Daven Henze

List of Publications by Year
in descending order

161 papers	10,227 citations	41344 49 h-index	46799 89 g-index
171 all docs	171 docs citations	171 times ranked	9352 citing authors

#	Article	IF	Citations
1	Impacts and mitigation of excess diesel-related NOx emissions in 11 major vehicle markets. Nature, 2017, 545, 467-471.	27.8	487
2	Global Estimates and Long-Term Trends of Fine Particulate Matter Concentrations (1998â€“2018). Environmental Science & Technology, 2020, 54, 7879-7890.	10.0	431
3	Development of the adjoint of GEOS-Chem. Atmospheric Chemistry and Physics, 2007, 7, 2413-2433.	4.9	378
4	Global modeling of secondary organic aerosol formation from aromatic hydrocarbons: high- vs. low-yield pathways. Atmospheric Chemistry and Physics, 2008, 8, 2405-2420.	4.9	366
5	Ammonia emissions in the United States, European Union, and China derived by highâ€resolution inversion of ammonium wet deposition data: Interpretation with a new agricultural emissions inventory (MASAGE_NH3). Journal of Geophysical Research D: Atmospheres, 2014, 119, 4343-4364.	3.3	333
6	Emissions estimation from satellite retrievals: A review of current capability. Atmospheric Environment, 2013, 77, 1011-1042.	4.1	323
7	Effect of changes in climate and emissions on future sulfateâ€nitrateâ€ammonium aerosol levels in the United States. Journal of Geophysical Research, 2009, 114, .	3.3	319
8	Global estimates of CO sources with high resolution by adjoint inversion of multiple satellite datasets (MOPITT, AIRS, SCIAMACHY, TES). Atmospheric Chemistry and Physics, 2010, 10, 855-876.	4.9	288
9	Inverse modeling and mapping US air quality influences of inorganic PM_{2.5} precursor emissions using the adjoint of GEOS-Chem. Atmospheric Chemistry and Physics, 2009, 9, 5877-5903.	4.9	226
10	Agricultural ammonia emissions in China: reconciling bottom-up and top-down estimates. Atmospheric Chemistry and Physics, 2018, 18, 339-355.	4.9	220
11	Origin and radiative forcing of black carbon transported to the Himalayas and Tibetan Plateau. Atmospheric Chemistry and Physics, 2011, 11, 2837-2852.	4.9	212
12	Estimates of the Global Burden of Ambient PM2.5, Ozone, and NO2 on Asthma Incidence and Emergency Room Visits. Environmental Health Perspectives, 2018, 126, 107004.	6.0	209
13	Updated Global Estimates of Respiratory Mortality in Adults â‰¥30Years of Age Attributable to Long-Term Ozone Exposure. Environmental Health Perspectives, 2017, 125, 087021.	6.0	195
14	Preterm birth associated with maternal fine particulate matter exposure: A global, regional and national assessment. Environment International, 2017, 101, 173-182.	10.0	192
15	Formation of Low Volatility Organic Compounds and Secondary Organic Aerosol from Isoprene Hydroxyhydroperoxide Low-NO Oxidation. Environmental Science & Technology, 2015, 49, 10330-10339.	10.0	172
16	Comparison of adjoint and analytical Bayesian inversion methods for constraining Asian sources of carbon monoxide using satellite (MOPITT) measurements of CO columns. Journal of Geophysical Research, 2009, 114, .	3.3	143
17	Carbonaceous aerosols in China: top-down constraints on primary sources and estimation of secondary contribution. Atmospheric Chemistry and Physics, 2012, 12, 2725-2746.	4.9	137
18	Unexpected slowdown of US pollutant emission reduction in the past decade. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5099-5104.	7.1	137

#	ARTICLE	IF	CITATIONS
19	TES ammonia retrieval strategy and global observations of the spatial and seasonal variability of ammonia. Atmospheric Chemistry and Physics, 2011, 11, 10743-10763.	4.9	129
20	Inferring regional sources and sinks of atmospheric CO₂ from GOSAT XCO₂ data. Atmospheric Chemistry and Physics, 2014, 14, 3703-3727.	4.9	120
21	The Adjoint of CMAQ. Environmental Science & Technology, 2007, 41, 7807-7817.	10.0	118
22	Source attribution of particulate matter pollution over North China with the adjoint method. Environmental Research Letters, 2015, 10, 084011.	5.2	117
23	Inequality of household consumption and air pollution-related deaths in China. Nature Communications, 2019, 10, 4337.	12.8	114
24	Impact of the isoprene photochemical cascade on tropical ozone. Atmospheric Chemistry and Physics, 2012, 12, 1307-1325.	4.9	111
25	Constraining U.S. ammonia emissions using TES remote sensing observations and the GEOSâ€Chem adjoint model. Journal of Geophysical Research D: Atmospheres, 2013, 118, 3355-3368.	3.3	110
26	Transient climate and ambient health impacts due to national solid fuel cookstove emissions. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 1269-1274.	7.1	107
27	Intercontinental source attribution of ozone pollution at western U.S. sites using an adjoint method. Geophysical Research Letters, 2009, 36, .	4.0	105
28	Response of Global Particulate-Matter-Related Mortality to Changes in Local Precursor Emissions. Environmental Science & Technology, 2015, 49, 4335-4344.	10.0	100
29	Assessing public health burden associated with exposure to ambient black carbon in the United States. Science of the Total Environment, 2016, 539, 515-525.	8.0	98
30	A 15-year record of CO emissions constrained by MOPITT CO observations. Atmospheric Chemistry and Physics, 2017, 17, 4565-4583.	4.9	92
31	The influence of boreal biomass burning emissions on the distribution of tropospheric ozone over North America and the North Atlantic during 2010. Atmospheric Chemistry and Physics, 2012, 12, 2077-2098.	4.9	90
32	Constraints on aerosol sources using GEOSâ€Chem adjoint and MODIS radiances, and evaluation with multisensor (OMI, MISR) data. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6396-6413.	3.3	89
33	Particulate matter-attributable mortality and relationships with carbon dioxide in 250 urban areas worldwide. Scientific Reports, 2019, 9, 11552.	3.3	89
34	Sources and Processes Affecting Fine Particulate Matter Pollution over North China: An Adjoint Analysis of the Beijing APEC Period. Environmental Science & Technology, 2016, 50, 8731-8740.	10.0	87
35	Topâ€down estimate of dust emissions through integration of MODIS and MISR aerosol retrievals with the GEOSâ€Chem adjoint model. Geophysical Research Letters, 2012, 39, .	4.0	84
36	Validation of TES methane with HIPPO aircraft observations: implications for inverse modeling of methane sources. Atmospheric Chemistry and Physics, 2012, 12, 1823-1832.	4.9	83

#	Article	IF	Citations
37	The influence of air quality model resolution on health impact assessment for fine particulate matter and its components. Air Quality, Atmosphere and Health, 2016, 9, 51-68.	3.3	81
38	Scientific assessment of background ozone over the U.S.: Implications for air quality management. Elementa, 2018, 6, 56.	3.2	80
39	Sources and Processes Contributing to Nitrogen Deposition: An Adjoint Model Analysis Applied to Biodiversity Hotspots Worldwide. Environmental Science & Technology, 2013, 47, 3226-3233.	10.0	78
40	Methods, availability, and applications of PM_{2.5} exposure estimates derived from ground measurements, satellite, and atmospheric models. Journal of the Air and Waste Management Association, 2019, 69, 1391-1414.	1.9	73
41	Sources and Impacts of Atmospheric NH3: Current Understanding and Frontiers for Modeling, Measurements, and Remote Sensing in North America. Current Pollution Reports, 2015, 1, 95-116.	6.6	69
42	Retrieval of desert dust and carbonaceous aerosol emissions over Africa from POLDER/PARASOL products generated by the GRASP algorithm. Atmospheric Chemistry and Physics, 2018, 18, 12551-12580.	4.9	63
43	Impact of model errors in convective transport on CO source estimates inferred from MOPITT CO retrievals. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2073-2083.	3.3	62
44	Secondary organic aerosols from anthropogenic volatile organic compounds contribute substantially to air pollution mortality. Atmospheric Chemistry and Physics, 2021, 21, 11201-11224.	4.9	60
45	Quantifying the impact of model errors on top-down estimates of carbon monoxide emissions using satellite observations. Journal of Geophysical Research, 2011, 116, .	3.3	59
46	Monthly topâ€down NO_{<i>x</i>} emissions for China (2005â€“2012): A hybrid inversion method and trend analysis. Journal of Geophysical Research D: Atmospheres, 2017, 122, 4600-4625.	3.3	59
47	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mtext>PM</mml:mtext></mml:mrow><mml:mrow><mml:mn>2</mm source attribution for Seoul in May from 2009 to 2013 using GEOS-Chem and its adjoint model. Environmental Pollution, 2017, 221, 377-384.	7.5	58
48	Source attribution of Arctic black carbon constrained by aircraft and surface measurements. Atmospheric Chemistry and Physics, 2017, 17, 11971-11989.	4.9	58
49	Improving simulations of fine dust surface concentrations over the western United States by optimizing the particle size distribution. Geophysical Research Letters, 2013, 40, 3270-3275.	4.0	56
50	Impacts of midlatitude precursor emissions and local photochemistry on ozone abundances in the Arctic. Journal of Geophysical Research, 2012, 117, .	3.3	55
51	Quantifying spatial and seasonal variability in atmospheric ammonia with in situ and space-based observations. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	54
52	HTAP2 multi-model estimates of premature human mortality due to intercontinental transport of air pollution and emission sectors. Atmospheric Chemistry and Physics, 2018, 18, 10497-10520.	4.9	54
53	Intercomparison of Magnitudes and Trends in Anthropogenic Surface Emissions From Bottomâ€Up Inventories, Topâ€Down Estimates, and Emission Scenarios. Earth's Future, 2020, 8, e2020EF001520.	6.3	54
54	Spatially Refined Aerosol Direct Radiative Forcing Efficiencies. Environmental Science & Technology, 2012, 46, 9511-9518.	10.0	53

#	Article	IF	Citations
55	Atmospheric nitrogen deposition to the northwestern Pacific: seasonal variation and source attribution. Atmospheric Chemistry and Physics, 2015, 15, 10905-10924.	4.9	51
56	Impact of intercontinental pollution transport on North American ozone air pollution: an HTAP phase 2 multi-model study. Atmospheric Chemistry and Physics, 2017, 17, 5721-5750.	4.9	51
57	Multi-model study of HTAPÂII on sulfur and nitrogen deposition. Atmospheric Chemistry and Physics, 2018, 18, 6847-6866.	4.9	49
58	Improved analysisâ€error covariance matrix for highâ€dimensional variational inversions: application to source estimation using a 3D atmospheric transport model. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 1906-1921.	2.7	48
59	The impact of future emission policies on tropospheric ozone using a parameterised approach. Atmospheric Chemistry and Physics, 2018, 18, 8953-8978.	4.9	47
60	SO₂ Emission Estimates Using OMI SO₂ Retrievals for 2005â€“2017. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8336-8359.	3.3	47
61	Adjoint inversion of Chinese non-methane volatile organic compound emissions using space-based observations of formaldehyde and glyoxal. Atmospheric Chemistry and Physics, 2018, 18, 15017-15046.	4.9	46
62	Assessment of source contributions to seasonal vegetative exposure to ozone in the U.S.. Journal of Geophysical Research D: Atmospheres, 2014, 119, 324-340.	3.3	43
63	Natural and Anthropogenic Ethanol Sources in North America and Potential Atmospheric Impacts of Ethanol Fuel Use. Environmental Science & Technology, 2012, 46, 8484-8492.	10.0	42
64	Global and regional radiative forcing from 20â€¯% reductions in BC, OC and SO₄ â€“ an HTAP2 multi-model study. Atmospheric Chemistry and Physics, 2016, 16, 13579-13599.	4.9	42
65	Constraining global aerosol emissions using POLDER/PARASOL satellite remote sensing observations. Atmospheric Chemistry and Physics, 2019, 19, 14585-14606.	4.9	42
66	Societal shifts due to COVID-19 reveal large-scale complexities and feedbacks between atmospheric chemistry and climate change. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	42
67	Sources of springtime surface black carbon in the Arctic: an adjoint analysis for April 2008. Atmospheric Chemistry and Physics, 2017, 17, 9697-9716.	4.9	41
68	Persistent sensitivity of Asian aerosol to emissions of nitrogen oxides. Geophysical Research Letters, 2013, 40, 1021-1026.	4.0	40
69	Constraining black carbon aerosol over Asia using OMI aerosol absorption optical depth and the adjoint of GEOS-Chem. Atmospheric Chemistry and Physics, 2015, 15, 10281-10308.	4.9	39
70	Comparing mass balance and adjoint methods for inverse modeling of nitrogen dioxide columns for global nitrogen oxide emissions. Journal of Geophysical Research D: Atmospheres, 2017, 122, 4718-4734.	3.3	38
71	Tropospheric Emission Spectrometer (TES) satellite observations of ammonia, methanol, formic acid, and carbon monoxide over the Canadian oil sands: validation and model evaluation. Atmospheric Measurement Techniques, 2015, 8, 5189-5211.	3.1	37
72	Quantifying global terrestrial methanol emissions using observations from the TES satellite sensor. Atmospheric Chemistry and Physics, 2014, 14, 2555-2570.	4.9	36

#	Article	IF	Citations
73	Attribution of direct ozone radiative forcing to spatially resolved emissions. Geophysical Research Letters, 2012, 39, .	4.0	35
74	Sensitivities of Ozone Air Pollution in the Beijingâ€“Tianjinâ€“Hebei Area to Local and Upwind Precursor Emissions Using Adjoint Modeling. Environmental Science & Technology, 2021, 55, 5752-5762.	10.0	35
75	Inverse Modeling of Aerosol Dynamics Using Adjoints: Theoretical and Numerical Considerations. Aerosol Science and Technology, 2005, 39, 677-694.	3.1	34
76	Impacts of Foreign, Domestic, and State-Level Emissions on Ozone-Induced Vegetation Loss in the United States. Environmental Science & Technology, 2016, 50, 806-813.	10.0	34
77	The effects of intercontinental emission sources on European air pollution levels. Atmospheric Chemistry and Physics, 2018, 18, 13655-13672.	4.9	34
78	Premature Deaths in Brazil Associated With Longâ€Term Exposure to PM_{2.5} From Amazon Fires Between 2016 and 2019. GeoHealth, 2020, 4, e2020GH000268.	4.0	34
79	ANISORROPIA: the adjoint of the aerosol thermodynamic model ISORROPIA. Atmospheric Chemistry and Physics, 2012, 12, 527-543.	4.9	33
80	Sensitivity of top-down CO source estimates to the modeled vertical structure in atmospheric CO. Atmospheric Chemistry and Physics, 2015, 15, 1521-1537.	4.9	33
81	Analysis of transpacific transport of black carbon during HIPPO-3: implications for black carbon aging. Atmospheric Chemistry and Physics, 2014, 14, 6315-6327.	4.9	32
82	Intra-urban spatial variability of surface ozone in Riverside, CA: viability and validation of low-cost sensors. Atmospheric Measurement Techniques, 2018, 11, 1777-1792.	3.1	31
83	Accounting for Climate and Air Quality Damages in Future U.S. Electricity Generation Scenarios. Environmental Science & Technology, 2013, 47, 3065-3072.	10.0	30
84	Regional data assimilation of multi-spectral MOPITT observations of CO over North America. Atmospheric Chemistry and Physics, 2015, 15, 6801-6814.	4.9	30
85	Development of the Low Emissions Analysis Platform â€" Integrated Benefits Calculator (LEAP-IBC) tool to assess air quality and climate co-benefits: Application for Bangladesh. Environment International, 2020, 145, 106155.	10.0	30
86	A new approach for monthly updates of anthropogenic sulfur dioxide emissions from space: Application to China and implications for air quality forecasts. Geophysical Research Letters, 2016, 43, 9931-9938.	4.0	29
87	Hybrid Mass Balance/4Dâ€Var Joint Inversion of NO_{<i>x</i>} and SO₂ Emissions in East Asia. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8203-8224.	3.3	29
88	The spatial extent of source influences on modeled column concentrations of shortâ€lived species. Geophysical Research Letters, 2012, 39, .	4.0	28
89	The cascade of global trade to large climate forcing over the Tibetan Plateau glaciers. Nature Communications, 2019, 10, 3281.	12.8	28
90	Prior biosphere model impact on global terrestrial CO₂ fluxes estimated from OCO-2 retrievals. Atmospheric Chemistry and Physics, 2019, 19, 13267-13287.	4.9	28

#	Article	IF	Citations
91	A fuel-based method for updating mobile source emissions during the COVID-19 pandemic. Environmental Research Letters, 2021, 16, 065018.	5.2	28
92	Global climate impacts of country-level primary carbonaceous aerosol from solid-fuel cookstove emissions. Environmental Research Letters, 2015, 10, 114003.	5.2	27
93	Inverse modeling of pan-Arctic methane emissions at high spatial resolution: what can we learn from assimilating satellite retrievals and using different process-based wetland and lake biogeochemical models?. Atmospheric Chemistry and Physics, 2016, 16, 12649-12666.	4.9	27
94	Inverse modeling of NH₃sources using CrIS remote sensing measurements. Environmental Research Letters, 2020, 15, 104082.	5.2	27
95	Extended Barbaralanes:Â Sigmatropic Shiftamers or Ïƒ-Polyacenes?. Journal of the American Chemical Society, 2004, 126, 4256-4263.	13.7	26
96	Topâ€down estimate of methane emissions in California using a mesoscale inverse modeling technique: The San Joaquin Valley. Journal of Geophysical Research D: Atmospheres, 2017, 122, 3686-3699.	3.3	26
97	Are 1,5-Disubstituted Semibullvalenes that HaveC2vEquilibrium Geometries Necessarily Bishomoaromatic?. Journal of the American Chemical Society, 2002, 124, 14977-14982.	13.7	25
98	GLIMPSE: A Rapid Decision Framework for Energy and Environmental Policy. Environmental Science & Technology, 2013, 47, 12011-12019.	10.0	25
99	How accounting for climate and health impacts of emissions could change the US energy system. Energy Policy, 2017, 102, 396-405.	8.8	25
100	Using Satellites to Track Indicators of Global Air Pollution and Climate Change Impacts: Lessons Learned From a NASAâ€Supported Scienceâ€Stakeholder Collaborative. GeoHealth, 2020, 4, e2020GH000270.	4.0	25
101	Satellite Monitoring for Air Quality and Health. Annual Review of Biomedical Data Science, 2021, 4, 417-447.	6.5	25
102	Constraints on Asian ozone using Aura TES, OMI and Terra MOPITT. Atmospheric Chemistry and Physics, 2015, 15, 99-112.	4.9	24
103	Implementation and evaluation of an array of chemical solvers in the Global Chemical Transport Model GEOS-Chem. Geoscientific Model Development, 2009, 2, 89-96.	3.6	23
104	Evaluation of tropospheric ozone and ozone precursors in simulations from the HTAPII and CCMI model intercomparisons â€“ a focus on the Indian subcontinent. Atmospheric Chemistry and Physics, 2019, 19, 6437-6458.	4.9	23
105	Sourceâ€receptor relationships of columnâ€average CO₂ and implications for the impact of observations on flux inversions. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5214-5236.	3.3	22
106	Top-down constraints on global N₂O emissions at optimal resolution: application of aÂ new dimension reduction technique. Atmospheric Chemistry and Physics, 2018, 18, 735-756.	4.9	22
107	High-resolution hybrid inversion of IASI ammonia columns to constrain US ammonia emissions using the CMAQ adjoint model. Atmospheric Chemistry and Physics, 2021, 21, 2067-2082.	4.9	22
108	Impacts of global NO_{<i>x</i>} inversions on NO₂ and ozone simulations. Atmospheric Chemistry and Physics, 2020, 20, 13109-13130.	4.9	22

#	Article	IF	Citations
109	Development and application of the WRFPLUS-Chem online chemistry adjoint and WRFDA-Chem assimilation system. Geoscientific Model Development, 2015, 8, 1857-1876.	3.6	21
110	Constraints on methane emissions in North America from future geostationary remote-sensing measurements. Atmospheric Chemistry and Physics, 2016, 16, 6175-6190.	4.9	21
111	Sources of nitrogen deposition in Federal Class I areas in the US. Atmospheric Chemistry and Physics, 2016, 16, 525-540.	4.9	21
112	The Multi-Scale Infrastructure for Chemistry and Aerosols (MUSICA). Bulletin of the American Meteorological Society, 2020, 101, E1743-E1760.	3.3	21
113	Sectorâ€Based Topâ€Down Estimates of NO_{<i>x</i>}, SO₂, and CO Emissions in East Asia. Geophysical Research Letters, 2022, 49, .	4.0	21
114	Differences Between Magnitudes and Health Impacts of BC Emissions Across the United States Using 12 km Scale Seasonal Source Apportionment. Environmental Science & Technology, 2015, 49, 4362-4371.	10.0	20
115	What factors control the trend of increasing AAOD over the United States in the last decade?. Journal of Geophysical Research D: Atmospheres, 2017, 122, 1797-1810.	3.3	20
116	Sensitivity analysis of the potential impact of discrepancies in stratosphereâ€“troposphere exchange on inferred sources and sinks of CO₂. Atmospheric Chemistry and Physics, 2015, 15, 11773-11788.	4.9	19
117	Improving present day and future estimates of anthropogenic sectoral emissions and the resulting air quality impacts in Africa. Faraday Discussions, 2017, 200, 397-412.	3.2	19
118	COVID-19 Lockdowns Afford the First Satellite-Based Confirmation That Vehicles Are an Under-recognized Source of Urban NH₃ Pollution in Los Angeles. Environmental Science and Technology Letters, 2022, 9, 3-9.	8.7	19
119	Inversion Estimates of Lognormally Distributed Methane Emission Rates From the Haynesvilleâ€Bossier Oil and Gas Production Region Using Airborne Measurements. Journal of Geophysical Research D: Atmospheres, 2019, 124, 3520-3531.	3.3	18
120	Assessment of Updated Fuelâ€Based Emissions Inventories Over the Contiguous United States Using TROPOMI NO₂ Retrievals. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035484.	3.3	18
121	Inverse modeling of SO₂ and NO_{<i>x</i>} emissions over China using multisensor satellite data â€“ Part 1: Formulation and sensitivity analysis. Atmospheric Chemistry and Physics, 2020, 20, 6631-6650.	4.9	16
122	Interannual variation of reactive nitrogen emissions and their impacts on PM_{2.5} air pollution in China during 2005â€“2015. Environmental Research Letters, 2021, 16, 125004.	5.2	16
123	Improved western U.S. background ozone estimates via constraining nonlocal and local source contributions using Aura TES and OMI observations. Journal of Geophysical Research D: Atmospheres, 2015, 120, 3572-3592.	3.3	15
124	Toronto area ozone: Longâ€term measurements and modeled sources of poor air quality events. Journal of Geophysical Research D: Atmospheres, 2015, 120, 11,368.	3.3	15
125	Simulation of atmospheric N₂O with GEOS-Chem and its adjoint: evaluation of observational constraints. Geoscientific Model Development, 2015, 8, 3179-3198.	3.6	15
126	Emission Impacts of Electric Vehicles in the US Transportation Sector Following Optimistic Cost and Efficiency Projections. Environmental Science & Technology, 2017, 51, 6665-6673.	10.0	15

#	Article	IF	Citations
127	Integrated assessment of global climate, air pollution, and dietary, malnutrition and obesity health impacts of food production and consumption between 2014 and 2018. Environmental Research Communications, 2021, 3, 075001.	2.3	15
128	A multiphase CMAQ version 5.0 adjoint. Geoscientific Model Development, 2020, 13, 2925-2944.	3.6	15
129	Premature deaths attributed to source-specific BC emissions in six urban US regions. Environmental Research Letters, 2015, 10, 114014.	5.2	14
130	Modeling the diurnal variability of agricultural ammonia in Bakersfield, California, during the CalNex campaign. Atmospheric Chemistry and Physics, 2017, 17, 2721-2739.	4.9	14
131	Assessing the Iterative Finite Difference Mass Balance and 4Dâ€Var Methods to Derive Ammonia Emissions Over North America Using Synthetic Observations. Journal of Geophysical Research D: Atmospheres, 2019, 124, 4222-4236.	3.3	14
132	Aircraft-based inversions quantify the importance of wetlands and livestock for Upper Midwest methane emissions. Atmospheric Chemistry and Physics, 2021, 21, 951-971.	4.9	14
133	Characterizing model errors in chemical transport modeling of methane: using GOSAT XCH₄ data with weak-constraint four-dimensional variational data assimilation. Atmospheric Chemistry and Physics, 2021, 21, 9545-9572.	4.9	14
134	Long-term observational constraints of organic aerosol dependence on inorganic species in the southeast US. Atmospheric Chemistry and Physics, 2020, 20, 13091-13107.	4.9	14
135	Decadal Variabilities in Tropospheric Nitrogen Oxides Over United States, Europe, and China. Journal of Geophysical Research D: Atmospheres, 2022, 127, e2021JD035872.	3.3	14
136	Estimates of black carbon emissions in the western United States using the GEOS-Chem adjoint model. Atmospheric Chemistry and Physics, 2015, 15, 7685-7702.	4.9	12
137	Impacts of anthropogenic and natural sources on free tropospheric ozone over the Middle East. Atmospheric Chemistry and Physics, 2016, 16, 6537-6546.	4.9	12
138	Sense size-dependent dust loading and emission from space using reflected solar and infrared spectral measurements: An observation system simulation experiment. Journal of Geophysical Research D: Atmospheres, 2017, 122, 8233-8254.	3.3	12
139	Optimal and scalable methods to approximate the solutions of largeâ€scale Bayesian problems: theory and application to atmospheric inversion and data assimilation. Quarterly Journal of the Royal Meteorological Society, 2018, 144, 365-390.	2.7	12
140	Long-range transport impacts on surface aerosol concentrations and the contributions to haze events in China: an HTAP2 multi-model study. Atmospheric Chemistry and Physics, 2018, 18, 15581-15600.	4.9	12
141	Inverse modeling of SO₂ and NO_{<i>x</i>} emissions over China using multisensor satellite data â€“ Part 2: Downscaling techniques for air quality analysis and forecasts. Atmospheric Chemistry and Physics, 2020, 20, 6651-6670.	4.9	12
142	How well can inverse analyses of high-resolution satellite data resolve heterogeneous methane fluxes? Observing system simulation experiments with the GEOS-Chem adjoint model (v35). Geoscientific Model Development, 2021, 14, 7775-7793.	3.6	11
143	Four-dimensional variational inversion of black carbon emissions during ARCTAS-CARB with WRFDA-Chem. Atmospheric Chemistry and Physics, 2017, 17, 7605-7633.	4.9	10
144	Two-scale multi-model ensemble: is a hybrid ensemble of opportunity telling us more?. Atmospheric Chemistry and Physics, 2018, 18, 8727-8744.	4.9	10

#	Article	IF	Citations
145	Assessing remote polarimetric measurement sensitivities to aerosol emissions using the geos-chem adjoint model. Atmospheric Measurement Techniques, 2013, 6, 3441-3457.	3.1	9
146	Quantifying Emissions of CO and NO_x Using Observations From MOPITT, OMI, TES, and OSIRIS. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1170-1193.	3.3	9
147	Mitigating the impacts of air pollutants in Nepal and climate co-benefits: a scenario-based approach. Air Quality, Atmosphere and Health, 2020, 13, 361-370.	3.3	9
148	Effects of a priori profile shape assumptions on comparisons between satellite NO₂ columns and model simulations. Atmospheric Chemistry and Physics, 2020, 20, 7231-7241.	4.9	9
149	Implications of RCP emissions for future changes in vegetative exposure to ozone in the western U.S.. Geophysical Research Letters, 2015, 42, 4190-4198.	4.0	8
150	Sources of black carbon during severe haze events in the Beijingâ€"Tianjinâ€"Hebei region using the adjoint method. Science of the Total Environment, 2020, 740, 140149.	8.0	8
151	Responses of Arctic black carbon and surface temperature to multi-region emission reductions: a Hemispheric Transport of Air Pollution Phase 2 (HTAP2) ensemble modeling study. Atmospheric Chemistry and Physics, 2021, 21, 8637-8654.	4.9	8
152	An Inversion Framework for Optimizing Nonâ€Methane VOC Emissions Using Remote Sensing and Airborne Observations in Northeast Asia During the KORUSâ€AQ Field Campaign. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	8
153	Using a global aerosol model adjoint to unravel the footprint of spatiallyâ€distributed emissions on cloud droplet number and cloud albedo. Geophysical Research Letters, 2012, 39, .	4.0	7
154	Transboundary transport of ozone pollution to a US border region: A case study of Yuma. Environmental Pollution, 2021, 273, 116421.	7.5	7
155	4Dâ€Var Inversion of European NH₃ Emissions Using CrIS NH₃ Measurements and GEOSâ€Chem Adjoint With Biâ€Directional and Uniâ€Directional Flux Schemes. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	7
156	The impact of observing characteristics on the ability to predict ozone under varying polluted photochemical regimes. Atmospheric Chemistry and Physics, 2015, 15, 10645-10667.	4.9	6
157	Enhanced parallelization of the incremental 4Dâ€Var data assimilation algorithm using the Randomized Incremental Optimal Technique. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 1351-1371.	2.7	6
158	Elucidating emissions control strategies for ozone to protect human health and public welfare within the continental United States. Environmental Research Letters, 2019, 14, 124093.	5.2	5
159	Response to Comment on â€œNatural and Anthropogenic Ethanol Sources in North America and Potential Atmospheric Impacts of Ethanol Fuel Useâ€. Environmental Science & Technology, 2013, 47, 2141-2141.	10.0	3
160	Enhanced Integration of Health, Climate, and Air Quality Management Planning at the Urban Scale. Frontiers in Sustainable Cities, 0, 4, .	2.4	3
161	Comparing health benefit calculations for alternative energy futures. Air Quality, Atmosphere and Health, 2020, 13, 773-787.	3.3	2