Daniel J Jacob

List of Publications by Year
in descending order

174 papers	28,772 citations	3919 88 h-index	6113 159 g-index
178 all docs	178 docs citations	178 times ranked	14585 citing authors

#	Article	IF	Citations
1	Transport of continental air to the subantarctic Indian Ocean. Tellus, Series B: Chemical and Physical Meteorology, 2022, 42, 62.	0.8	34
2	Catalytic role of formaldehyde in particulate matter formation. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	19
3	Methane emissions in the United States, Canada, and Mexico: evaluation of national methane emission inventories and 2010â€“2017 sectoral trends by inverse analysis of in situ (GLOBALVIEWplus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Atmospheric Chemistry and Physics, 2022, 22, 395-418.	1.9	25
4	Updated Global Fuel Exploitation Inventory (GFEI) for methane emissions from the oil, gas, and coal sectors: evaluation with inversions of atmospheric methane observations. Atmospheric Chemistry and Physics, 2022, 22, 3235-3249.	1.9	22
5	Aerosolâ€Radiation Interactions in China in Winter: Competing Effects of Reduced Shortwave Radiation and Cloudâ€Snowfallâ€Albedo Feedbacks Under Rapidly Changing Emissions. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	5
6	An Onlineâ€Learned Neural Network Chemical Solver for Stable Longâ€Term Global Simulations of Atmospheric Chemistry. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	10
7	The 2019 methane budget and uncertainties at 1Â° resolution and each country through Bayesian integration Of GOSAT total column methane data and a priori inventory estimates. Atmospheric Chemistry and Physics, 2022, 22, 6811-6841.	1.9	24
8	Multisatellite Imaging of a Gas Well Blowout Enables Quantification of Total Methane Emissions. Geophysical Research Letters, 2021, 48, e2020GL090864.	1.5	39
9	Aqueous production of secondary organic aerosol from fossil-fuel emissions in winter Beijing haze. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	75
10	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
11	Ozone pollution in the North China Plain spreading into the late-winter haze season. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	138
12	Global methane budget and trend, 2010â€“2017: complementarity of inverse analyses using in situ (GLOBALVIEWplus CH₄ ObsPack) and satellite (GOSAT) observations. Atmospheric Chemistry and Physics, 2021, 21, 4637-4657.	1.9	55
13	2010â€“2015 North American methane emissions, sectoral contributions, and trends: a high-resolution inversion of GOSAT observations of atmospheric methane. Atmospheric Chemistry and Physics, 2021, 21, 4339-4356.	1.9	45
14	Attribution of the accelerating increase in atmospheric methane during 2010â€“2018 by inverse analysis of GOSAT observations. Atmospheric Chemistry and Physics, 2021, 21, 3643-3666.	1.9	68
15	High-frequency monitoring of anomalous methane point sources with multispectral Sentinel-2 satellite observations. Atmospheric Measurement Techniques, 2021, 14, 2771-2785.	1.2	57
16	Control of particulate nitrate air pollution in China. Nature Geoscience, 2021, 14, 389-395.	5.4	139
17	Concurrent variation in oil and gas methane emissions and oil price during the COVID-19 pandemic. Atmospheric Chemistry and Physics, 2021, 21, 6605-6626.	1.9	55
18	Satellite-based survey of extreme methane emissions in the Permian basin. Science Advances, 2021, 7, .	4.7	66

#	Article	IF	Citations
19	Unravelling a large methane emission discrepancy in Mexico using satellite observations. Remote Sensing of Environment, 2021, 260, 112461.	4.6	49
20	Improved Mechanistic Model of the Atmospheric Redox Chemistry of Mercury. Environmental Science & Technology, 2021, 55, 14445-14456.	4.6	65
21	Understanding Sources of Atmospheric Hydrogen Chloride in Coastal Spring and Continental Winter. ACS Earth and Space Chemistry, 2021, 5, 2507-2516.	1.2	4
22	Satellite Constraints on the Latitudinal Distribution and Temperature Sensitivity of Wetland Methane Emissions. AGU Advances, 2021, 2, e2021AV000408.	2.3	31
23	Harmonized Emissions Component (HEMCO) 3.0 as a versatile emissions component for atmospheric models: application in the GEOS-Chem, NASA GEOS, WRF-GC, CESM2, NOAA GEFS-Aerosol, and NOAA UFS models. Geoscientific Model Development, 2021, 14, 5487-5506.	1.3	23
24	Global distribution of methane emissions: a comparative inverse analysis of observations from the TROPOMI and GOSAT satellite instruments. Atmospheric Chemistry and Physics, 2021, 21, 14159-14175.	1.9	54
25	Relating geostationary satellite measurements of aerosol optical depth (AOD) over East Asia to fine particulate matter (PM_{2.5}): insights from the KORUS-AQ aircraft campaign and GEOS-Chem model simulations. Atmospheric Chemistry and Physics, 2021, 21, 16775-16791.	1.9	18
26	A Bayesian framework for deriving sector-based methane emissions from top-down fluxes. Communications Earth & Environment, 2021, 2, .	2.6	12
27	Development and evaluation of a new compact mechanism for aromatic oxidation in atmospheric models. Atmospheric Chemistry and Physics, 2021, 21, 18351-18374.	1.9	19
28	Modeling the OH-Initiated Oxidation of Mercury in the Global Atmosphere without Violating Physical Laws. Journal of Physical Chemistry A, 2020, 124, 444-453.	1.1	33
29	Quantifying Time-Averaged Methane Emissions from Individual Coal Mine Vents with GHGSat-D Satellite Observations. Environmental Science & Technology, 2020, 54, 10246-10253.	4.6	46
30	Photochemistry of oxidized Hg(I) and Hg(II) species suggests missing mercury oxidation in the troposphere. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30949-30956.	3.3	50
31	Toward Stable, General Machineâ€Learned Models of the Atmospheric Chemical System. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032759.	1.2	25
32	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
33	Global Importance of Hydroxymethanesulfonate in Ambient Particulate Matter: Implications for Air Quality. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032706.	1.2	28
34	Fast sulfate formation from oxidation of SO2 by NO2 and HONO observed in Beijing haze. Nature Communications, 2020, 11, 2844.	5.8	161
35	Effect of changing NO_{<i>x</i>} lifetime on the seasonality and long-term trends of satellite-observed tropospheric NO₂ columns over China. Atmospheric Chemistry and Physics, 2020, 20, 1483-1495.	1.9	135
36	Effects of Anthropogenic Chlorine on PM_{2.5} and Ozone Air Quality in China. Environmental Science & Technology, 2020, 54, 9908-9916.	4.6	38

#	Article	IF	Citations
37	Enabling Highâ€Performance Cloud Computing for Earth Science Modeling on Over a Thousand Cores: Application to the GEOSâ€Chem Atmospheric Chemistry Model. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002064.	1.3	23
38	Quantifying methane emissions from the largest oil-producing basin in the United States from space. Science Advances, 2020, 6, eaaz5120.	4.7	155
39	A gridded inventory of anthropogenic methane emissions from Mexico based on Mexicoâ€™s national inventory of greenhouse gases and compounds. Environmental Research Letters, 2020, 15, 105015.	2.2	19
40	Increases in surface ozone pollution in China from 2013 to 2019: anthropogenic and meteorological influences. Atmospheric Chemistry and Physics, 2020, 20, 11423-11433.	1.9	294
41	Global modeling of cloud water acidity, precipitation acidity, and acid inputs to ecosystems. Atmospheric Chemistry and Physics, 2020, 20, 12223-12245.	1.9	33
42	An adaptive method for speeding up the numerical integration of chemical mechanisms in atmospheric chemistry models: application to GEOS-Chem version 12.0.0. Geoscientific Model Development, 2020, 13, 2475-2486.	1.3	7
43	Global distribution of methane emissions, emission trends, and OH concentrations and trends inferred from an inversion of GOSAT satellite data for 2010â€“2015. Atmospheric Chemistry and Physics, 2019, 19, 7859-7881.	1.9	111
44	Fine particulate matter (PM_{2.5}) trends in China, 2013â€“2018: separating contributions from anthropogenic emissions and meteorology. Atmospheric Chemistry and Physics, 2019, 19, 11031-11041.	1.9	442
45	A new model mechanism for atmospheric oxidation of isoprene: global effects on oxidants, nitrogen oxides, organic products, and secondary organic aerosol. Atmospheric Chemistry and Physics, 2019, 19, 9613-9640.	1.9	117
46	The 2005â€“2016 Trends of Formaldehyde Columns Over China Observed by Satellites: Increasing Anthropogenic Emissions of Volatile Organic Compounds and Decreasing Agricultural Fire Emissions. Geophysical Research Letters, 2019, 46, 4468-4475.	1.5	66
47	Possible heterogeneous chemistry of hydroxymethanesulfonate (HMS) in northern China winter haze. Atmospheric Chemistry and Physics, 2019, 19, 1357-1371.	1.9	97
48	Satelliteâ€Observed Changes in Mexico's Offshore Gas Flaring Activity Linked to Oil/Gas Regulations. Geophysical Research Letters, 2019, 46, 1879-1888.	1.5	32
49	Potential of next-generation imaging spectrometers to detect and quantify methane point sources from space. Atmospheric Measurement Techniques, 2019, 12, 5655-5668.	1.2	58
50	A two-pollutant strategy for improving ozone and particulate air quality in China. Nature Geoscience, 2019, 12, 906-910.	5.4	493
51	Anthropogenic drivers of 2013â€“2017 trends in summer surface ozone in China. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 422-427.	3.3	990
52	Detecting high-emitting methane sources in oil/gas fields using satellite observations. Atmospheric Chemistry and Physics, 2018, 18, 16885-16896.	1.9	39
53	High-resolution inversion of methane emissions in the Southeast US using SEAC⁴RS aircraft observations of atmospheric methane: anthropogenic and wetland sources. Atmospheric Chemistry and Physics, 2018, 18, 6483-6491.	1.9	38
54	Comparative analysis of low-Earth orbit (TROPOMI) and geostationary (GeoCARB, GEO-CAPE) satellite instruments for constraining methane emissions on fine regional scales: application to the Southeast US. Atmospheric Measurement Techniques, 2018, 11, 6379-6388.	1.2	17

#	Article	IF	Citations
55	GEOS-Chem High Performance (GCHP v11-02c): a next-generation implementation of the GEOS-Chem chemical transport model for massively parallel applications. Geoscientific Model Development, 2018, 11, 2941-2953.	1.3	58
56	Quantifying methane point sources from fine-scale satellite observations of atmospheric methane plumes. Atmospheric Measurement Techniques, 2018, 11, 5673-5686.	1.2	142
57	Photoreduction of gaseous oxidized mercury changes global atmospheric mercury speciation, transport and deposition. Nature Communications, 2018, 9, 4796.	5.8	107
58	Insignificant effect of climate change on winter haze pollution in Beijing. Atmospheric Chemistry and Physics, 2018, 18, 17489-17496.	1.9	37
59	Contribution of Hydroxymethane Sulfonate to Ambient Particulate Matter: A Potential Explanation for High Particulate Sulfur During Severe Winter Haze in Beijing. Geophysical Research Letters, 2018, 45, 11,969.	1.5	72
60	Errors and improvements in the use of archived meteorological data for chemical transport modeling: an analysis using GEOS-ChemÂv11-01 driven by GEOS-5 meteorology. Geoscientific Model Development, 2018, 11, 305-319.	1.3	49
61	Assessment of methane emissions from the U.S. oil and gas supply chain. Science, 2018, 361, 186-188.	6.0	519
62	Short history of NASA applied science teams for air quality and health. Journal of Applied Remote Sensing, 2018, 12, 1.	0.6	11
63	Burden of Disease from Rising Coal-Fired Power Plant Emissions in Southeast Asia. Environmental Science & Technology, 2017, 51, 1467-1476.	4.6	122
64	Ambiguity in the causes for decadal trends in atmospheric methane and hydroxyl. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5367-5372.	3.3	213
65	Unmask temporal trade-offs in climate policy debates. Science, 2017, 356, 492-493.	6.0	80
66	Formaldehyde (HCHO) As a Hazardous Air Pollutant: Mapping Surface Air Concentrations from Satellite and Inferring Cancer Risks in the United States. Environmental Science & Technology, 2017, 51, 5650-5657.	4.6	131
67	Multidecadal trends in aerosol radiative forcing over the Arctic: Contribution of changes in anthropogenic aerosol to Arctic warming since 1980. Journal of Geophysical Research D: Atmospheres, 2017, 122, 3573-3594.	1.2	70
68	Global budget of tropospheric ozone: Evaluating recent model advances with satellite (OMI), aircraft (IAGOS), and ozonesonde observations. Atmospheric Environment, 2017, 167, 323-334.	1.9	74
69	Longâ€term (2005â€“2014) trends in formaldehyde (HCHO) columns across North America as seen by the OMI satellite instrument: Evidence of changing emissions of volatile organic compounds. Geophysical Research Letters, 2017, 44, 7079-7086.	1.5	68
70	A new mechanism for atmospheric mercury redox chemistry: implications for the global mercury budget. Atmospheric Chemistry and Physics, 2017, 17, 6353-6371.	1.9	296
71	Representing effects of aqueous phase reactions in shallow cumuli in global models. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5769-5787.	1.2	3
72	Planning, implementation, and scientific goals of the Studies of Emissions and Atmospheric Composition, Clouds and Climate Coupling by Regional Surveys (SEAC⁴RS) field mission. Journal of Geophysical Research D: Atmospheres, 2016, 121, 4967-5009.	1.2	158

#	Article	IF	Citations
73	A mass budget for mercury and methylmercury in the Arctic Ocean. Global Biogeochemical Cycles, 2016, 30, 560-575.	1.9	110
74	Gridded National Inventory of U.S. Methane Emissions. Environmental Science & Technology, 2016, 50, 13123-13133.	4.6	165
75	Global impacts of tropospheric halogens (Cl, Br, I) on oxidants and composition in GEOS-Chem. Atmospheric Chemistry and Physics, 2016, 16, 12239-12271.	1.9	231
76	Observing atmospheric formaldehyde (HCHO) from space: validation and intercomparison of six retrievals from four satellites (OMI, GOME2A, GOME2B, OMPS) with SEAC⁴RS aircraft observations over the southeast US. Atmospheric Chemistry and Physics, 2016, 16, 13477-13490.	1.9	99
77	Why do models overestimate surface ozone in the Southeast United States?. Atmospheric Chemistry and Physics, 2016, 16, 13561-13577.	1.9	320
78	Satellite observations of atmospheric methane and their value for quantifying methane emissions. Atmospheric Chemistry and Physics, 2016, 16, 14371-14396.	1.9	230
79	Organic nitrate chemistry and its implications for nitrogen budgets in an isoprene- and monoterpene-rich atmosphere: constraints from aircraft (SEAC⁴RS) and ground-based (SOAS) observations in the Southeast US. Atmospheric Chemistry and Physics, 2016, 16, 5969-5991.	1.9	173
80	Observed decrease in atmospheric mercury explained by global decline in anthropogenic emissions. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 526-531.	3.3	284
81	A decline in Arctic Ocean mercury suggested by differences in decadal trends of atmospheric mercury between the Arctic and northern midlatitudes. Geophysical Research Letters, 2015, 42, 6076-6083.	1.5	21
82	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
83	Global budget and radiative forcing of black carbon aerosol: Constraints from poleâ€toâ€pole (HIPPO) observations across the Pacific. Journal of Geophysical Research D: Atmospheres, 2014, 119, 195-206.	1.2	193
84	Annual distributions and sources of Arctic aerosol components, aerosol optical depth, and aerosol absorption. Journal of Geophysical Research D: Atmospheres, 2014, 119, 4107-4124.	1.2	79
85	Legacy impacts of allâ€time anthropogenic emissions on the global mercury cycle. Global Biogeochemical Cycles, 2013, 27, 410-421.	1.9	377
86	Mercury as a Global Pollutant: Sources, Pathways, and Effects. Environmental Science & Technology, 2013, 47, 4967-4983.	4.6	1,729
87	Factors driving mercury variability in the Arctic atmosphere and ocean over the past 30 years. Global Biogeochemical Cycles, 2013, 27, 1226-1235.	1.9	37
88	Ozone and organic nitrates over the eastern United States: Sensitivity to isoprene chemistry. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,256.	1.2	213
89	Interannual variability in tropical tropospheric ozone and OH: The role of lightning. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,468.	1.2	66
90	Multiâ€decadal decline of mercury in the North Atlantic atmosphere explained by changing subsurface seawater concentrations. Geophysical Research Letters, 2012, 39, .	1.5	85

#	Article	IF	Citations
91	Optimized regional and interannual variability of lightning in a global chemical transport model constrained by LIS/OTD satellite data. Journal of Geophysical Research, 2012, 117, .	3.3	310
92	Resolving intercontinental pollution plumes in global models of atmospheric transport. Journal of Geophysical Research, 2010, 115, .	3.3	82
93	Synthesis of satellite (MODIS), aircraft (ICARTT), and surface (IMPROVE, EPAâ€AQS, AERONET) aerosol observations over eastern North America to improve MODIS aerosol retrievals and constrain surface aerosol concentrations and sources. Journal of Geophysical Research, 2010, 115, .	3.3	144
94	Anthropogenic impacts on global storage and emissions of mercury from terrestrial soils: Insights from a new global model. Journal of Geophysical Research, 2010, 115, .	3.3	140
95	Intercontinental source attribution of ozone pollution at western U.S. sites using an adjoint method. Geophysical Research Letters, 2009, 36, .	1.5	105
96	Transition metalâ€catalyzed oxidation of atmospheric sulfur: Global implications for the sulfur budget. Journal of Geophysical Research, 2009, 114, .	3.3	176
97	Chemical nonlinearities in relating intercontinental ozone pollution to anthropogenic emissions. Geophysical Research Letters, 2009, 36, .	1.5	63
98	Global 3â€D landâ€oceanâ€atmosphere model for mercury: Presentâ€day versus preindustrial cycles and anthropogenic enrichment factors for deposition. Global Biogeochemical Cycles, 2008, 22, .	1.9	174
99	Intercomparison of SCIAMACHY and OMI tropospheric NO₂ columns: Observing the diurnal evolution of chemistry and emissions from space. Journal of Geophysical Research, 2008, 113, .	3.3	165
100	Effects of 2000â€“2050 global change on ozone air quality in the United States. Journal of Geophysical Research, 2008, 113, .	3.3	186
101	Spatial distribution of isoprene emissions from North America derived from formaldehyde column measurements by the OMI satellite sensor. Journal of Geophysical Research, 2008, 113, .	3.3	234
102	Global distribution of solid and aqueous sulfate aerosols: Effect of the hysteresis of particle phase transitions. Journal of Geophysical Research, 2008, 113, .	3.3	84
103	Sensitivity of sulfate direct climate forcing to the hysteresis of particle phase transitions. Journal of Geophysical Research, 2008, 113, .	3.3	67
104	Global budget of ethane and regional constraints on U.S. sources. Journal of Geophysical Research, 2008, 113, .	3.3	164
105	Improved algorithm for MODIS satellite retrievals of aerosol optical depths over western North America. Journal of Geophysical Research, 2008, 113, .	3.3	77
106	Effects of 2000â€“2050 changes in climate and emissions on global tropospheric ozone and the policyâ€relevant background surface ozone in the United States. Journal of Geophysical Research, 2008, 113, .	3.3	118
107	Chemical cycling and deposition of atmospheric mercury: Global constraints from observations. Journal of Geophysical Research, 2007, 112, .	3.3	351
108	Air-sea exchange in the global mercury cycle. Global Biogeochemical Cycles, 2007, 21, .	1.9	193

#	Article	IF	Citations
109	Inventory of boreal fire emissions for North America in 2004: Importance of peat burning and pyroconvective injection. Journal of Geophysical Research, 2007, 112, .	3.3	194
110	Why are there large differences between models in global budgets of tropospheric ozone?. Journal of Geophysical Research, 2007, 112, .	3.3	257
111	Space-based formaldehyde measurements as constraints on volatile organic compound emissions in east and south Asia and implications for ozone. Journal of Geophysical Research, 2007, 112, .	3.3	232
112	Atmospheric acetylene and its relationship with CO as an indicator of air mass age. Journal of Geophysical Research, 2007, 112, .	3.3	117
113	The impact of transpacific transport of mineral dust in the United States. Atmospheric Environment, 2007, 41, 1251-1266.	1.9	426
114	First directly retrieved global distribution of tropospheric column ozone from GOME: Comparison with the GEOS-CHEM model. Journal of Geophysical Research, 2006, 111, .	3.3	61
115	Quantifying the seasonal and interannual variability of North American isoprene emissions using satellite observations of the formaldehyde column. Journal of Geophysical Research, 2006, 111, .	3.3	240
116	Using CO2:CO correlations to improve inverse analyses of carbon fluxes. Journal of Geophysical Research, 2006, 111, .	3.3	67
117	Transpacific transport of Asian anthropogenic aerosols and its impact on surface air quality in the United States. Journal of Geophysical Research, 2006, 111, .	3.3	203
118	Formaldehyde distribution over North America: Implications for satellite retrievals of formaldehyde columns and isoprene emission. Journal of Geophysical Research, 2006, 111, .	3.3	172
119	Ozone-CO correlations determined by the TES satellite instrument in continental outflow regions. Geophysical Research Letters, 2006, 33, n/a-n/a.	1.5	92
120	Global lifetime of elemental mercury against oxidation by atomic bromine in the free troposphere. Geophysical Research Letters, 2006, 33, .	1.5	177
121	North American pollution outflow and the trapping of convectively lifted pollution by upper-level anticyclone. Journal of Geophysical Research, 2005, 110, .	3.3	156
122	Export efficiency of black carbon aerosol in continental outflow: Global implications. Journal of Geophysical Research, 2005, 110, .	3.3	171
123	Influence of reduced carbon emissions and oxidation on the distribution of atmospheric CO2: Implications for inversion analyses. Global Biogeochemical Cycles, 2005, 19, n/a-n/a.	1.9	35
124	Convective outflow of South Asian pollution: A global CTM simulation compared with EOS MLS observations. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	206
125	Validation of Multiangle Imaging Spectroradiometer (MISR) aerosol optical thickness measurements using Aerosol Robotic Network (AERONET) observations over the contiguous United States. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	68
126	Constraints on the sources of tropospheric ozone from210Pb-7Be-O3correlations. Journal of Geophysical Research, 2004, 109, .	3.3	21

#	Article	IF	Citations
127	Export of NOyfrom the North American boundary layer: Reconciling aircraft observations and global model budgets. Journal of Geophysical Research, 2004, 109, .	3.3	75
128	Improved quantification of Chinese carbon fluxes using CO2/CO correlations in Asian outflow. Journal of Geophysical Research, 2004, 109, .	3.3	131
129	Impact of Asian emissions on observations at Trinidad Head, California, during ITCT 2K2. Journal of Geophysical Research, 2004, 109, .	3.3	83
130	Natural and transboundary pollution influences on sulfate-nitrate-ammonium aerosols in the United States: Implications for policy. Journal of Geophysical Research, 2004, 109, .	3.3	791
131	Constraints on Asian and European sources of methane from CH4-C2H6-CO correlations in Asian outflow. Journal of Geophysical Research, 2004, 109, .	3.3	40
132	Comparative inverse analysis of satellite (MOPITT) and aircraft (TRACE-P) observations to estimate Asian sources of carbon monoxide. Journal of Geophysical Research, 2004, 109, .	3.3	217
133	Interactions between tropospheric chemistry and aerosols in a unified general circulation model. Journal of Geophysical Research, 2003, 108, AAC 1-1.	3.3	152
134	Mapping isoprene emissions over North America using formaldehyde column observations from space. Journal of Geophysical Research, 2003, 108, .	3.3	346
135	Global and regional decreases in tropospheric oxidants from photochemical effects of aerosols. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	457
136	A global three-dimensional model analysis of the atmospheric budgets of HCN and CH3CN: Constraints from aircraft and ground measurements. Journal of Geophysical Research, 2003, 108, .	3.3	126
137	Biomass burning emission inventory with daily resolution: Application to aircraft observations of Asian outflow. Journal of Geophysical Research, 2003, 108, .	3.3	100
138	An intercomparison and evaluation of aircraft-derived and simulated CO from seven chemical transport models during the TRACE-P experiment. Journal of Geophysical Research, 2003, 108, .	3.3	78
139	Sources and budgets for CO and O3in the northeastern Pacific during the spring of 2001: Results from the PHOBEA-II Experiment. Journal of Geophysical Research, 2003, 108, .	3.3	84
140	Application of empirical orthogonal functions to evaluate ozone simulations with regional and global models. Journal of Geophysical Research, 2003, 108, .	3.3	77
141	Sources of carbonaceous aerosols over the United States and implications for natural visibility. Journal of Geophysical Research, 2003, 108, .	3.3	468
142	Transport and Chemical Evolution over the Pacific (TRACE-P) aircraft mission: Design, execution, and first results. Journal of Geophysical Research, 2003, 108, .	3.3	510
143	Seasonal and interannual variability of North American isoprene emissions as determined by formaldehyde column measurements from space. Geophysical Research Letters, 2003, 30, n/a-n/a.	1.5	125
144	Inverting for emissions of carbon monoxide from Asia using aircraft observations over the western Pacific. Journal of Geophysical Research, 2003, 108, .	3.3	178

#	Article	IF	Citations
145	Global inventory of nitrogen oxide emissions constrained by space-based observations of NO2columns. Journal of Geophysical Research, 2003, 108, .	3.3	442
146	Eastern Asian emissions of anthropogenic halocarbons deduced from aircraft concentration data. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	67
147	Potential of observations from the Tropospheric Emission Spectrometer to constrain continental sources of carbon monoxide. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	77
148	Transport pathways for Asian pollution outflow over the Pacific: Interannual and seasonal variations. Journal of Geophysical Research, 2003, 108, .	3.3	331
149	Atmospheric budget of acetone. Journal of Geophysical Research, 2002, 107, ACH 5-1-ACH 5-17.	3.3	290
150	Background ozone over the United States in summer: Origin, trend, and contribution to pollution episodes. Journal of Geophysical Research, 2002, 107, ACH 11-1.	3.3	353
151	An improved retrieval of tropospheric nitrogen dioxide from GOME. Journal of Geophysical Research, 2002, 107, ACH 9-1.	3.3	355
152	Transatlantic transport of pollution and its effects on surface ozone in Europe and North America. Journal of Geophysical Research, 2002, 107, ACH 4-1.	3.3	253
153	Interpretation of TOMS observations of tropical tropospheric ozone with a global model and in situ observations. Journal of Geophysical Research, 2002, 107, ACH 4-1.	3.3	174
154	Sources of tropospheric ozone along the Asian Pacific Rim: An analysis of ozonesonde observations. Journal of Geophysical Research, 2002, 107, ACH 3-1-ACH 3-19.	3.3	121
155	Linking ozone pollution and climate change: The case for controlling methane. Geophysical Research Letters, 2002, 29, 25-1-25-4.	1.5	220
156	Stratospheric versus pollution influences on ozone at Bermuda: Reconciling past analyses. Journal of Geophysical Research, 2002, 107, ACH 1-1.	3.3	53
157	Global chemical model analysis of biomass burning and lightning influences over the South Pacific in austral spring. Journal of Geophysical Research, 2002, 107, ACH 11-1.	3.3	36
158	Global modeling of tropospheric chemistry with assimilated meteorology: Model description and evaluation. Journal of Geophysical Research, 2001, 106, 23073-23095.	3.3	1,927
159	Constraints from210Pb and7Be on wet deposition and transport in a global three-dimensional chemical tracer model driven by assimilated meteorological fields. Journal of Geophysical Research, 2001, 106, 12109-12128.	3.3	637
160	A tropospheric ozone maximum over the Middle East. Geophysical Research Letters, 2001, 28, 3235-3238.	1.5	122
161	ATMOSPHERIC CHEMISTRY: Enhanced: The NO2 Flux Conundrum. Science, 2000, 289, 2291-2293.	6.0	111
162	Atmospheric hydrogen cyanide (HCN): Biomass burning source, ocean sink?. Geophysical Research Letters, 2000, 27, 357-360.	1.5	159

#	Article	IF	Citations
163	Detection of a lightning influence on tropical tropospheric ozone. Geophysical Research Letters, 2000, 27, 1639-1642.	1.5	51
164	Increasing background ozone in surface air over the United States. Geophysical Research Letters, 2000, 27, 3465-3468.	1.5	91
165	Satellite observations of formaldehyde over North America from GOME. Geophysical Research Letters, 2000, 27, 3461-3464.	1.5	218
166	A persistent imbalance in HOxand NOxphotochemistry of the upper troposphere driven by deep tropical convection. Geophysical Research Letters, 1997, 24, 3189-3192.	1.5	165
167	A global three-dimensional model of tropospheric sulfate. Journal of Geophysical Research, 1996, 101, 18667-18690.	3.3	284
168	Seasonal transition from NOx- to hydrocarbon-limited conditions for ozone production over the eastern United States in September. Journal of Geophysical Research, 1995, 100, 9315.	3.3	150
169	Surface ozone depletion in Arctic spring sustained by bromine reactions on aerosols. Nature, 1992, 359, 522-524.	13.7	433
170	Tropospheric Chemistry: 4 Years of U.S. Research, 1987â€“1990. Reviews of Geophysics, 1991, 29, 2-11.	9.0	4
171	A record of the atmospheric methane sink from formaldehyde in polar ice cores. Nature, 1991, 349, 603-605.	13.7	140
172	Radon-222 as a test of convective transport in a general circulation model. Tellus, Series B: Chemical and Physical Meteorology, 1990, 42, 118-134.	0.8	68
173	The H₂SO₄â€HNO₃â€NH₃ system at high humidities and in fogs: 2. Comparison of field data with thermodynamic calculations. Journal of Geophysical Research, 1986, 91, 1089-1096.	3.3	54
174	Comment on â€œThe photochemistry of a remote stratiform cloudâ€•by William L. Chameides. Journal of Geophysical Research, 1985, 90, 5864-5864.	3.3	30