Haichao Wang

List of Publications by Year
in descending order

51	2,078	279798	243625
papers	citations	23 h-index	44 g-index

93	93	93	1641
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Wintertime photochemistry in Beijing: observations of RO_{<i>x</i>} radical concentrations in the North China Plain during the BEST-ONE campaign. Atmospheric Chemistry and Physics, 2018, 18, 12391-12411.	4.9	177
2	High N₂O₅ Concentrations Observed in Urban Beijing: Implications of a Large Nitrate Formation Pathway. Environmental Science and Technology Letters, 2017, 4, 416-420.	8.7	167
3	Aerosol Liquid Water Driven by Anthropogenic Inorganic Salts: Implying Its Key Role in Haze Formation over the North China Plain. Environmental Science and Technology Letters, 2018, 5, 160-166.	8.7	165
4	Fast Photochemistry in Wintertime Haze: Consequences for Pollution Mitigation Strategies. Environmental Science & Technology, 2019, 53, 10676-10684.	10.0	147
5	Exploring atmospheric free-radical chemistry in China: the self-cleansing capacity and the formation of secondary air pollution. National Science Review, 2019, 6, 579-594.	9.5	123
6	Explicit diagnosis of the local ozone production rate and the ozone-NOx-VOC sensitivities. Science Bulletin, 2018, 63, 1067-1076.	9.0	116
7	An explicit study of local ozone budget and NOx-VOCs sensitivity in Shenzhen China. Atmospheric Environment, 2020, 224, 117304.	4.1	85
8	Fast particulate nitrate formation via N₂O₅ uptake aloft in winter in Beijing. Atmospheric Chemistry and Physics, 2018, 18, 10483-10495.	4.9	82
9	A Comprehensive Model Test of the HONO Sources Constrained to Field Measurements at Rural North China Plain. Environmental Science & Technology, 2019, 53, 3517-3525.	10.0	81
10	The trend of surface ozone in Beijing from 2013 to 2019: Indications of the persisting strong atmospheric oxidation capacity. Atmospheric Environment, 2020, 242, 117801.	4.1	72
11	Field Determination of Nitrate Formation Pathway in Winter Beijing. Environmental Science & Technology, 2020, 54, 9243-9253.	10.0	69
12	Development of a portable cavity-enhanced absorption spectrometer for the measurement of ambient NO₃ and N₂O₅: experimental setup, lab characterizations, and field applications in a polluted urban environment. Atmospheric Measurement Techniques, 2017, 10, 1465-1479.	3.1	65
13	Efficient N₂O₅ uptake and NO₃ oxidation in the outflow of urban Beijing. Atmospheric Chemistry and Physics, 2018, 18, 9705-9721.	4.9	64
14	Chlorine oxidation of VOCs at a semi-rural site in Beijing: significant chlorine liberation from ClNO₂ and subsequent gas- and particle-phase Clâ€“VOC production. Atmospheric Chemistry and Physics, 2018, 18, 13013-13030.	4.9	54
15	Oral administration of liquid iron preparation containing excess iron induces intestine and liver injury, impairs intestinal barrier function and alters the gut microbiota in rats. Journal of Trace Elements in Medicine and Biology, 2018, 47, 12-20.	3.0	52
16	Model simulation of NO 3 , N 2 O 5 and ClNO 2 at a rural site in Beijing during CAREBeijing-2006. Atmospheric Research, 2017, 196, 97-107.	4.1	35
17	NO3 and N2O5 chemistry at a suburban site during the EXPLORE-YRD campaign in 2018. Atmospheric Environment, 2020, 224, 117180.	4.1	28
18	Observations and modeling of OH and HO2 radicals in Chengdu, China in summer 2019. Science of the Total Environment, 2021, 772, 144829.	8.0	28

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19	Wintertime N2O5 uptake coefficients over the North China Plain. Science Bulletin, 2020, 65, 765-774.	9.0	27
20	Assessing the Ratios of Formaldehyde and Glyoxal to NO₂ as Indicators of O₃â€“NO_xâ€“VOC Sensitivity. Environmental Science & Technology, 2021, 55, 10935-10945.	10.0	27
21	The formation and mitigation of nitrate pollution: comparison between urban and suburban environments. Atmospheric Chemistry and Physics, 2022, 22, 4539-4556.	4.9	27
22	An IBBCEAS system for atmospheric measurements of glyoxal and methylglyoxal in the presence of high NO₂ concentrations. Atmospheric Measurement Techniques, 2019, 12, 4439-4453.	3.1	25
23	Uptake of Waterâ€soluble Gasâ€phase Oxidation Products Drives Organic Particulate Pollution in Beijing. Geophysical Research Letters, 2021, 48, e2020GL091351.	4.0	24
24	Spatial characteristics of the nighttime oxidation capacity in the Yangtze River Delta, China. Atmospheric Environment, 2019, 208, 150-157.	4.1	22
25	Meteorology and topographic influences on nocturnal ozone increase during the summertime over Shaoguan, China. Atmospheric Environment, 2021, 256, 118459.	4.1	22
26	Direct evidence of local photochemical production driven ozone episode in Beijing: A case study. Science of the Total Environment, 2021, 800, 148868.	8.0	21
27	A critical review of sulfate aerosol formation mechanisms during winter polluted periods. Journal of Environmental Sciences, 2023, 123, 387-399.	6.1	20
28	OH and HO₂ radical chemistry at a suburban site during the EXPLORE-YRD campaign in 2018. Atmospheric Chemistry and Physics, 2022, 22, 7005-7028.	4.9	19
29	Sensitive Detection of Ambient Formaldehyde by Incoherent Broadband Cavity Enhanced Absorption Spectroscopy. Analytical Chemistry, 2020, 92, 2697-2705.	6.5	18
30	Characterizing nitrate radical budget trends in Beijing during 2013â€“2019. Science of the Total Environment, 2021, 795, 148869.	8.0	17
31	Anthropogenic monoterpenes aggravating ozone pollution. National Science Review, 2022, 9, .	9.5	17
32	Role of Heat Waveâ€Induced Biogenic VOC Enhancements in Persistent Ozone Episodes Formation in Pearl River Delta. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034317.	3.3	16
33	Measurement report: Online measurement of gas-phase nitrated phenols utilizing a CI-LToF-MS: primary sources and secondary formation. Atmospheric Chemistry and Physics, 2021, 21, 7917-7932.	4.9	15
34	Monitoring Ambient Nitrate Radical by Open-Path Cavity-Enhanced Absorption Spectroscopy. Analytical Chemistry, 2019, 91, 10687-10693.	6.5	12
35	Heterogeneous Reaction of CaCO₃ With NO₂ at Different Relative Humidities: Kinetics, Mechanisms, and Impacts on Aerosol Hygroscopicity. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034826.	3.3	12
36	Budget of nitrous acid (HONO) at an urban site in the fall season of Guangzhou, China. Atmospheric Chemistry and Physics, 2022, 22, 8951-8971.	4.9	12

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37	Intercomparison of in situ CRDS and CEAS for measurements of atmospheric N2O5 in Beijing, China. Science of the Total Environment, 2018, 613-614, 131-139.	8.0	11
38	Observations of OH Radical Reactivity in Field Studies. Acta Chimica Sinica, 2019, 77, 613.	1.4	11
39	Observations of glyoxal and methylglyoxal in a suburban area of the Yangtze River Delta, China. Atmospheric Environment, 2020, 238, 117727.	4.1	10
40	Simulation of organic nitrates in Pearl River Delta in 2006 and the chemical impact on ozone production. Science China Earth Sciences, 2018, 61, 228-238.	5.2	9
41	Impact of aerosolâ€“radiation interaction on new particle formation. Atmospheric Chemistry and Physics, 2021, 21, 9995-10004.	4.9	9
42	Thermal dissociation cavity-enhanced absorption spectrometer for measuring NO₂, RO₂NO₂, and RONO₂ in the atmosphere. Atmospheric Measurement Techniques, 2021, 14, 4033-4051.	3.1	8
43	An Observational Based Modeling of the Surface Layer Particulate Nitrate in the North China Plain During Summertime. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035623.	3.3	8
44	Particle hygroscopicity inhomogeneity and its impact on reactive uptake. Science of the Total Environment, 2022, 811, 151364.	8.0	8
45	Observation based study on atmospheric oxidation capacity in Shanghai during late-autumn: Contribution from nitryl chloride. Atmospheric Environment, 2022, 271, 118902.	4.1	8
46	N₂O₅ uptake onto saline mineral dust: a potential missing source of tropospheric ClNO₂ in inland China. Atmospheric Chemistry and Physics, 2022, 22, 1845-1859.	4.9	7
47	Interpretation of NO₃â€“N₂O<sub>5</sub observation via steady state in high-aerosol air mass: the impact of equilibrium coefficient in ambient conditions. Atmospheric Chemistry and Physics, 2022, 22, 3525-3533.	4.9	7
48	Numerical Simulation on the Effects of the Horizontal Charge Distribution on Lightning Types and Behaviors. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034375.	3.3	5
49	Effects of nighttime heterogeneous reactions on the formation of secondary aerosols and ozone in the Pearl River Delta. Chinese Science Bulletin, 2022, 67, 2060-2068.	0.7	4
50	Compilation of reaction kinetics parameters determined in the Key Development Project for Air Pollution Formation Mechanism and Control Technologies in China. Journal of Environmental Sciences, 2023, 123, 327-340.	6.1	1
51	Atmospheric Impacts. Springer Theses, 2021, , 95-112.	0.1	0