9	24
52	Exploring Oxidation in the Remote Free Troposphere: Insights From Atmospheric Tomography (ATom). Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031685.	1.2	23
53	Reactive halogens increase the global methane lifetime and radiative forcing in the 21st century. Nature Communications, 2022, 13, 2768.	5.8	20
54	Evaluating the Impact of Chemical Complexity and Horizontal Resolution on Tropospheric Ozone Over the Conterminous US With a Global Variable Resolution Chemistry Model. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	20

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55	Bimodal distribution of free tropospheric ozone over the tropical western Pacific revealed by airborne observations. Geophysical Research Letters, 2015, 42, 7844-7851.	1.5	18
56	An observationally constrained evaluation of the oxidative capacity in the tropical western Pacific troposphere. Journal of Geophysical Research D: Atmospheres, 2016, 121, 7461-7488.	1.2	18
57	Ocean Biogeochemistry Control on the Marine Emissions of Brominated Very Shortâ€Lived Ozoneâ€Depleting Substances: A Machineâ€Learning Approach. Journal of Geophysical Research D: Atmospheres, 2019, 124, 12319-12339.	1.2	17
58	Global Atmospheric Budget of Acetone: Airâ€Sea Exchange and the Contribution to Hydroxyl Radicals. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032553.	1.2	17
59	Observations and Modeling of NO_x Photochemistry and Fate in Fresh Wildfire Plumes. ACS Earth and Space Chemistry, 2021, 5, 2652-2667.	1.2	17
60	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
61	Airborne measurements of BrO and the sum of HOBr and Br₂ over the Tropical West Pacific from 1 to 15â€‰km during the CONvective TRansport of Active Species in the Tropics (CONTRAST) experiment. Journal of Geophysical Research D: Atmospheres, 2016, 121, 12,560.	1.2	16
62	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
63	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.	1.2	14
64	HCOOH in the Remote Atmosphere: Constraints from Atmospheric Tomography (ATom) Airborne Observations. ACS Earth and Space Chemistry, 2021, 5, 1436-1454.	1.2	13
65	Empirical Insights Into the Fate of Ammonia in Western U.S. Wildfire Smoke Plumes. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033730.	1.2	12
66	Exposure to Particulate Matter and Estimation of Volatile Organic Compounds across Wildland Firefighter Job Tasks. Environmental Science & Technology, 2021, 55, 11795-11804.	4.6	9
67	Source and variability of formaldehyde (HCHO) at northern high latitudes: an integrated satellite, aircraft, and model study. Atmospheric Chemistry and Physics, 2022, 22, 7163-7178.	1.9	9
68	Use of Airborne In Situ VOC Measurements to Estimate Transit Time Spectrum: An Observationâ€Based Diagnostic of Convective Transport. Geophysical Research Letters, 2018, 45, 13,150.	1.5	8
69	Urban Snowpack ClNO2 Production and Fate: A One-Dimensional Modeling Study. ACS Earth and Space Chemistry, 2020, 4, 1140-1148.	1.2	8
70	Evidence for an Oceanic Source of Methyl Ethyl Ketone to the Atmosphere. Geophysical Research Letters, 2020, 47, e2019GL086045.	1.5	8
71	Evidence of Nighttime Production of Organic Nitrates During SEAC 4 RS, FRAPPÃ‰, and KORUSâ€AQ. Geophysical Research Letters, 2020, 47, e2020GL087860.	1.5	7
72	The CU Airborne Solar Occultation Flux Instrument: Performance Evaluation during BB-FLUX. ACS Earth and Space Chemistry, 2022, 6, 582-596.	1.2	7

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73	Unpiloted Aircraft System Instrument for the Rapid Collection of Whole Air Samples and Measurements for Environmental Monitoring and Air Quality Studies. Environmental Science & Technology, 2021, 55, 5657-5667.	4.6	6
74	The Role of Snow in Controlling Halogen Chemistry and Boundary Layer Oxidation During Arctic Spring: A 1D Modeling Case Study. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	6
75	Wintertime Transport of Reactive Trace Gases From East Asia Into the Deep Tropics. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,877.	1.2	5
76	Wildfire-driven changes in the abundance of gas-phase pollutants in the city of Boise, ID during summer 2018. Atmospheric Pollution Research, 2022, 13, 101269.	1.8	5
77	Ozone depletion due to dust release of iodine in the free troposphere. Science Advances, 2021, 7, eabj6544.	4.7	5
78	Initial Results From the Nonâ€Methane Hydrocarbon Intercomparison Experiment. Journal of the Chinese Chemical Society, 1994, 41, 279-286.	0.8	4
79	A Lagrangian Model Diagnosis of Stratospheric Contributions to Tropical Midtropospheric Air. Journal of Geophysical Research D: Atmospheres, 2018, 123, 9764-9785.	1.2	4
80	Deriving Tropospheric Transit Time Distributions Using Airborne Trace Gas Measurements: Uncertainty and Information Content. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034358.	1.2	2