J P Digangi

List of Publications by Year
in descending order

76 papers	2,663 citations	172457 29 h-index	233421 45 g-index
130 all docs	130 docs citations	130 times ranked	3274 citing authors

#	Article	IF	Citations
1	The NASA Atmospheric Tomography (ATom) Mission: Imaging the Chemistry of the Global Atmosphere. Bulletin of the American Meteorological Society, 2022, 103, E761-E790.	3.3	39
2	Observations of atmospheric oxidation and ozone production in South Korea. Atmospheric Environment, 2022, 269, 118854.	4.1	6
3	Field observational constraints on the controllers in glyoxal (CHOCHO) reactive uptake to aerosol. Atmospheric Chemistry and Physics, 2022, 22, 805-821.	4.9	5
4	Cold Air Outbreaks Promote New Particle Formation Off the U.S. East Coast. Geophysical Research Letters, 2022, 49, .	4.0	9
5	Airborne Emission Rate Measurements Validate Remote Sensing Observations and Emission Inventories of Western U.S. Wildfires. Environmental Science & Technology, 2022, 56, 7564-7577.	10.0	15
6	Characteristics and evolution of brown carbon in western United States wildfires. Atmospheric Chemistry and Physics, 2022, 22, 8009-8036.	4.9	21
7	Aircraft-based observation of meteoric material in lower-stratospheric aerosol particles between 15 and 68Â°â€‰N. Atmospheric Chemistry and Physics, 2021, 21, 989-1013.	4.9	18
8	Wintertime Formaldehyde: Airborne Observations and Source Apportionment Over the Eastern United States. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033518.	3.3	9
9	Measurement report: Long-range transport patterns into the tropical northwest Pacific during the CAMP²Ex aircraft campaign: chemical composition, size distributions, and the impact of convection. Atmospheric Chemistry and Physics, 2021, 21, 3777-3802.	4.9	22
10	Airborne Testing of 2-Î¼m Pulsed IPDA Lidar for Active Remote Sensing of Atmospheric Carbon Dioxide. Atmosphere, 2021, 12, 412.	2.3	10
11	Airborne Measurements of Contrail Ice Propertiesâ€”Dependence on Temperature and Humidity. Geophysical Research Letters, 2021, 48, e2020GL092166.	4.0	16
12	Large hemispheric difference in nucleation mode aerosol concentrations in the lowermost stratosphere at mid- and high latitudes. Atmospheric Chemistry and Physics, 2021, 21, 9065-9088.	4.9	8
13	Fossil Versus Nonfossil CO Sources in the US: New Airborne Constraints From ACTâ€America and GEM. Geophysical Research Letters, 2021, 48, e2021GL093361.	4.0	8
14	Satellite soil moisture data assimilation impacts on modeling weather variables and ozone in the southeastern US â€“ PartÂ1: An overview. Atmospheric Chemistry and Physics, 2021, 21, 11013-11040.	4.9	5
15	Atmospheric Carbon and Transport â€“ America (ACTâ€America) Data Sets: Description, Management, and Delivery. Earth and Space Science, 2021, 8, e2020EA001634.	2.6	15
16	The Atmospheric Carbon and Transport (ACT)-America Mission. Bulletin of the American Meteorological Society, 2021, 102, E1714-E1734.	3.3	17
17	Examining CO₂ Model Observation Residuals Using ACTâ€America Data. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034481.	3.3	4
18	Ambient aerosol properties in the remote atmosphere from global-scale in situ measurements. Atmospheric Chemistry and Physics, 2021, 21, 15023-15063.	4.9	15

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19	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, .	7.1	28
20	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.	4.9	34
21	Novel Analysis to Quantify Plume Crosswind Heterogeneity Applied to Biomass Burning Smoke. Environmental Science & Technology, 2021, 55, 15646-15657.	10.0	11
22	Seasonal Variability in Local Carbon Dioxide Biomass Burning Sources Over Central and Eastern US Using Airborne In Situ Enhancement Ratios. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034525.	3.3	8
23	Ozone chemistry in western U.S. wildfire plumes. Science Advances, 2021, 7, eabl3648.	10.3	45
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, .	7.1	51
25	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.	4.9	24
26	Reconciling Assumptions in Bottomâ€Up and Topâ€Down Approaches for Estimating Aerosol Emission Rates From Wildland Fires Using Observations From FIREXâ€AQ. Journal of Geophysical Research D: Atmospheres, 2021, 126, .	3.3	10
27	Multispecies Assessment of Factors Influencing Regional CO₂ and CH₄ Enhancements During the Winter 2017 ACTâ€America Campaign. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031339.	3.3	23
28	Exploring Oxidation in the Remote Free Troposphere: Insights From Atmospheric Tomography (ATom). Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031685.	3.3	23
29	High Temporal Resolution Satellite Observations of Fire Radiative Power Reveal Link Between Fire Behavior and Aerosol and Gas Emissions. Geophysical Research Letters, 2020, 47, e2020GL090707.	4.0	30
30	Global Atmospheric Budget of Acetone: Airâ€Sea Exchange and the Contribution to Hydroxyl Radicals. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032553.	3.3	17
31	Missing OH reactivity in the global marine boundary layer. Atmospheric Chemistry and Physics, 2020, 20, 4013-4029.	4.9	25
32	Numerical simulation of atmospheric CO2 concentration and flux over the Korean Peninsula using WRF-VPRM model during Korus-AQ 2016 campaign. PLoS ONE, 2020, 15, e0228106.	2.5	12
33	Spatial heterogeneity in CO₂, CH₄, and energy fluxes: insights from airborne eddy covariance measurements over the Mid-Atlantic region. Environmental Research Letters, 2020, 15, 035008.	5.2	19
34	Observations of Greenhouse Gas Changes Across Summer Frontal Boundaries in the Eastern United States. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD030526.	3.3	34
35	Dynamical Downscaling of CO₂ in 2016 Over the Contiguous United States Using WRFâ€VPRM, a Weatherâ€Biosphereâ€Onlineâ€Coupled Model. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001875.	3.8	21
36	Cropland Carbon Uptake Delayed and Reduced by 2019 Midwest Floods. AGU Advances, 2020, 1, e2019AV000140.	5.4	41

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37	Observation-based modeling of ozone chemistry in the Seoul metropolitan area during the Korea-United States Air Quality Study (KORUS-AQ). Elementa, 2020, 8, .	3.2	32
38	Investigation of factors controlling PM2.5 variability across the South Korean Peninsula during KORUS-AQ. Elementa, 2020, 8, .	3.2	44
39	Validation of satellite formaldehyde (HCHO) retrievals using observations from 12 aircraft campaigns. Atmospheric Chemistry and Physics, 2020, 20, 12329-12345.	4.9	21
40	Autonomous airborne mid-infrared spectrometer for high-precision measurements of ethane during the NASA ACT-America studies. Atmospheric Measurement Techniques, 2020, 13, 6095-6112.	3.1	2
41	Validation of XCO₂ and XCH₄ retrieved from a portable Fourier transform spectrometer with those from in situ profiles from aircraft-borne instruments. Atmospheric Measurement Techniques, 2020, 13, 5149-5163.	3.1	3
42	Using Shortâ€Term CO/CO₂ Ratios to Assess Air Mass Differences Over the Korean Peninsula During KORUSâ€AQ. Journal of Geophysical Research D: Atmospheres, 2019, 124, 10951-10972.	3.3	31
43	The distribution of sea-salt aerosol in the global troposphere. Atmospheric Chemistry and Physics, 2019, 19, 4093-4104.	4.9	68
44	Adaptation and performance assessment of a quantum and interband cascade laser spectrometer for simultaneous airborne in situ observation of CH₄, C₂H₆, CO₂, CO and N₂O. Atmospheric Measurement Techniques, 2019, 12, 1767-1783.	3.1	29
45	Evaluation of Regional CO 2 Mole Fractions in the ECMWF CAMS Realâ€Time Atmospheric Analysis and NOAA CarbonTracker Nearâ€Realâ€Time Reanalysis With Airborne Observations From ACTâ€America Field Campaigns. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8119-8133.	3.3	15
46	Source Contributions to Carbon Monoxide Concentrations During KORUSâ€AQ Based on CAMâ€chem Model Applications. Journal of Geophysical Research D: Atmospheres, 2019, 124, 2796-2822.	3.3	21
47	Estimating Methane Emissions From Underground Coal and Natural Gas Production in Southwestern Pennsylvania. Geophysical Research Letters, 2019, 46, 4531-4540.	4.0	32
48	Forward Modeling and Optimization of Methane Emissions in the South Central United States Using Aircraft Transects Across Frontal Boundaries. Geophysical Research Letters, 2019, 46, 13564-13573.	4.0	18
49	Anthropogenic Control Over Wintertime Oxidation of Atmospheric Pollutants. Geophysical Research Letters, 2019, 46, 14826-14835.	4.0	28
50	Wintertime Overnight NO_{<i>x</i>} Removal in a Southeastern United States Coalâ€fired Power Plant Plume: A Model for Understanding Winter NO_{<i>x</i>} Processing and its Implications. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1412-1425.	3.3	14
51	Characteristics of greenhouse gas concentrations derived from ground-based FTS spectra at Anmyeondo, South Korea. Atmospheric Measurement Techniques, 2018, 11, 2361-2374.	3.1	7
52	Secondary organic aerosol production from local emissions dominates the organic aerosol budget over Seoul, South Korea, during KORUS-AQ. Atmospheric Chemistry and Physics, 2018, 18, 17769-17800.	4.9	105
53	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
54	Heterogeneous Ice Nucleation in the Tropical Tropopause Layer. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,210.	3.3	16

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55	Evaluating high-resolution forecasts of atmospheric CO and CO₂ from a global prediction system during KORUS-AQ field campaign. Atmospheric Chemistry and Physics, 2018, 18, 11007-11030.	4.9	35
56	The NASA Airborne Tropical Tropopause Experiment: High-Altitude Aircraft Measurements in the Tropical Western Pacific. Bulletin of the American Meteorological Society, 2017, 98, 129-143.	3.3	79
57	Physical processes controlling the spatial distributions of relative humidity in the tropical tropopause layer over the Pacific. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6094-6107.	3.3	20
58	Dynamical conditions of ice supersaturation and ice nucleation in convective systems: A comparative analysis between in situ aircraft observations and WRF simulations. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2844-2866.	3.3	9
59	On the Susceptibility of Cold Tropical Cirrus to Ice Nuclei Abundance. Journals of the Atmospheric Sciences, 2016, 73, 2445-2464.	1.7	28
60	An assessment of the radiative effects of ice supersaturation based on in situ observations. Geophysical Research Letters, 2016, 43, 11,039.	4.0	8
61	Impacts of the Denver Cyclone on regional air quality and aerosol formation in the Colorado Front Range during FRAPPÃ‰Â2014. Atmospheric Chemistry and Physics, 2016, 16, 12039-12058.	4.9	24
62	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.	7.1	91
63	Aircraft measurements of BrO, IO, glyoxal, NO₂, H₂O, O₂â€“O₂ and aerosol extinction profiles in the tropics: comparison with aircraft-/ship-based in situ and lidar measurements. Atmospheric Measurement Techniques, 2015, 8, 2121-2148.	3.1	107
64	Convective transport of water vapor into the lower stratosphere observed during double-tropopause events. Journal of Geophysical Research D: Atmospheres, 2014, 119, 10,941-10,958.	3.3	63
65	On the temperature dependence of organic reactivity, nitrogen oxides, ozone production, and the impact of emission controls in San Joaquin Valley, California. Atmospheric Chemistry and Physics, 2014, 14, 3373-3395.	4.9	92
66	Missing peroxy radical sources within a summertime ponderosa pine forest. Atmospheric Chemistry and Physics, 2014, 14, 4715-4732.	4.9	56
67	Overview of the Manitou Experimental Forest Observatory: site description and selected science results from 2008 to 2013. Atmospheric Chemistry and Physics, 2014, 14, 6345-6367.	4.9	62
68	Evaluation of HO_x sources and cycling using measurement-constrained model calculations in a 2-methyl-3-butene-2-ol (MBO) and monoterpene (MT) dominated ecosystem. Atmospheric Chemistry and Physics, 2013, 13, 2031-2044.	4.9	62
69	Comparison of different real time VOC measurement techniques in a ponderosa pine forest. Atmospheric Chemistry and Physics, 2013, 13, 2893-2906.	4.9	83
70	Observations of glyoxal and formaldehyde as metrics for the anthropogenic impact on rural photochemistry. Atmospheric Chemistry and Physics, 2012, 12, 9529-9543.	4.9	71
71	Insights into hydroxyl measurements and atmospheric oxidation in a California forest. Atmospheric Chemistry and Physics, 2012, 12, 8009-8020.	4.9	211
72	Observations and modeling of formaldehyde at the PROPHET mixed hardwood forest site in 2008. Atmospheric Environment, 2012, 49, 403-410.	4.1	9

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73	First direct measurements of formaldehyde flux via eddy covariance: implications for missing in-canopy formaldehyde sources. Atmospheric Chemistry and Physics, 2011, 11, 10565-10578.	4.9	101
74	Photochemical modeling of glyoxal at a rural site: observations and analysis from BEARPEX 2007. Atmospheric Chemistry and Physics, 2011, 11, 8883-8897.	4.9	41
75	A Laser Induced Fluorescence-Based Instrument for In-Situ Measurements of Atmospheric Formaldehyde. Environmental Science & Technology, 2009, 43, 790-795.	10.0	72
76	Laser-Induced Phosphorescence for the in Situ Detection of Glyoxal at Part per Trillion Mixing Ratios. Analytical Chemistry, 2008, 80, 5884-5891.	6.5	67