Yuxuan Wang

List of Publications by Year
in descending order

90 papers	6,226 citations	81900 39 h-index	76900 74 g-index
120 all docs	120 docs citations	120 times ranked	6271 citing authors

#	Article	IF	Citations
1	NO_x emission trends for China, 1995â€“2004: The view from the ground and the view from space. Journal of Geophysical Research, 2007, 112, .	3.3	422
2	Sulfate-nitrate-ammonium aerosols over China: response to 2000â€“2015 emission changes of sulfur dioxide, nitrogen oxides, and ammonia. Atmospheric Chemistry and Physics, 2013, 13, 2635-2652.	4.9	313
3	Nitrogen deposition to the United States: distribution, sources, and processes. Atmospheric Chemistry and Physics, 2012, 12, 4539-4554.	4.9	256
4	Daily Estimation of Ground-Level PM_{2.5} Concentrations over Beijing Using 3 km Resolution MODIS AOD. Environmental Science & Technology, 2015, 49, 12280-12288.	10.0	240
5	Enhanced sulfate formation during China's severe winter haze episode in January 2013 missing from current models. Journal of Geophysical Research D: Atmospheres, 2014, 119, 10,425.	3.3	235
6	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
7	Fine-particle pH for Beijing winter haze as inferred from different thermodynamic equilibrium models. Atmospheric Chemistry and Physics, 2018, 18, 7423-7438.	4.9	208
8	Improved estimate of the policy-relevant background ozone in the United States using the GEOS-Chem global model with 1/2Â°ÂÂ—Â2/3Â° horizontal resolution over North America. Atmospheric Environment, 2011, 45, 6769-6776.	4.1	190
9	Seasonal and spatial variability of surface ozone over China: contributions from background and domestic pollution. Atmospheric Chemistry and Physics, 2011, 11, 3511-3525.	4.9	169
10	Global Chemical Composition of Ambient Fine Particulate Matter for Exposure Assessment. Environmental Science & Technology, 2014, 48, 13060-13068.	10.0	164
11	Evaluating the contribution of changes in isoprene emissions to surface ozone trends over the eastern United States. Journal of Geophysical Research, 2005, 110, .	3.3	163
12	Potential for Wind-Generated Electricity in China. Science, 2009, 325, 1378-1380.	12.6	163
13	North American pollution outflow and the trapping of convectively lifted pollution by upper-level anticyclone. Journal of Geophysical Research, 2005, 110, .	3.3	156
14	A nested grid formulation for chemical transport over Asia: Applications to CO. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	141
15	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
16	Heterogeneous sulfate aerosol formation mechanisms during wintertime Chinese haze events: air quality model assessment using observations of sulfate oxygen isotopes in Beijing. Atmospheric Chemistry and Physics, 2019, 19, 6107-6123.	4.9	137
17	Spatial distributions of particle number concentrations in the global troposphere: Simulations, observations, and implications for nucleation mechanisms. Journal of Geophysical Research, 2010, 115, .	3.3	129
18	CO₂ and its correlation with CO at a rural site near Beijing: implications for combustion efficiency in China. Atmospheric Chemistry and Physics, 2010, 10, 8881-8897.	4.9	125

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19	Life cycle assessment of CO2 emissions from wind power plants: Methodology and case studies. Renewable Energy, 2012, 43, 30-36.	8.9	118
20	Seasonal and spatial variation of trace elements in multi-size airborne particulate matters of Beijing, China: Mass concentration, enrichment characteristics, source apportionment, chemical speciation and bioavailability. Atmospheric Environment, 2014, 99, 257-265.	4.1	117
21	Source attribution of particulate matter pollution over North China with the adjoint method. Environmental Research Letters, 2015, 10, 084011.	5.2	117
22	Sensitivity of surface ozone over China to 2000â€“2050 global changes of climate and emissions. Atmospheric Environment, 2013, 75, 374-382.	4.1	107
23	Simulating aerosolâ€“radiationâ€“cloud feedbacks on meteorology and air quality over eastern China under severe haze conditionsin winter. Atmospheric Chemistry and Physics, 2015, 15, 2387-2404.	4.9	107
24	Asian emissions of CO and NOx: Constraints from aircraft and Chinese station data. Journal of Geophysical Research, 2004, 109, .	3.3	97
25	Seasonal variability of NOxemissions over east China constrained by satellite observations: Implications for combustion and microbial sources. Journal of Geophysical Research, 2007, 112, .	3.3	97
26	Possible heterogeneous chemistry of hydroxymethanesulfonate (HMS) in northern China winter haze. Atmospheric Chemistry and Physics, 2019, 19, 1357-1371.	4.9	97
27	Improved algorithm for MODIS satellite retrievals of aerosol optical thickness over land in dusty atmosphere: Implications for air quality monitoring in China. Remote Sensing of Environment, 2010, 114, 2575-2583.	11.0	86
28	Impact of air pollution control policies on future PM2.5 concentrations and their source contributions in China. Journal of Environmental Management, 2018, 227, 124-133.	7.8	82
29	Source apportionment of atmospheric mercury pollution in China using the GEOS-Chem model. Environmental Pollution, 2014, 190, 166-175.	7.5	78
30	Influence of the West Pacific subtropical high on surface ozone daily variability in summertime over eastern China. Atmospheric Environment, 2017, 170, 197-204.	4.1	76
31	Modeling dust and soluble iron deposition to the South Atlantic Ocean. Journal of Geophysical Research, 2010, 115, .	3.3	72
32	Winter haze over North China Plain from 2009 to 2016: Influence of emission and meteorology. Environmental Pollution, 2018, 242, 1308-1318.	7.5	72
33	Improving the Accuracy of Daily Satellite-Derived Ground-Level Fine Aerosol Concentration Estimates for North America. Environmental Science & Technology, 2012, 46, 11971-11978.	10.0	66
34	Estimates of Health Impacts and Radiative Forcing in Winter Haze in Eastern China through Constraints of Surface PM_{2.5} Predictions. Environmental Science & Technology, 2017, 51, 2178-2185.	10.0	64
35	Traffic restrictions associated with the Sino-African summit: Reductions of NOxdetected from space. Geophysical Research Letters, 2007, 34, .	4.0	63
36	Estimating ground-level PM_{2.5} in eastern China using aerosol optical depth determined from the GOCI satellite instrument. Atmospheric Chemistry and Physics, 2015, 15, 13133-13144.	4.9	61

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37	Adverse effects of increasing drought on air quality via natural processes. Atmospheric Chemistry and Physics, 2017, 17, 12827-12843.	4.9	48
38	Can a â€œstate of the artâ€•chemistry transport model simulate Amazonian tropospheric chemistry?. Journal of Geophysical Research, 2011, 116, .	3.3	47
39	Attribution of PM2.5 exposure in Beijingâ€“Tianjinâ€“Hebei region to emissions: implication to control strategies. Science Bulletin, 2017, 62, 957-964.	9.0	46
40	Black carbon and its correlation with trace gases at a rural site in Beijing: Top-down constraints from ambient measurements on bottom-up emissions. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	45
41	Changes of Emission Sources to Nitrate Aerosols in Beijing After the Clean Air Actions: Evidence From Dual Isotope Compositions. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031998.	3.3	41
42	Persistent sensitivity of Asian aerosol to emissions of nitrogen oxides. Geophysical Research Letters, 2013, 40, 1021-1026.	4.0	40
43	Insignificant effect of climate change on winter haze pollution in Beijing. Atmospheric Chemistry and Physics, 2018, 18, 17489-17496.	4.9	37
44	Influence of the Bermuda High on interannual variability of summertime ozone in the Houstonâ€“Galvestonâ€“Brazoria region. Atmospheric Chemistry and Physics, 2016, 16, 15265-15276.	4.9	36
45	Predicting daily PM2.5 concentrations in Texas using high-resolution satellite aerosol optical depth. Science of the Total Environment, 2018, 631-632, 904-911.	8.0	36
46	Satellite detection and model verification of NO _x emissions from power plants in Northern China. Environmental Research Letters, 2010, 5, 044007.	5.2	33
47	Photochemical roles of rapid economic growth and potential abatement strategies on tropospheric ozone over South and East Asia in 2030. Atmospheric Chemistry and Physics, 2014, 14, 9259-9277.	4.9	33
48	Fine particulate matter pollution in North China: Seasonal-spatial variations, source apportionment, sector and regional transport contributions. Environmental Research, 2020, 184, 109368.	7.5	32
49	A quantitative assessment of uncertainties affecting estimates of global mean OH derived from methyl chloroform observations. Journal of Geophysical Research, 2008, 113, .	3.3	30
50	Regional differences in Chinese SO₂ emission control efficiency and policy implications. Atmospheric Chemistry and Physics, 2015, 15, 6521-6533.	4.9	29
51	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
52	Effects of stratospheric ozone recovery on photochemistry and ozone air quality in the troposphere. Atmospheric Chemistry and Physics, 2014, 14, 4079-4086.	4.9	28
53	Ethane, ethyne and carbon monoxide concentrations in the upper troposphere and lower stratosphere from ACE and GEOS-Chem: a comparison study. Atmospheric Chemistry and Physics, 2011, 11, 9927-9941.	4.9	26
54	New Directions: GEIA's 2020 vision for better air emissions information. Atmospheric Environment, 2013, 81, 710-712.	4.1	25

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55	Effect of continental sources and sinks on the seasonal and latitudinal gradient of atmospheric carbon dioxide over East Asia. Atmospheric Environment, 2013, 79, 853-860.	4.1	25
56	Topâ€down estimate of China's black carbon emissions using surface observations: Sensitivity to observation representativeness and transport model error. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5781-5795.	3.3	24
57	A large decline of tropospheric NO2 in China observed from space by SNPP OMPS. Science of the Total Environment, 2019, 675, 337-342.	8.0	23
58	The Biogeographic Pattern of Microbial Functional Genes along an Altitudinal Gradient of the Tibetan Pasture. Frontiers in Microbiology, 2017, 8, 976.	3.5	22
59	Identification of Sea Breeze Recirculation and Its Effects on Ozone in Houston, TX, During DISCOVERâ€AQ 2013. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033165.	3.3	22
60	De-coupling interannual variations of vertical dust extinction over the Taklimakan Desert during 2007â€“2016 using CALIOP. Science of the Total Environment, 2018, 633, 608-617.	8.0	21
61	Clustering Surface Ozone Diurnal Cycles to Understand the Impact of Circulation Patterns in Houston, TX. Journal of Geophysical Research D: Atmospheres, 2019, 124, 13457-13474.	3.3	21
62	Variations of surface O3 in August at a rural site near Shanghai: influences from the West Pacific subtropical high and anthropogenic emissions. Environmental Science and Pollution Research, 2012, 19, 4016-4029.	5.3	20
63	Spatiotemporal Variations of Ambient Concentrations of Trace Elements in a Highly Polluted Region of China. Journal of Geophysical Research D: Atmospheres, 2019, 124, 4186-4202.	3.3	19
64	Human and animal wastes: Implications for atmospheric N2O and NOx. Global Biogeochemical Cycles, 2005, 19, n/a-n/a.	4.9	18
65	Impact of the 2011 Southern U.S. Drought on Ground-Level Fine Aerosol Concentration in Summertime*. Journals of the Atmospheric Sciences, 2015, 72, 1075-1093.	1.7	18
66	Mapping daily PM2.5 at 500â€¯m resolution over Beijing with improved hazy day performance. Science of the Total Environment, 2019, 659, 410-418.	8.0	16
67	Changes in tropospheric ozone levels over the Three Representative Regions of China observed from space by the Tropospheric Emission Spectrometer (TES), 2005â€“2010. Science Bulletin, 2012, 57, 2865-2871.	1.7	15
68	Characterizing sources of high surface ozone events in the southwestern US with intensive field measurements and two global models. Atmospheric Chemistry and Physics, 2020, 20, 10379-10400.	4.9	15
69	Transport of Central American Fire Emissions to the U.S. Gulf Coast: Climatological Pathways and Impacts on Ozone and PM_{2.5}. Journal of Geophysical Research D: Atmospheres, 2018, 123, 8344-8361.	3.3	14
70	Assessing biotic contributions to CO₂ fluxes in northern China using the Vegetation, Photosynthesis and Respiration Model (VPRM-CHINA) and observations from 2005 to 2009. Biogeosciences, 2018, 15, 6713-6729.	3.3	13
71	Year round measurements of O3 and CO at a rural site near Beijing: variations in their correlations. Tellus, Series B: Chemical and Physical Meteorology, 2010, 62, 228-241.	1.6	11
72	Influence of Cold Fronts on Variability of Daily Surface O3 over the Houston-Galveston-Brazoria Area in Texas USA during 2003â€“2016. Atmosphere, 2018, 9, 159.	2.3	11

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73	Variations of Siberian High Position under climate change: Impacts on winter pollution over north China. Atmospheric Environment, 2018, 189, 227-234.	4.1	11
74	Quantifying the effects of environmental factors on wildfire burned area in the south central US using integrated machine learning techniques. Atmospheric Chemistry and Physics, 2020, 20, 11065-11087.	4.9	11
75	Evaluating Drought Responses of Surface Ozone Precursor Proxies: Variations With Land Cover Type, Precipitation, and Temperature. Geophysical Research Letters, 2021, 48, e2020GL091520.	4.0	9
76	Observational evidence for direct uptake of ozone in China by Asian dust in springtime. Atmospheric Environment, 2018, 186, 45-55.	4.1	7
77	Links Between the Largeâ€Scale Circulation and Daily Air Quality Over Central Eastern China During Winter. Journal of Geophysical Research D: Atmospheres, 2019, 124, 7147-7163.	3.3	6
78	Sensitivity of PM2.5 to NOx emissions and meteorology in North China based on observations. Science of the Total Environment, 2021, 766, 142275.	8.0	6
79	Long-term trend in surface ozone in Houston-Galveston-Brazoria: Sectoral contributions based on changes in volatile organic compounds. Environmental Pollution, 2022, 308, 119647.	7.5	6
80	Accelerating carbon uptake in the Northern Hemisphere: evidence from the interhemispheric difference of atmospheric CO₂ concentrations. Tellus, Series B: Chemical and Physical Meteorology, 2022, 65, 20334.	1.6	5
81	Evaluating China's anthropogenic CO₂ emissions inventories: aÂnorthern China case study using continuous surface observations from 2005 to 2009. Atmospheric Chemistry and Physics, 2020, 20, 3569-3588.	4.9	5
82	Effects of a remotely sensed land cover dataset with high spatial resolution on the simulation of secondary air pollutants over china using the nested-grid GEOS-chem chemical transport model. Advances in Atmospheric Sciences, 2014, 31, 179-187.	4.3	4
83	Surface MDA8 ozone variability during cold front events over the contiguous United States during 2003â€“2017. Atmospheric Environment, 2019, 213, 359-366.	4.1	4
84	Evaluating the Response of Summertime Surface Sulfate to Hydroclimate Variations in the Continental United States: Role of Meteorological Inputs in the GEOSâ€Chem Model. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1662-1679.	3.3	4
85	Spatial Variation of Surface O₃ Responses to Drought Over the Contiguous United States During Summertime: Role of Precursor Emissions and Ozone Chemistry. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	4
86	Review on the applications of Tropospheric Emissions Spectrometer to air-quality research: Perspectives for China. Frontiers of Environmental Science and Engineering in China, 2010, 4, 12-19.	0.8	3
87	Drought Impacts on Secondary Organic Aerosol: A Case Study in the Southeast United States. Environmental Science & Technology, 2019, 53, 242-250.	10.0	3
88	Reduced surface fine dust under droughts over the southeastern United States during summertime: observations and CMIP6 model simulations. Atmospheric Chemistry and Physics, 2022, 22, 7843-7859.	4.9	3
89	Variations of Siberian High Position under climate change: Impacts on winter pollution over North China. , 2021, , 169-190.		0
90	Atmospheric Modeling of Pollutant Concentrations. , 2013, , 263-290.		0