

Guannan Geng

List of Publications by Year in descending order

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Version: 2024-02-01

80
papers

9,717
citations

57631

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62479

80
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103
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103
docs citations

103
times ranked

6554
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Trends in China's anthropogenic emissions since 2010 as the consequence of clean air actions. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 14095-14111. | 1.9 | 1,613 |
| 2 | Drivers of improved PM _{2.5} air quality in China from 2013 to 2017. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 24463-24469. | 3.3 | 1,193 |
| 3 | Transboundary health impacts of transported global air pollution and international trade. <i>Nature</i> , 2017, 543, 705-709. | 13.7 | 737 |
| 4 | Anthropogenic emission inventories in China: a review. <i>National Science Review</i> , 2017, 4, 834-866. | 4.6 | 580 |
| 5 | Full-coverage high-resolution daily PM _{2.5} estimation using MAIAC AOD in the Yangtze River Delta of China. <i>Remote Sensing of Environment</i> , 2017, 199, 437-446. | 4.6 | 239 |
| 6 | Targeted emission reductions from global super-polluting power plant units. <i>Nature Sustainability</i> , 2018, 1, 59-68. | 11.5 | 215 |
| 7 | An Ensemble Machine-Learning Model To Predict Historical PM _{2.5} Concentrations in China from Satellite Data. <i>Environmental Science & Technology</i> , 2018, 52, 13260-13269. | 4.6 | 215 |
| 8 | Estimating long-term PM _{2.5} concentrations in China using satellite-based aerosol optical depth and a chemical transport model. <i>Remote Sensing of Environment</i> , 2015, 166, 262-270. | 4.6 | 214 |
| 9 | Air quality improvements and health benefits from China's clean air action since 2013. <i>Environmental Research Letters</i> , 2017, 12, 114020. | 2.2 | 213 |
| 10 | Tracking Air Pollution in China: Near Real-Time PM _{2.5} Retrievals from Multisource Data Fusion. <i>Environmental Science & Technology</i> , 2021, 55, 12106-12115. | 4.6 | 205 |
| 11 | Drivers of PM _{2.5} air pollution deaths in China 2002–2017. <i>Nature Geoscience</i> , 2021, 14, 645-650. | 5.4 | 197 |
| 12 | Changes in China's anthropogenic emissions and air quality during the COVID-19 pandemic in 2020. <i>Earth System Science Data</i> , 2021, 13, 2895-2907. | 3.7 | 176 |
| 13 | Estimating ground-level PM _{2.5} concentrations over three megalopolises in China using satellite-derived aerosol optical depth measurements. <i>Atmospheric Environment</i> , 2016, 124, 232-242. | 1.9 | 163 |
| 14 | Predicting monthly high-resolution PM _{2.5} concentrations with random forest model in the North China Plain. <i>Environmental Pollution</i> , 2018, 242, 675-683. | 3.7 | 146 |
| 15 | Rapid improvement of PM _{2.5} pollution and associated health benefits in China during 2013–2017. <i>Science China Earth Sciences</i> , 2019, 62, 1847-1856. | 2.3 | 146 |
| 16 | Pathways of China's PM _{2.5} air quality 2015–2060 in the context of carbon neutrality. <i>National Science Review</i> , 2021, 8, nwab078. | 4.6 | 142 |
| 17 | Satellite-based estimates of decline and rebound in China's CO ₂ emissions during COVID-19 pandemic. <i>Science Advances</i> , 2020, 6, . | 4.7 | 136 |
| 18 | Economic footprint of California wildfires in 2018. <i>Nature Sustainability</i> , 2021, 4, 252-260. | 11.5 | 131 |

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|----|---|-----|-----------|
| 19 | Air pollution characteristics and their relationship with emissions and meteorology in the Yangtze River Delta region during 2014–2016. <i>Journal of Environmental Sciences</i> , 2019, 83, 8-20. | 3.2 | 123 |
| 20 | Current Emissions and Future Mitigation Pathways of Coal-Fired Power Plants in China from 2010 to 2030. <i>Environmental Science & Technology</i> , 2018, 52, 12905-12914. | 4.6 | 122 |
| 21 | Estimating Spatiotemporal Variation in Ambient Ozone Exposure during 2013–2017 Using a Data-Fusion Model. <i>Environmental Science & Technology</i> , 2020, 54, 14877-14888. | 4.6 | 118 |
| 22 | Changes in spatial patterns of PM _{2.5} pollution in China 2000–2018: Impact of clean air policies. <i>Environment International</i> , 2020, 141, 105776. | 4.8 | 118 |
| 23 | Chemical composition of ambient PM _{2.5} over China and relationship to precursor emissions during 2005–2012. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 9187-9203. | 1.9 | 117 |
| 24 | Dynamic projection of anthropogenic emissions in China: methodology and 2015–2050 emission pathways under a range of socio-economic, climate policy, and pollution control scenarios. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 5729-5757. | 1.9 | 117 |
| 25 | Inequality of household consumption and air pollution-related deaths in China. <i>Nature Communications</i> , 2019, 10, 4337. | 5.8 | 114 |
| 26 | Satellite remote sensing of changes in NO _x emissions over China during 1996–2010. <i>Science Bulletin</i> , 2012, 57, 2857-2864. | 1.7 | 113 |
| 27 | Tracking PM _{2.5} and O ₃ Pollution and the Related Health Burden in China 2013–2020. <i>Environmental Science & Technology</i> , 2022, 56, 6922-6932. | 4.6 | 113 |
| 28 | Impact of China's Air Pollution Prevention and Control Action Plan on PM _{2.5} chemical composition over eastern China. <i>Science China Earth Sciences</i> , 2019, 62, 1872-1884. | 2.3 | 105 |
| 29 | Separating emission and meteorological contributions to long-term PM _{2.5} trends over eastern China during 2000–2018. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 9475-9496. | 1.9 | 99 |
| 30 | Associations of wildfire smoke PM _{2.5} exposure with cardiorespiratory events in Colorado 2011–2014. <i>Environment International</i> , 2019, 133, 105151. | 4.8 | 94 |
| 31 | Revealing the Hidden Health Costs Embodied in Chinese Exports. <i>Environmental Science & Technology</i> , 2015, 49, 4381-4388. | 4.6 | 88 |
| 32 | Resolution dependence of uncertainties in gridded emission inventories: a case study in Hebei, China. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 921-933. | 1.9 | 88 |
| 33 | Global climate forcing of aerosols embodied in international trade. <i>Nature Geoscience</i> , 2016, 9, 790-794. | 5.4 | 79 |
| 34 | Evaluation of gap-filling approaches in satellite-based daily PM _{2.5} prediction models. <i>Atmospheric Environment</i> , 2021, 244, 117921. | 1.9 | 71 |
| 35 | Development of PM _{2.5} and NO ₂ models in a LUR framework incorporating satellite remote sensing and air quality model data in Pearl River Delta region, China. <i>Environmental Pollution</i> , 2017, 226, 143-153. | 3.7 | 70 |
| 36 | Effects of atmospheric transport and trade on air pollution mortality in China. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 10367-10381. | 1.9 | 64 |

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|----|--|-----|-----------|
| 37 | Mapping anthropogenic emissions in China at 1 km spatial resolution and its application in air quality modeling. <i>Science Bulletin</i> , 2021, 66, 612-620. | 4.3 | 64 |
| 38 | Estimating ground-level PM _{2.5} in eastern China using aerosol optical depth determined from the GOCI satellite instrument. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 13133-13144. | 1.9 | 61 |
| 39 | Impact of spatial proxies on the representation of bottom-up emission inventories: A satellite-based analysis. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 4131-4145. | 1.9 | 61 |
| 40 | Fusing Observational, Satellite Remote Sensing and Air Quality Model Simulated Data to Estimate Spatiotemporal Variations of PM _{2.5} Exposure in China. <i>Remote Sensing</i> , 2017, 9, 221. | 1.8 | 55 |
| 41 | Impact of clean air action on PM _{2.5} pollution in China. <i>Science China Earth Sciences</i> , 2019, 62, 1845-1846. | 2.3 | 55 |
| 42 | Enhancement of PM _{2.5} Concentrations by Aerosol-Meteorology Interactions Over China. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 1179-1194. | 1.2 | 51 |
| 43 | Decadal changes in anthropogenic source contribution of PM _{2.5} pollution and related health impacts in China, 1990-2015. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 7783-7799. | 1.9 | 49 |
| 44 | Health co-benefits of climate change mitigation depend on strategic power plant retirements and pollution controls. <i>Nature Climate Change</i> , 2021, 11, 1077-1083. | 8.1 | 49 |
| 45 | Attribution of PM _{2.5} exposure in Beijing-Tianjin-Hebei region to emissions: implication to control strategies. <i>Science Bulletin</i> , 2017, 62, 957-964. | 4.3 | 46 |
| 46 | Association between pregnancy loss and ambient PM _{2.5} using survey data in Africa: a longitudinal case-control study, 1998-2016. <i>Lancet Planetary Health</i> , The, 2019, 3, e219-ee225. | 5.1 | 46 |
| 47 | Energy and emission pathways towards PM _{2.5} air quality attainment in the Beijing-Tianjin-Hebei region by 2030. <i>Science of the Total Environment</i> , 2019, 692, 361-370. | 3.9 | 45 |
| 48 | Estimation of pregnancy losses attributable to exposure to ambient fine particles in south Asia: an epidemiological case-control study. <i>Lancet Planetary Health</i> , The, 2021, 5, e15-e24. | 5.1 | 44 |
| 49 | Contribution of hydroxymethanesulfonate (HMS) to severe winter haze in the North China Plain. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 5887-5897. | 1.9 | 40 |
| 50 | Random forest models for PM _{2.5} speciation concentrations using MISR fractional AODs. <i>Environmental Research Letters</i> , 2020, 15, 034056. | 2.2 | 37 |
| 51 | Satellite-Based Daily PM _{2.5} Estimates During Fire Seasons in Colorado. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 8159-8171. | 1.2 | 36 |
| 52 | Evaluating the spatiotemporal ozone characteristics with high-resolution predictions in mainland China, 2013-2019. <i>Environmental Pollution</i> , 2022, 299, 118865. | 3.7 | 33 |
| 53 | Estimating daily PM _{2.5} concentrations in New York City at the neighborhood-scale: Implications for integrating non-regulatory measurements. <i>Science of the Total Environment</i> , 2019, 697, 134094. | 3.9 | 31 |
| 54 | Open fire exposure increases the risk of pregnancy loss in South Asia. <i>Nature Communications</i> , 2021, 12, 3205. | 5.8 | 31 |

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|----|--|-----|-----------|
| 55 | Long-term PM2.5 exposure and depressive symptoms in China: A quasi-experimental study. <i>The Lancet Regional Health - Western Pacific</i> , 2021, 6, 100079. | 1.3 | 31 |
| 56 | Satellite-based estimation of hourly PM2.5 levels during heavy winter pollution episodes in the Yangtze River Delta, China. <i>Chemosphere</i> , 2020, 239, 124678. | 4.2 | 28 |
| 57 | The sensitivity of satellite-based PM2.5 estimates to its inputs: Implications to model development in data-poor regions. <i>Environment International</i> , 2018, 121, 550-560. | 4.8 | 26 |
| 58 | Associations between exposure to landscape fire smoke and child mortality in low-income and middle-income countries: a matched case-control study. <i>Lancet Planetary Health</i> , The, 2021, 5, e588-e598. | 5.1 | 25 |
| 59 | Clean air actions in China, PM2.5 exposure, and household medical expenditures: A quasi-experimental study. <i>PLoS Medicine</i> , 2021, 18, e1003480. | 3.9 | 22 |
| 60 | Reduction in black carbon light absorption due to multi-pollutant emission control during APEC China 2014. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 10275-10287. | 1.9 | 20 |
| 61 | Exposure to landscape fire smoke reduced birthweight in low- and middle-income countries: findings from a siblings-matched case-control study. <i>ELife</i> , 2021, 10, . | 2.8 | 19 |
| 62 | Satellite-based assessment of the long-term efficacy of PM2.5 pollution control policies across the Taiwan Strait. <i>Remote Sensing of Environment</i> , 2020, 251, 112067. | 4.6 | 18 |
| 63 | Modeling the aging process of black carbon during atmospheric transport using a new approach: a case study in Beijing. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 9663-9680. | 1.9 | 17 |
| 64 | Improved air quality in China can enhance solar-power performance and accelerate carbon-neutrality targets. <i>One Earth</i> , 2022, 5, 550-562. | 3.6 | 17 |
| 65 | Association between a Rapid Reduction in Air Particle Pollution and Improved Lung Function in Adults. <i>Annals of the American Thoracic Society</i> , 2021, 18, 247-256. | 1.5 | 16 |
| 66 | Comparison of Current and Future PM _{2.5} Air Quality in China Under CMIP6 and DPEC Emission Scenarios. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093197. | 1.5 | 15 |
| 67 | Dramatic changes in Harbin aerosol during 2018–2020: the roles of open burning policy and secondary aerosol formation. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 15199-15211. | 1.9 | 15 |
| 68 | Air quality and health benefits of China's current and upcoming clean air policies. <i>Faraday Discussions</i> , 2021, 226, 584-606. | 1.6 | 13 |
| 69 | Reduction of Global Life Expectancy Driven by Trade-Related Transboundary Air Pollution. <i>Environmental Science and Technology Letters</i> , 2022, 9, 212-218. | 3.9 | 13 |
| 70 | New WHO global air quality guidelines help prevent premature deaths in China. <i>National Science Review</i> , 2022, 9, nwac055. | 4.6 | 13 |
| 71 | Corrigendum to Anthropogenic emission inventories in China: a review. <i>National Science Review</i> , 2018, 5, 603-603. | 4.6 | 12 |
| 72 | Imbalanced transfer of trade-related air pollution mortality in China. <i>Environmental Research Letters</i> , 2020, 15, 094009. | 2.2 | 11 |

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|----|---|-----|-----------|
| 73 | Application of Bayesian Additive Regression Trees for Estimating Daily Concentrations of PM2.5 Components. <i>Atmosphere</i> , 2020, 11, 1233. | 1.0 | 10 |
| 74 | Formation of secondary inorganic aerosol in a frigid urban atmosphere. <i>Frontiers of Environmental Science and Engineering</i> , 2021, 16, 1. | 3.3 | 10 |
| 75 | Improved spatial representation of a highly resolved emission inventory in China: evidence from TROPOMI measurements. <i>Environmental Research Letters</i> , 2021, 16, 084056. | 2.2 | 9 |
| 76 | A Satellite-Based Land Use Regression Model of Ambient NO2 with High Spatial Resolution in a Chinese City. <i>Remote Sensing</i> , 2021, 13, 397. | 1.8 | 6 |
| 77 | Consumption-based PM2.5-related premature mortality in the Beijing-Tianjin-Hebei region. <i>Science of the Total Environment</i> , 2021, 800, 149575. | 3.9 | 6 |
| 78 | Evaporation process dominates vehicular NMVOC emissions in China with enlarged contribution from 1990 to 2016. <i>Environmental Research Letters</i> , 2021, 16, 124036. | 2.2 | 4 |
| 79 | Daily Emission Patterns of Coal-Fired Power Plants in China Based on Multisource Data Fusion. <i>ACS Environmental Au</i> , 2022, 2, 363-372. | 3.3 | 4 |
| 80 | Satellite-derived long-term estimates of full-coverage PM1 concentrations across China based on a stacking decision tree model. <i>Atmospheric Environment</i> , 2021, 255, 118448. | 1.9 | 3 |