Daven Henze

List of Publications by Citations

161 papers	7,261 citations	45 h-index	80 g-index
171 ext. papers	8,861 ext. citations	7.1 avg, IF	5.99 L-index

#	Paper	IF	Citations
161	Global modeling of secondary organic aerosol formation from aromatic hydrocarbons: high- vs. low-yield pathways. *Atmospheric Chemistry and Physics*, **2008**, 8, 2405-2420	6.8	312
160	Development of the adjoint of GEOS-Chem. *Atmospheric Chemistry and Physics*, **2007**, 7, 2413-2433	6.8	301
159	Impacts and mitigation of excess diesel-related NO emissions in 11 major vehicle markets. *Nature*, **2017**, 545, 467-471	50.4	298
158	Emissions estimation from satellite retrievals: A review of current capability. *Atmospheric Environment*, **2013**, 77, 1011-1042	5.3	270
157	Effect of changes in climate and emissions on future sulfate-nitrate-ammonium aerosol levels in the United States. *Journal of Geophysical Research*, **2009**, 114,		259
156	Ammonia emissions in the United States, European Union, and China derived by high-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	4.4	250
155	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	6.8	241
154	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	6.8	193
153	Origin and radiative forcing of black carbon transported to the Himalayas and Tibetan Plateau. *Atmospheric Chemistry and Physics*, **2011**, 11, 2837-2852	6.8	180
152	Global Estimates and Long-Term Trends of Fine Particulate Matter Concentrations (1998-2018). *Environmental Science & Technology*, **2020**, 54, 7879-7890	10.3	143
151	Preterm birth associated with maternal fine particulate matter exposure: A global, regional and national assessment. *Environment International*, **2017**, 101, 173-182	12.9	142
150	Formation of Low Volatility Organic Compounds and Secondary Organic Aerosol from Isoprene Hydroxyhydroperoxide Low-NO Oxidation. *Environmental Science & Technology*, **2015**, 49, 10330-9	10.3	139
149	Estimates of the Global Burden of Ambient [Formula: see text], Ozone, and [Formula: see text] on Asthma Incidence and Emergency Room Visits. *Environmental Health Perspectives*, **2018**, 126, 107004	8.4	132
148	Agricultural ammonia emissions in China: reconciling bottom-up and top-down estimates. *Atmospheric Chemistry and Physics*, **2018**, 18, 339-355	6.8	128
147	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,		125
146	Updated Global Estimates of Respiratory Mortality in Adults ≥30Years of Age Attributable to Long-Term Ozone Exposure. *Environmental Health Perspectives*, **2017**, 125, 087021	8.4	121
145	Carbonaceous aerosols in China: top-down constraints on primary sources and estimation of secondary contribution. *Atmospheric Chemistry and Physics*, **2012**, 12, 2725-2746	6.8	117

144	TES ammonia retrieval strategy and global observations of the spatial and seasonal variability of ammonia. *Atmospheric Chemistry and Physics*, **2011**, 11, 10743-10763	6.8	107
143	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	11.5	103
142	Constraining U.S. ammonia emissions using TES remote sensing observations and the GEOS-Chem adjoint model. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 3355-3368	4.4	98
141	The adjoint of CMAQ. *Environmental Science & Technology*, **2007**, 41, 7807-17	10.3	96
140	Source attribution of particulate matter pollution over North China with the adjoint method. *Environmental Research Letters*, **2015**, 10, 084011	6.2	92
139	Inferring regional sources and sinks of atmospheric CO₂ from GOSAT XCO₂ data. *Atmospheric Chemistry and Physics*, **2014**, 14, 3703-3727	6.8	91
138	Impact of the isoprene photochemical cascade on tropical ozone. *Atmospheric Chemistry and Physics* , **2012**, 12, 1307-1325	6.8	91
137	Response of global particulate-matter-related mortality to changes in local precursor emissions. *Environmental Science & Technology*, **2015**, 49, 4335-44	10.3	88
136	Intercontinental source attribution of ozone pollution at western U.S. sites using an adjoint method. *Geophysical Research Letters*, **2009**, 36,	4.9	87
135	Constraints on aerosol sources using GEOS-Chem adjoint and MODIS radiances, and evaluation with multisensor (OMI, MISR) data. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 6396-6413	4.4	78
134	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	6.8	76
133	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	11.5	74
132	Validation of TES methane with HIPPO aircraft observations: implications for inverse modeling of methane sources. *Atmospheric Chemistry and Physics*, **2012**, 12, 1823-1832	6.8	71
131	Sources and Processes Affecting Fine Particulate Matter Pollution over North China: An Adjoint Analysis of the Beijing APEC Period. *Environmental Science & Technology*, **2016**, 50, 8731-40	10.3	70
130	Top-down estimate of dust emissions through integration of MODIS and MISR aerosol retrievals with the GEOS-Chem adjoint model. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	70
129	A 15-year record of CO emissions constrained by MOPITT CO observations. *Atmospheric Chemistry and Physics*, **2017**, 17, 4565-4583	6.8	69
128	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	5.6	64
127	Sources and processes contributing to nitrogen deposition: an adjoint model analysis applied to biodiversity hotspots worldwide. *Environmental Science & Technology*, **2013**, 47, 3226-33	10.3	64

126	Assessing public health burden associated with exposure to ambient black carbon in the United States. *Science of the Total Environment*, **2016**, 539, 515-525	10.2	62
125	Inequality of household consumption and air pollution-related deaths in China. *Nature Communications*, **2019**, 10, 4337	17.4	53
124	Quantifying the impact of model errors on top-down estimates of carbon monoxide emissions using satellite observations. *Journal of Geophysical Research*, **2011**, 116,		53
123	Scientific assessment of background ozone over the U.S.: Implications for air quality management. *Elementa*, **2018**, 6, 56	3.6	52
122	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	4.4	50
121	Monthly top-down NOx emissions for China (2005–2012): A hybrid inversion method and trend analysis. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 4600-4625	4.4	49
120	Particulate matter-attributable mortality and relationships with carbon dioxide in 250 urban areas worldwide. *Scientific Reports*, **2019**, 9, 11552	4.9	48
119	Source attribution of Arctic black carbon constrained by aircraft and surface measurements. *Atmospheric Chemistry and Physics*, **2017**, 17, 11971-11989	6.8	47
118	Impacts of midlatitude precursor emissions and local photochemistry on ozone abundances in the Arctic. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		46
117	Methods, availability, and applications of PM exposure estimates derived from ground measurements, satellite, and atmospheric models. *Journal of the Air and Waste Management Association*, **2019**, 69, 1391-1414	2.4	45
116	Spatially refined aerosol direct radiative forcing efficiencies. *Environmental Science & Technology*, **2012**, 46, 9511-8	10.3	45
115	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	4.9	44
114	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	6.8	44
113	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	7.6	43
112	Quantifying spatial and seasonal variability in atmospheric ammonia with in situ and space-based observations. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	43
111	Atmospheric nitrogen deposition to the northwestern Pacific: seasonal variation and source attribution. *Atmospheric Chemistry and Physics*, **2015**, 15, 10905-10924	6.8	41
110	Global and regional radiative forcing from 20 % reductions in BC, OC and SO₄ – an HTAP2 multi-model study. *Atmospheric Chemistry and Physics*, **2016**, 16, 13579-13599	6.8	37
109	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	6.8	36

108	Persistent sensitivity of Asian aerosol to emissions of nitrogen oxides. *Geophysical Research Letters*, **2013**, 40, 1021-1026	4.9	36
107	Assessment of source contributions to seasonal vegetative exposure to ozone in the U.S.. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 324-340	4.4	35
106	Improved analysis-error covariance matrix for high-dimensional variational inversions: application to source estimation using a 3D atmospheric transport model. *Quarterly Journal of the Royal Meteorological Society*, **2015**, 141, 1906-1921	6.4	35
105	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	6.8	34
104	Natural and anthropogenic ethanol sources inNorth America and potential atmospheric impacts of ethanol fuel use. *Environmental Science & Technology*, **2012**, 46, 8484-92	10.3	34
103	PM source attribution for Seoul in May from 2009 to 2013 using GEOS-Chem and its adjoint model. *Environmental Pollution*, **2017**, 221, 377-384	9.3	33
102	Sources of springtime surface black carbon in the Arctic: an adjoint analysis for April 2008. *Atmospheric Chemistry and Physics*, **2017**, 17, 9697-9716	6.8	33
101	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	6.8	33
100	Quantifying global terrestrial methanol emissions using observations from the TES satellite sensor. *Atmospheric Chemistry and Physics*, **2014**, 14, 2555-2570	6.8	31
99	Inverse Modeling of Aerosol Dynamics Using Adjoints: Theoretical and Numerical Considerations. *Aerosol Science and Technology*, **2005**, 39, 677-694	3.4	30
98	ANISORROPIA: the adjoint of the aerosol thermodynamic model ISORROPIA. *Atmospheric Chemistry and Physics*, **2012**, 12, 527-543	6.8	29
97	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	6.8	29
96	The impact of future emission policies on tropospheric ozone using a parameterised approach. *Atmospheric Chemistry and Physics*, **2018**, 18, 8953-8978	6.8	29
95	SO Emission Estimates Using OMI SO Retrievals for 2005-2017. *Journal of Geophysical Research D: Atmospheres*, **2019**, 124, 8336-8359	4.4	28
94	Analysis of transpacific transport of black carbon during HIPPO-3: implications for black carbon aging. *Atmospheric Chemistry and Physics*, **2014**, 14, 6315-6327	6.8	28
93	Attribution of direct ozone radiative forcing to spatially resolved emissions. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	28
92	Accounting for climate and air quality damages in future U.S. electricity generation scenarios. *Environmental Science & Technology*, **2013**, 47, 3065-72	10.3	28
91	Sensitivity of top-down CO source estimates to the modeled vertical structure in atmospheric CO. *Atmospheric Chemistry and Physics*, **2015**, 15, 1521-1537	6.8	27

90	Multi-model study of HTAP□I on sulfur and nitrogen deposition. *Atmospheric Chemistry and Physics*, **2018**, 18, 6847-6866	6.8	27
89	Intra-urban spatial variability of surface ozone in Riverside, CA: viability and validation of low-cost sensors. *Atmospheric Measurement Techniques*, **2018**, 11, 1777-1792	4	26
88	Global climate impacts of country-level primary carbonaceous aerosol from solid-fuel cookstove emissions. *Environmental Research Letters*, **2015**, 10, 114003	6.2	24
87	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	4	24
86	The spatial extent of source influences on modeled column concentrations of short-lived species. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	24
85	Are 1,5-disubstituted semibullvalenes that have C2v equilibrium geometries necessarily bishomoaromatic?. *Journal of the American Chemical Society*, **2002**, 124, 14977-82	16.4	24
84	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	4.9	24
83	Constraining global aerosol emissions using POLDER/PARASOL satellite remote sensing observations. *Atmospheric Chemistry and Physics*, **2019**, 19, 14585-14606	6.8	24
82	Intercomparison of Magnitudes and Trends in Anthropogenic Surface Emissions From Bottom-Up Inventories, Top-Down Estimates, and Emission Scenarios. *Earth's Future*, **2020**, 8, e2020EF001520	7.9	23
81	GLIMPSE: a rapid decision framework for energy and environmental policy. *Environmental Science & Technology*, **2013**, 47, 12011-9	10.3	23
80	Regional data assimilation of multi-spectral MOPITT observations of CO over North America. *Atmospheric Chemistry and Physics*, **2015**, 15, 6801-6814	6.8	23
79	The effects of intercontinental emission sources on European air pollution levels. *Atmospheric Chemistry and Physics*, **2018**, 18, 13655-13672	6.8	23
78	Top-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	4.4	22
77	Extended barbaralanes: sigmatropic shiftamers or sigma-polyacenes?. *Journal of the American Chemical Society*, **2004**, 126, 4256-63	16.4	22
76	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	4.4	21
75	Impacts of Foreign, Domestic, and State-Level Emissions on Ozone-Induced Vegetation Loss in the United States. *Environmental Science & Technology*, **2016**, 50, 806-13	10.3	20
74	Source-receptor relationships of column-average CO2 and implications for the impact of observations on flux inversions. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 5214-5236	4.4	19
73	Implementation and evaluation of an array of chemical solvers in the Global Chemical Transport Model GEOS-Chem. *Geoscientific Model Development*, **2009**, 2, 89-96	6.3	19

72	Hybrid Mass Balance/4D-Var Joint Inversion of NO and SO Emissions in East Asia. *Journal of Geophysical Research D: Atmospheres*, **2019**, 124, 8203-8224	4.4	18
71	Evaluation of tropospheric ozone and ozone precursors in simulations from the HTAPII and CCMI model intercomparisons a focus on the Indian subcontinent. *Atmospheric Chemistry and Physics*, **2019**, 19, 6437-6458	6.8	17
70	Sensitivity analysis of the potential impact of discrepancies in stratosphere troposphere exchange on inferred sources and sinks of CO₂. *Atmospheric Chemistry and Physics*, **2015**, 15, 11773-11788	6.8	17
69	Constraints on Asian ozone using Aura TES, OMI and Terra MOPITT. *Atmospheric Chemistry and Physics*, **2015**, 15, 99-112	6.8	17
68	Premature Deaths in Brazil Associated With Long-Term Exposure to PM From Amazon Fires Between 2016 and 2019. *GeoHealth*, **2020**, 4, e2020GH000268	5	17
67	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	4.4	16
66	How accounting for climate and health impacts of emissions could change the US energy system. *Energy Policy*, **2017**, 102, 396-405	7.2	16
65	Top-down constraints on global N₂O emissions at optimal resolution: application of a new dimension reduction technique. *Atmospheric Chemistry and Physics*, **2018**, 18, 735-756	6.8	16
64	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	6.8	16
63	Sources of nitrogen deposition in Federal Class I areas in the US. *Atmospheric Chemistry and Physics*, **2016**, 16, 525-540	6.8	16
62	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, 4362-71	10.3	15
61	Constraints on methane emissions in North America from future geostationary remote-sensing measurements. *Atmospheric Chemistry and Physics*, **2016**, 16, 6175-6190	6.8	15
60	The cascade of global trade to large climate forcing over the Tibetan Plateau glaciers. *Nature Communications*, **2019**, 10, 3281	17.4	15
59	Impacts of global NO_{<i>x</i>} inversions on NO₂ and ozone simulations. *Atmospheric Chemistry and Physics*, **2020**, 20, 13109-13130	6.8	14
58	Premature deaths attributed to source-specific BC emissions in six urban US regions. *Environmental Research Letters*, **2015**, 10, 114014	6.2	13
57	Simulation of atmospheric N₂O with GEOS-Chem and its adjoint: evaluation of observational constraints. *Geoscientific Model Development*, **2015**, 8, 3179-3198	6.3	13
56	Development and application of the WRFPLUS-Chem online chemistry adjoint and WRFDA-Chem assimilation system. *Geoscientific Model Development*, **2015**, 8, 1857-1876	6.3	13
55	Prior biosphere model impact on global terrestrial CO₂ fluxes estimated from OCO-2 retrievals. *Atmospheric Chemistry and Physics*, **2019**, 19, 13267-13287	6.8	13

54	Emission Impacts of Electric Vehicles in the US Transportation Sector Following Optimistic Cost and Efficiency Projections. *Environmental Science & Technology*, **2017**, 51, 6665-6673	10.3	12
53	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	4.4	12
52	Toronto area ozone: Long-term measurements and modeled sources of poor air quality events. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 11,368-11,390	4.4	12
51	Secondary organic aerosols from anthropogenic volatile organic compounds contribute substantially to air pollution mortality. *Atmospheric Chemistry and Physics*, **2021**, 21, 11201-11224	6.8	12
50	Improving present day and future estimates of anthropogenic sectoral emissions and the resulting air quality impacts in Africa. *Faraday Discussions*, **2017**, 200, 397-412	3.6	11
49	Using Satellites to Track Indicators of Global Air Pollution and Climate Change Impacts: Lessons Learned From a NASA-Supported Science-Stakeholder Collaborative. *GeoHealth*, **2020**, 4, e2020GH000270	5	11
48	Modeling the diurnal variability of agricultural ammonia in Bakersfield, California, during the CalNex campaign. *Atmospheric Chemistry and Physics*, **2017**, 17, 2721-2739	6.8	11
47	Inversion Estimates of Lognormally Distributed Methane Emission Rates From the Haynesville-Bossier Oil and Gas Production Region Using Airborne Measurements. *Journal of Geophysical Research D: Atmospheres*, **2019**, 124, 3520-3531	4.4	11
46	Estimates of black carbon emissions in the western United States using the GEOS-Chem adjoint model. *Atmospheric Chemistry and Physics*, **2015**, 15, 7685-7702	6.8	10
45	The Multi-Scale Infrastructure for Chemistry and Aerosols (MUSICA). *Bulletin of the American Meteorological Society*, **2020**, 101, E1743-E1760	6.1	10
44	Inverse modeling of NH3 sources using CrIS remote sensing measurements. *Environmental Research Letters*, **2020**, 15, 104082	6.2	10
43	Sensitivities of Ozone Air Pollution in the Beijing-Tianjin-Hebei Area to Local and Upwind Precursor Emissions Using Adjoint Modeling. *Environmental Science & Technology*, **2021**, 55, 5752-5762	10.3	10
42	Inverse modeling of SO₂ and NO_{<i>x</i>} emissions over China using multisensor satellite data Part 2: Downscaling techniques for air quality analysis and forecasts. *Atmospheric Chemistry and Physics*, **2020**, 20, 6651-6670	6.8	9
41	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	4.4	9
40	Four-dimensional variational inversion of black carbon emissions during ARCTAS-CARB with WRFDA-Chem. *Atmospheric Chemistry and Physics*, **2017**, 17, 7605-7633	6.8	9
39	Assessing the Iterative Finite Difference Mass Balance and 4D-Var Methods to Derive Ammonia Emissions Over North America Using Synthetic Observations. *Journal of Geophysical Research D: Atmospheres*, **2019**, 124, 4222-4236	4.4	8
38	Optimal and scalable methods to approximate the solutions of large-scale Bayesian problems: theory and application to atmospheric inversion and data assimilation. *Quarterly Journal of the Royal Meteorological Society*, **2018**, 144, 365-390	6.4	8
37	Implications of RCP emissions for future changes in vegetative exposure to ozone in the western U.S.. *Geophysical Research Letters*, **2015**, 42, 4190-4198	4.9	8

36	Assessing remote polarimetric measurement sensitivities to aerosol emissions using the geos-chem adjoint model. *Atmospheric Measurement Techniques*, **2013**, 6, 3441-3457	4	8
35	Inverse modeling of SO₂ and NO_{<i>x</i>} emissions over China using multisensor satellite data Part 1: Formulation and sensitivity analysis. *Atmospheric Chemistry and Physics*, **2020**, 20, 6631-6650	6.8	7
34	Impacts of anthropogenic and natural sources on free tropospheric ozone over the Middle East. *Atmospheric Chemistry and Physics*, **2016**, 16, 6537-6546	6.8	7
33	Using a global aerosol model adjoint to unravel the footprint of spatially-distributed emissions on cloud droplet number and cloud albedo. *Geophysical Research Letters*, **2012**, 39,	4.9	7
32	A multiphase CMAQ version 5.0 adjoint. *Geoscientific Model Development*, **2020**, 13, 2925-2944	6.3	7
31	A fuel-based method for updating mobile source emissions during the COVID-19 pandemic. *Environmental Research Letters*, **2021**, 16, 065018	6.2	7
30	Aircraft-based inversions quantify the importance of wetlands and livestock for Upper Midwest methane emissions. *Atmospheric Chemistry and Physics*, **2021**, 21, 951-971	6.8	7
29	Two-scale multi-model ensemble: is a hybrid ensemble of opportunity telling us more?. *Atmospheric Chemistry and Physics*, **2018**, 18, 2727-2744	6.8	7
28	Development of the Low Emissions Analysis Platform - Integrated Benefits Calculator (LEAP-IBC) tool to assess air quality and climate co-benefits: Application for Bangladesh. *Environment International*, **2020**, 145, 106155	12.9	6
27	Quantifying Emissions of CO and NOx Using Observations From MOPITT, OMI, TES, and OSIRIS. *Journal of Geophysical Research D: Atmospheres*, **2019**, 124, 1170-1193	4.4	6
26	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	6.8	6
25	Satellite Monitoring for Air Quality and Health. *Annual Review of Biomedical Data Science*, **2021**, 4, 417-447	5.6	6
24	Enhanced parallelization of the incremental 4D-Var data assimilation algorithm using the Randomized Incremental Optimal Technique. *Quarterly Journal of the Royal Meteorological Society*, **2020**, 146, 1351-1371	6.4	5
23	The impact of observing characteristics on the ability to predict ozone under varying polluted photochemical regimes. *Atmospheric Chemistry and Physics*, **2015**, 15, 10645-10667	6.8	5
22	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,	11.5	5
21	Long-term observational constraints of organic aerosol dependence on inorganic species in the southeast US. *Atmospheric Chemistry and Physics*, **2020**, 20, 13091-13107	6.8	5
20	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	6.8	5
19	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	5.6	4

18	Sources of black carbon during severe haze events in the Beijing-Tianjin-Hebei region using the adjoint method. *Science of the Total Environment*, **2020**, 740, 140149	10.2	3
17	Response to comment on "Natural and anthropogenic ethanol sources in North America and potential atmospheric impacts of ethanol fuel use". *Environmental Science & Technology*, **2013**, 47, 2141	10.3	3
16	Interannual variation of reactive nitrogen emissions and their impacts on PM2.5 air pollution in China during 2005-2015. *Environmental Research Letters*,	6.2	3
15	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*,	11	3
14	Effects of a priori profile shape assumptions on comparisons between satellite NO₂ columns and model simulations. *Atmospheric Chemistry and Physics*, **2020**, 20, 7231-7241	6.8	3
13	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	6.8	3
12	Elucidating emissions control strategies for ozone to protect human health and public welfare within the continental United States. *Environmental Research Letters*, **2019**, 14, 124093	6.2	3
11	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	3.1	3
10	Analysis of recent anthropogenic surface emissions from bottom-up inventories and top-down estimates: are future emission scenarios valid for the recent past?		3
9	Sector-Based Top-Down Estimates of NO x , SO 2 , and CO Emissions in East Asia. *Geophysical Research Letters*, **2022**, 49,	4.9	2
8	Anthropogenic Secondary Organic Aerosols Contribute Substantially to Air Pollution Mortality		2
7	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	6.8	2
6	Decadal Variabilities in Tropospheric Nitrogen Oxides Over United States, Europe, and China. *Journal of Geophysical Research D: Atmospheres*, **2022**, 127, e2021JD035872	4.4	1
5	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	6.3	1
4	Assessment of Updated Fuel-Based Emissions Inventories Over the Contiguous United States Using TROPOMI NO2 Retrievals. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2021JD035484	4.4	1
3	Improving NO₂ and ozone simulations through global NO_{<i>x</i>} emission inversions **2020**,		1
2	Transboundary transport of ozone pollution to a US border region: A case study of Yuma. *Environmental Pollution*, **2021**, 273, 116421	9.3	1
1	Comparing health benefit calculations for alternative energy futures. *Air Quality, Atmosphere and Health*, **2020**, 13, 773-787	5.6	0