

Wanyun Xu

List of Publications by Year in descending order

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Version: 2024-02-01

56
papers

1,383
citations

304368

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377514

34
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docs citations

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times ranked

1242
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Long-term trends of surface ozone and its influencing factors at the Mt Waliguan GAW station, China – Part 1: Overall trends and characteristics. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 6191-6205. | 1.9 | 104 |
| 2 | Photochemical Aqueous-Phase Reactions Induce Rapid Daytime Formation of Oxygenated Organic Aerosol on the North China Plain. <i>Environmental Science & Technology</i> , 2020, 54, 3849-3860. | 4.6 | 85 |
| 3 | Chemical Differences Between PM ₁ and PM _{2.5} in Highly Polluted Environment and Implications in Air Pollution Studies. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086288. | 1.5 | 72 |
| 4 | Long-term trends of surface ozone and its influencing factors at the Mt Waliguan GAW station, China – Part 2: The roles of anthropogenic emissions and climate variability. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 773-798. | 1.9 | 56 |
| 5 | A novel method for calculating ambient aerosol liquid water content based on measurements of a humidified nephelometer system. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 2967-2982. | 1.2 | 50 |
| 6 | Characterization of atmospheric trace gases and particulate matter in Hangzhou, China. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 1705-1728. | 1.9 | 48 |
| 7 | Long-term changes of regional ozone in China: implications for human health and ecosystem impacts. <i>Elementa</i> , 2020, 8, . | 1.1 | 48 |
| 8 | Distinct diurnal variation in organic aerosol hygroscopicity and its relationship with oxygenated organic aerosol. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 865-880. | 1.9 | 46 |
| 9 | Seasonal variation in surface ozone and its regional characteristics at global atmosphere watch stations in China. <i>Journal of Environmental Sciences</i> , 2019, 77, 291-302. | 3.2 | 41 |
| 10 | NH ₃ -promoted hydrolysis of NO ₂ induces explosive growth in HONO. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 10557-10570. | 1.9 | 38 |
| 11 | Current Challenges in Visibility Improvement in Southern China. <i>Environmental Science and Technology Letters</i> , 2020, 7, 395-401. | 3.9 | 38 |
| 12 | Dust-Dominated Coarse Particles as a Medium for Rapid Secondary Organic and Inorganic Aerosol Formation in Highly Polluted Air. <i>Environmental Science & Technology</i> , 2020, 54, 15710-15721. | 4.6 | 37 |
| 13 | Light absorption of black carbon and brown carbon in winter in North China Plain: comparisons between urban and rural sites. <i>Science of the Total Environment</i> , 2021, 770, 144821. | 3.9 | 33 |
| 14 | First simultaneous measurements of peroxyacetyl nitrate (PAN) and ozone at Nam Co in the central Tibetan Plateau: impacts from the PBL evolution and transport processes. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 5199-5217. | 1.9 | 32 |
| 15 | Exploring the inconsistent variations in atmospheric primary and secondary pollutants during the 2016 G20 summit in Hangzhou, China: implications from observations and models. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 5391-5403. | 1.9 | 31 |
| 16 | Chemical characteristics of PM 2.5 during summer at a background site of the Yangtze River Delta in China. <i>Atmospheric Research</i> , 2017, 198, 163-172. | 1.8 | 29 |
| 17 | A Review on Laboratory Studies and Field Measurements of Atmospheric Organic Aerosol Hygroscopicity and Its Parameterization Based on Oxidation Levels. <i>Current Pollution Reports</i> , 2020, 6, 410-424. | 3.1 | 29 |
| 18 | A novel method for distinguishing fog and haze based on PM _{2.5} , visibility, and relative humidity. <i>Science China Earth Sciences</i> , 2014, 57, 2156-2164. | 2.3 | 28 |

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|----|---|-----|-----------|
| 19 | Variability of SO ₂ in an intensive fog in North China Plain: Evidence of high solubility of SO ₂ . <i>Particuology</i> , 2013, 11, 41-47. | 2.0 | 27 |
| 20 | Biomass burning impacts on ambient aerosol at a background site in East China: Insights from a yearlong study. <i>Atmospheric Research</i> , 2020, 231, 104660. | 1.8 | 27 |
| 21 | Explosive morning growth phenomena of NH ₃ on the North China Plain: Causes and potential impacts on aerosol formation. <i>Environmental Pollution</i> , 2020, 257, 113621. | 3.7 | 27 |
| 22 | A parameterization for the light scattering enhancement factor with aerosol chemical compositions. <i>Atmospheric Environment</i> , 2018, 191, 370-377. | 1.9 | 25 |
| 23 | Measurements of higher alkanes using NO _x chemical ionization in PTR-ToF-MS: important contributions of higher alkanes to secondary organic aerosols in China. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 14123-14138. | 1.9 | 24 |
| 24 | Multiphase chemistry experiment in Fogs and Aerosols in the North China Plain (McFAN): integrated analysis and intensive winter campaign 2018. <i>Faraday Discussions</i> , 2021, 226, 207-222. | 1.6 | 23 |
| 25 | Organic aerosol volatility and viscosity in the North China Plain: contrast between summer and winter. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 5463-5476. | 1.9 | 22 |
| 26 | Development and validation of a CCD-laser aerosol detective system for measuring the ambient aerosol phase function. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 2313-2322. | 1.2 | 21 |
| 27 | Changes in ammonia and its effects on PM _{2.5} chemical property in three winter seasons in Beijing, China. <i>Science of the Total Environment</i> , 2020, 749, 142208. | 3.9 | 21 |
| 28 | High Concentrations of Atmospheric Isocyanic Acid (HNCO) Produced from Secondary Sources in China. <i>Environmental Science & Technology</i> , 2020, 54, 11818-11826. | 4.6 | 20 |
| 29 | Aerosol Promotes Peroxyacetyl Nitrate Formation During Winter in the North China Plain. <i>Environmental Science & Technology</i> , 2021, 55, 3568-3581. | 4.6 | 20 |
| 30 | Chlorofluorocarbons, hydrochlorofluorocarbons, and hydrofluorocarbons in the atmosphere of four Chinese cities. <i>Atmospheric Environment</i> , 2013, 75, 83-91. | 1.9 | 19 |
| 31 | Characteristics and source implications of aromatic hydrocarbons at urban and background areas in Beijing, China. <i>Science of the Total Environment</i> , 2020, 707, 136083. | 3.9 | 18 |
| 32 | Simultaneous observation of atmospheric peroxyacetyl nitrate and ozone in the megacity of Shanghai, China: Regional transport and thermal decomposition. <i>Environmental Pollution</i> , 2021, 274, 116570. | 3.7 | 18 |
| 33 | Measurement report: Chemical characteristics of PM _{2.5} during typical biomass burning season at an agricultural site of the North China Plain. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 3181-3192. | 1.9 | 17 |
| 34 | Efficient Conversion of NO to NO ₂ on SO ₂ -Aged MgO under Atmospheric Conditions. <i>Environmental Science & Technology</i> , 2020, 54, 11848-11856. | 4.6 | 15 |
| 35 | The abundance and inter-relationship of atmospheric peroxyacetyl nitrate (PAN), peroxypropionyl nitrate (PPN), O ₃ , and NO _y during the wintertime in Beijing, China. <i>Science of the Total Environment</i> , 2020, 718, 137388. | 3.9 | 15 |
| 36 | Method to retrieve the nocturnal aerosol optical depth with a CCD laser aerosol detective system. <i>Optics Letters</i> , 2017, 42, 4607. | 1.7 | 14 |

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|----|---|-----|-----------|
| 37 | A novel method to retrieve the nocturnal boundary layer structure based on CCD laser aerosol detection system measurements. <i>Remote Sensing of Environment</i> , 2018, 211, 38-47. | 4.6 | 14 |
| 38 | Influence of High Relative Humidity on Secondary Organic Carbon: Observations at a Background Site in East China. <i>Journal of Meteorological Research</i> , 2019, 33, 905-913. | 0.9 | 13 |
| 39 | Estimation of particulate organic nitrates from thermodenuderâ€“aerosol mass spectrometer measurements in the North China Plain. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 3693-3705. | 1.2 | 12 |
| 40 | Secondary aerosol formation alters CCN activity in the North China Plain. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 7409-7427. | 1.9 | 11 |
| 41 | On the fossil and non-fossil fuel sources of carbonaceous aerosol with radiocarbon and AMS-PMF methods during winter hazy days in a rural area of North China plain. <i>Environmental Research</i> , 2022, 208, 112672. | 3.7 | 11 |
| 42 | Calculating ambient aerosol surface area concentrations using aerosol light scattering enhancement measurements. <i>Atmospheric Environment</i> , 2019, 216, 116919. | 1.9 | 10 |
| 43 | Volatile organic compounds in wintertime North China Plain: Insights from measurements of proton transfer reaction time-of-flight mass spectrometer (PTR-ToF-MS). <i>Journal of Environmental Sciences</i> , 2022, 114, 98-114. | 3.2 | 10 |
| 44 | The chemical composition and mixing state of BC-containing particles and the implications on light absorption enhancement. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 7619-7630. | 1.9 | 10 |
| 45 | Strong light scattering of highly oxygenated organic aerosols impacts significantly on visibility degradation. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 7713-7726. | 1.9 | 10 |
| 46 | Predicting cloud condensation nuclei number concentration based on conventional measurements of aerosol properties in the North China Plain. <i>Science of the Total Environment</i> , 2020, 719, 137473. | 3.9 | 9 |
| 47 | A new method for calculating number concentrations of cloud condensation nuclei based on measurements of a three-wavelength humidified nephelometer system. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 895-906. | 1.2 | 8 |
| 48 | Size-resolved characterization of organic aerosol in the North China Plain: new insights from high resolution spectral analysis. <i>Environmental Science Atmospheres</i> , 2021, 1, 346-358. | 0.9 | 8 |
| 49 | Understanding the formation of high-ozone episodes at Raoyang, a rural site in the north China plain. <i>Atmospheric Environment</i> , 2020, 240, 117797. | 1.9 | 7 |
| 50 | A modeling study of the regional representativeness of surface ozone variation at the WMO/GAW background stations in China. <i>Atmospheric Environment</i> , 2020, 242, 117672. | 1.9 | 6 |
| 51 | Joint increase of aerosol scattering efficiency and aerosol hygroscopicity aggravate visibility impairment in the North China Plain. <i>Science of the Total Environment</i> , 2022, 839, 156279. | 3.9 | 6 |
| 52 | Wet Inorganic Nitrogen Deposition at the Daheitin Reservoir in North China: Temporal Variation, Sources, and Biomass Burning Influences. <i>Atmosphere</i> , 2020, 11, 1260. | 1.0 | 5 |
| 53 | Measurement report: On the difference in aerosol hygroscopicity between high and low relative humidity conditions in the North China Plain. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 4599-4613. | 1.9 | 5 |
| 54 | Particle number size distribution of PM1 and PM10 in fogs and implications on fog droplet evolutions. <i>Atmospheric Environment</i> , 2022, 277, 119086. | 1.9 | 4 |

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|----|---|-----|-----------|
| 55 | Observational insights into the compound environmental effect for 2-methyltetrols formation under humid ambient conditions. <i>Chemosphere</i> , 2022, 289, 133153. | 4.2 | 3 |
| 56 | Primary Emissions and Secondary Aerosol Processing During Wintertime in Rural Area of North China Plain. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, . | 1.2 | 3 |