Jing Wei, Ph.D. (Updated to 1/2023)

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Biography

I am focusing on studying atmospheric aerosols, clouds, particulate matter, and trace gases using remote sensing, big data, and artificial intelligence. Up to now, I have authored over **60** SCI papers as first or corresponding authors in leading journals such as *RSE*, *ES&T*, *JGR*, *ACP*, and *TGRS*, including **6 ESI Hot (Top < 0.1%) papers** and **11 ESI Highly Cited (Top < 1%) papers**, and **7** papers have been cited more than 100 times, with the highest one of **283** times. My total citations are more than **3700** times with an H-index of **33** (Google). I was the winner of the **AGU James R. Holton Award** and selected to Stanford University List of the **World's Top 2% Scientists**. I was an Editor of *Earth System Science Data* and associate editors of *Journal of Geophysical Research: Atmospheres* and *Remote Sensing*. I have generated the high-resolution and high-quality datasets of ground-level air pollutants in China, the United States, and the World (i.e., CHAP, USHAP, and GHAP), which have been widely used, leading to more than **120** related publications.

Work Experience

Faculty Research Associate, Department of Atmospheric and Oceanic Science, Earth System Science Interdisciplinary Center, University of Maryland, College Park, USA, 2022–Present.
Postdoctoral Fellow, Department of Chemical and Biochemical Engineering, University of Iowa, USA, 2021–2022.
Research Assistant, Center for Earth System Science, Tsinghua University, China, 2017–2018.
Research Assistant, Institute of Space and Earth Information Science, Chinese University of Hong Kong, China, 2017.

Education

Joint Ph.D. in Atmospheric Physics and Atmospheric Environment, University of Maryland, College Park, USA, 2021/1.
Ph.D. in Global Environmental Change, Beijing Normal University, China, 2021/1.
M.Sc. in Photogrammetry and Remote Sensing, Shandong University of Science and Technology, China, 2017.
B.Sc. in Remote Sensing Science and Technology, Shandong University of Science and Technology, China, 2014.

Research Interests

- Aerosol and particulate matter remote sensing
- Trace gas remote sensing
- Cloud and cloud shadow detection
- Air pollution modelling and health exposure
- Artificial intelligence (machine and deep learning)
- Big data

Awards, Honors & Recognitions

- AGU James R. Holton Award (2022)
- World's Top 2% Scientists (2022, 2021)
- Top 100 Most Cited Chinese Papers Published in International Journals (2022)
- ESSIC Annual Best Paper Award (2022)
- Zhou Tingru Geography Youth Award (2021)
- Gao Tingyao Environmental Protection Outstanding Youth Award (2020)
- Li Xiaowen Remote Sensing Science Youth Award (2019)
- ESI Hot Paper, *Remote Sensing of Environment* (2022/2021/2019)
- ESI Hot Paper, *Atmospheric Chemistry and Physics* (2020)
- ESI Hot Paper, *Environmental Science & Technology* (2019)
- ESI Hot Paper, *Atmospheric Environment* (2019)
- ESI Highly Cited Paper, *Remote Sensing of Environment* (2022/2019)

- ESI Highly Cited Paper, *Journal of Cleaner Production* (2022)
- ESI Highly Cited Paper, *Atmospheric Chemistry and Physics* (2021/2020/2019)
- ESI Highly Cited Paper, *Environment International* (2021)
- ESI Highly Cited Paper, *Science of the Total Environment* (2021)
- ESI Highly Cited Paper, *Environmental Science & Technology* (2019)
- ESI Highly Cited Paper, *Atmospheric Environment* (2019)
- ESI Highly Cited Paper, *Atmospheric Environment* (2018)
- ESI Highly Cited Paper, *Remote Sensing* (2018)
- Most Cited Articles (since 2020), *Remote Sensing of Environment* (2021)
- Most Cited Articles (since 2019), *Remote Sensing of Environment* (2021/2019)
- Most Cited Articles (since 2018), *Remote Sensing of Environment* (2019)
- Most Cited Articles (since 2018), *Atmospheric Environment* (2019)
- 1st Most Cited Paper in *Remote Sensing of Environment* (2021)
- 1st Most Cited Paper and Author in *Atmospheric Environment* (2019)
- Journal High Impact Paper, *Hypertension* (2021)
- Journal Highlight Article, *Atmospheric Chemistry and Physics* (2020)
- Journal Highlight Article, *Journal of Geophysical Research-Atmospheres* (2018)
- Outstanding Graduates, Beijing (Ph.D., 2021)
- Special Prize for Graduate Academic Innovation, Beijing Normal University (2021)
- National Scholarship (Ph.D., 2020/2019; M.Sc., 2016/2015)
- Special Scholarship for Doctoral Freshmen, Beijing Normal University (2018)
- Outstanding Graduates, Shandong Province (M.Sc., 2017; B.Sc., 2014)
- Outstanding Scientific & Technological Innovation Achievement Award, Shandong Province (Second Prize, 2016)

Publications and Citations

- Total SCI journal publications: **164** (first/corresponding author: **62**)
- Google Scholar: ***H-index*** = 33, ***Total Citations*** = 3,777
- Scopus: ***H-index*** = 33, ***Total Citations*** = 3,627
- Web of Science: ***H-index*** = 30, ***Total Citations*** = 3,022
- A full publication list is provided on Page 4–7.

Research Grants

- Co-Investigator: *Generation of Integrated Aerosol Fine-Mode Fraction and Surface Particulate Matter from LEO- and GEO Satellites in Asia Using Machine-Learning Models*, NASA Earth Sciences' Applied Science Program [80NSSC21K1980], 2021–Present
- Co-Investigator: *Enrich and enhance the application of TEMPO and GEOS data products for regional air quality and public health management under smoke conditions*, NASA Earth Sciences' Applied Science Program [80NSSC21K0428], 2021–Present
- PI: Interdisciplinary Research Fund for the First-Year Doctoral Candidates [BNUXKJC1808], Beijing Normal University, 2018–2019
- PI: Graduate Innovation Fund [SDKDYC170103], Shandong University of Science and Technology, 2016–2017
- PI: Graduate Innovation Fund [YC150103], Shandong University of Science and Technology, 2015–2016
- PI: Graduate Innovation Fund [YC140307], Shandong University of Science and Technology, 2014–2015
- Participant: National Key R&D Program of China [2017YFC1501702]
- Participant: National Natural Science Foundation of China [42030606, 91544217, 41171270]

Editorial and Reviewer Services

- Editor, *Earth System Science Data* (IF = 11.815), 2022–Present
- Associate Editor, *Journal of Geophysical Research: Atmospheres* (IF = 5.22), 2023–Present
- Associate Editor, *Remote Sensing* (IF = 5.349), 2022–Present

- Editorial Board Members: *International Journal of Digital Earth* (2022–Present), *Frontiers in Earth Science* (2022–Present), and *Big Earth Data* (2021–Present)
- Youth Editorial Board Members: *The Innovation* (2022–Present), *Remote Sensing Technology and Application* (*Chinese*, 2022–Present), *Journal of Atmospheric and Environmental Optics* (*Chinese*, 2022–Present), *Journal of Environmental Hygiene* (*Chinese*, 2022–Present)
- Guest Editors: *Atmospheric Measurement Techniques* (2021–Present), *Sustainability* (2021–Present), *Frontiers in Earth Science* (2021–2022), *Frontiers in Environmental Science* (2021–2022), *Atmosphere* (2022), *National Remote Sensing Bulletin (Chinese)* (2021–2022), *Frontiers in Public Health* (2022)
- Journal Reviewer (150+ peer views for 50+ journals): *Remote Sensing of Environment*, *Environmental Science & Technology*, *Journal of Geophysical Research-Atmospheres*, *Geophysical Research Letters*, *Atmospheric Chemistry and Physics*, *IEEE Transactions on Geoscience and Remote Sensing*, *The Lancet Regional Health – Americas*, et al.

Membership and Service

- Co-Chair, Atmospheric Environmental Remote Sensing Society (AERSS) ECPC, 2022-Now
- Co-Convener/Co-Chair, Asia Oceania Geosciences Society (AOGS) Section, 2022 **(Top Conveners)**
- Members: American Geophysical Union (AGU), American Meteorological Society (AMS), Asia Oceania Geosciences Society (AOGS), Chinese-American Oceanic and Atmospheric Association (COAA)

Selected Invited Seminars

- Total seminars: **21** talks (**1** Chair and **1** Invited Department Seminar).
- **Wei, J.** University of Maryland, College Park, November 3, 2022. (Invited **Department Seminar**)
- **Wei, J.** University of Science and Technology of China, October 21, 2022.
- **Wei, J.** MDPI Remote Sensing, June 25, 2022. **(Chair)**
- **Wei, J.** China Clean Air Policy Partnership, Tsinghua University, April 6, 2021.
- **Wei, J.** Lanzhou University, China, March 26, 2021.
- **Wei, J.** Nanjing University of Information Science and Technology, December 29, 2020.
- **Wei, J.** NASA Goddard Space Flight Center, December 1, 2020.
- **Wei, J.** Ministry of Ecology and Environment Center for Satellite Application on Ecology and Environment, November 25, 2020.
- **Wei, J.** Zhejiang University, September 20, 2020.
- **Wei, J.** Peking University, July 8, 2019.

Selected Presentations

- Conference Presentations: **13** talks (**1** invited), **7** posters.
- **Wei, J.** Two-decade fine-scale surface $PM_{2.5}$ estimates and spatiotemporal variations in China using machine learning, American Meteorological Society (AMS) Annual Meeting, January 10, 2023 (Online).
- **Wei, J.** Tracking ambient air pollution from space integrating Big Data and artificial intelligence. American Geophysical Union (AGU) Fall Meeting, December 12–16, 2022, Chicago, IL, USA. (Invited Talk)
- **Wei, J.** Satellite-derived daily fine-scale surface NO_2 concentrations in China by combing machine and deep learning models. American Geophysical Union (AGU) Fall Meeting, December 12–16, 2022, Chicago, IL, USA.
- **Wei, J.** Hourly $PM_{2.5}$ estimations from Himawari-8/AHI aerosol products across China via machine learning. Advancement of POLarimetric Observations (APOLO), August 9-12, 2022, Washington D.C., USA.
- **Wei, J.** Full-coverage daily ground-level ozone (O_3) estimation from Bigdata using machine learning across China. Asia Oceania Geosciences Society (AOGS), August 1–5, 2022 (Online).
- **Wei, J.** Ground-level NO_2 surveillance derived from the Sentinel-5P TROPOMI satellite across China using remote sensing and machine learning. Asia Oceania Geosciences Society (AOGS), August 1–6, 2021 (Online).
- **Wei, J.** Monitoring the spatiotemporal variations of $PM_{2.5}$ pollution across China in recent 20 years using satellite remote sensing. The First Youth Forum on Remote Sensing and Collaborative Analysis of Atmospheric Environment, November 28–29, 2020 (Online).
- **Wei, J.** Satellite-based high-resolution and high-quality fine particulate matters across China. IEEE International Geoscience and Remote Sensing Symposium (IGARSS), September 26 – October 2, 2020 (Online).

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Full List of Publications (First/Corresponding Author) [Citations > 100]

1. **Wei, J.**, Huang, W., Li, Z., Xue, W., Peng, Y., Sun, L., and Cribb, M. Estimating 1-km-resolution $PM_{2.5}$ concentrations across China using the space-time random forest approach. *Remote Sensing of Environment*, 2019, 231, 111221. **(ESI Hot and Highly Cited Paper, Journal Most Cited Articles since 2018/2019)** **[283]**
2. **Wei, J.**, Li, Z., Lyapustin, A., Sun, L., Peng, Y., Xue, W., Su, T., and Cribb, M. Reconstructing 1-km-resolution high-quality $PM_{2.5}$ data records from 2000 to 2018 in China: spatiotemporal variations and policy implications. *Remote Sensing of Environment*, 2021, 252, 112136. **(ESI Hot and Highly Cited Paper, Journal Most Cited Articles since 2019/2020, Top 100 Most Cited Chinese Papers Published in International Journals, ESSIC 2022 Best Paper Award, Editor Invitation)** **[231]**
3. **Wei, J.**, Li, Z., Peng, Y., and Sun, L. MODIS Collection 6.1 aerosol optical depth products over land and ocean: validation and comparison. *Atmospheric Environment*, 2019, 201, 428–440. **(ESI Hot and Highly Cited Paper, Journal Most Cited Articles since 2018)** **[195]**
4. **Wei, J.**, Li, Z., Guo, J., Sun, **Wei, J.**, Li, Z., Cribb, M., Huang, W., Xue, W., Sun, L., Guo, J., Peng, Y., Li, J., Lyapustin, A., Liu, L., Wu, H., and Song, Y. Improved 1 km resolution $PM_{2.5}$ estimates across China using enhanced space-time extremely randomized trees. *Atmospheric Chemistry and Physics*, 2020, 20(6), 3273–3289. **(ESI Hot and Highly Cited Paper)** **[194]**
5. **Wei, J.**, Li, Z., Guo, J., Sun, L., Huang, W., Xue, W., Fan, T., and Cribb, M. Satellite-derived 1-km-resolution PM_1 concentrations from 2014 to 2018 across China. *Environmental Science & Technology*, 2019, 53(22), 13265–13274. **(ESI Hot and Highly Cited Paper)** **[144]**
6. **Wei, J.***, Li, Z., Li, K., Dickerson, R., Pinker, R., Wang, J., Liu, X., Sun, L., Xue, W., and Cribb, M. Full-coverage mapping and spatiotemporal variations of ground-level ozone (O_3) pollution from 2013 to 2020 across China. *Remote Sensing of Environment*, 2022, 270, 112775. **(ESI Hot and Highly Cited Paper)**
7. **Wei, J.**, Peng, Y., Mahmood, R., Sun, L., and Guo, J. Intercomparison in spatial distributions and temporal trends derived from multi-source satellite aerosol products. *Atmospheric Chemistry and Physics*, 2019, 19, 7183–7207. **(ESI Highly Cited Paper, Cited By IPCC AR6)**
8. **Wei, J.***, Li, Z., Pinker, R., Wang, J., Sun, L., Xue, W., Li, R., and Cribb, M. Himawari-8-derived diurnal variations of ground-level $PM_{2.5}$ pollution across China using the fast space-time Light Gradient Boosting Machine (LightGBM). *Atmospheric Chemistry and Physics*, 2021, 21, 7863–7880. **(ESI Highly Cited Paper)**
9. **Wei, J.***, Li, Z., Xue, W., Sun, L., Fan, T., Liu, L., Su, T., and Cribb, M. The ChinaHighPM$_{10}$ dataset: generation, validation, and spatiotemporal variations from 2015 to 2019 across China. *Environment International*, 2021, 146, 106290. **(ESI Highly Cited Paper)**
10. **Wei, J.***, Sun, L., Huang, B., Bilal, M., Zhang, Z., and Wang, L. Verification, improvement and application of aerosol optical depths in China. Part 1: Inter-comparison of NPP-VIIRS and Aqua-MODIS. *Atmospheric Environment*, 2018, 175, 221–233. **(ESI Highly Cited Paper)**
11. **Wei, J.**, Sun, L., Peng, Y., Wang, L., Zhang, Z., Bilal, M., and Ma., Y. An improved high-spatial-resolution aerosol retrieval algorithm for MODIS images over land. *Journal of Geophysical Research Atmospheres*, 2018, 123(21), 12291–12307. **(Journal Highlight)**
12. **Wei, J.**, Huang, B., Sun, L., Zhang, Z., Wang, L., and Bilal, M. A simple and universal aerosol retrieval algorithm for Landsat series images over complex surfaces. *Journal of Geophysical Research Atmospheres*, 2017, 122(24), 13338–13355.
13. **Wei, J.**, Huang, W., Li, Z., Sun, L., Zhu, X., Yuan, Q., Liu, L., and Cribb, M. Cloud detection for Landsat imagery by combining the random forest and super-pixels extracted via energy-driven sampling segmentation approaches. *Remote Sensing of Environment*, 2020, 248, 112005.
14. **Wei, J.***, Liu, S., Li, Z., Liu, C., Qin, K., Liu, X., Pinker, R., Dickerson, R., Lin, J., Boersma, K., Sun, L., Li, R., Xue, W., Cui, Y., Zhang, C., and Wang, J. Ground-level NO_2 surveillance from space across China for high resolution using interpretable spatiotemporally weighted artificial intelligence. *Environmental Science & Technology*, 2022, 56(14), 9988–9998. **(Editor Invitation)**
15. **Wei, J.***, Li, Z., Sun, L., Xue, X., Ma, Z., Liu, L., Fan, T., and Cribb, M. Extending the EOS long-term $PM_{2.5}$ data records since 2013 in China: application to the VIIRS Deep Blue aerosol products. *IEEE Transactions on Geoscience and Remote Sensing*, 2022, 60, 4100412.
16. **Wei, J.**, Li, Z., Peng, Y., Sun, L., and Yan, X. A regionally robust high-spatial-resolution aerosol retrieval algorithm for MODIS images over Eastern China. *IEEE Transactions on Geoscience and Remote Sensing*, 2019, 57(7), 4748–4757.

17. **Wei, J.**, Li, Z., Sun, L., Yang, Y., Zhao, C., and Cai, Z. Enhanced aerosol estimations from Suomi-NPP VIIRS images over heterogeneous surfaces. *IEEE Transactions on Geoscience and Remote Sensing*, 2019, 57(12), 9534–9543.
18. **Wei, J.**, Li, Z., Sun, L., Peng, Y., Zhang, Z., Li, Z., Su, T., Feng, L., Cai, Z., and Wu, H. Evaluation and uncertainty estimate of the next-generation geostationary meteorological Himawari-8/AHI aerosol products. *Science of the Total Environment*, 2019, 692, 879–891.
19. **Wei, J.***, Li, Z., Sun, L., Peng, Y., Liu, L., He, L., Qin, W., and Cribb, M. MODIS Collection 6.1 3 km resolution aerosol optical depth product: global evaluation and uncertainty analysis. *Atmospheric Environment*, 2020, 240, 117768.
20. **Wei, J.**, Li, Z., Sun, L., Peng, Y., and Wang, L. Improved merge schemes for MODIS Collection 6.1 Dark Target and Deep Blue combined aerosol products. *Atmospheric Environment*, 2019, 202, 315–327.
21. **Wei, J.**, Peng, Y., Guo, J., and Sun, L. Performance of MODIS Collection 6.1 Level 3 aerosol products in spatial-temporal variations over land. *Atmospheric Environment*, 2019, 206, 30–44.
22. **Wei, J.**, and Sun, L. Comparison and evaluation of different MODIS aerosol optical depth products over Beijing-Tianjin-Hebei region in China. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 2017, 10(3), 835–844.
23. **Wei, J.***, Ming, Y., Jia, Q., and Yang, D. Simple mineral mapping algorithm based on multi-type spectral diagnostic absorption features: a case study at Cuprite, Nevada. *Journal of Applied Remote Sensing*, 2017, 11(2).
24. **Wei, J.***, Ming, Y., Han, L., Ren, Z., and Guo, Y. Method of remote sensing identification for mineral types based on multiple spectral characteristic parameters matching. *Spectroscopy and Spectral Analysis*, 2015, 35(10), 2862-2866.
25. Cai, M., Lin, X., Wang, X., Zhang, S., Qian, Z., McMillin, S., Aaron, H., Lin, H., **Wei, J.***, Zhang, Z., and Pan, J. Ambient particulate matter pollution of different sizes associated with recurrent stroke hospitalization in China: A cohort study of 1.07 million stroke patients. *Science of The Total Environment*, 2023, 856, 159104.
26. Chen, L., Gao, D., Ma, T., Chen, M., Li, Y., Ma, Y., Wen, B., Jiang, J., Wang, X., Zhang, J., Chen, S., Wu, L., Li, W., Liu, X., Guo, X., Huang, S., **Wei, J.***, Song, Y., Ma, J., and Dong, Y. Ambient gaseous pollutant exposure and incidence of visual impairment among children and adolescents: fndings from a longitudinal, two-center cohort study in China. *Environmental Science and Pollution Research*, 2022, 29, 73262–73270.
27. Guo, H., Li, X., Li, W., Wu, J., and **Wei, J.*** Climatic modification effects on the association between PM1 and lung cancer incidence in China. *BMC Public Health*, 2021, 21, 880.
28. He, F., **Wei, J.**[#], Dong, Y., Liu, C., Zhao, K., Peng, W., Lu, Z., Zhang, B., Xue, F., Guo, X., and Jia, X. Associations of ambient temperature with mortality for ischemic and hemorrhagic stroke and the modification effects of greenness in Shandong Province, China. *Science of The Total Environment*, 2022, 851, 158046.
29. He, L., Wang, L., Li, Z., Jiang, D., Sun, L., Liu, D., Liu, L., Yao, R., Zhou, Z., and **Wei, J.*** VIIRS Environmental Data Record and Deep Blue aerosol products: validation, comparison, and spatiotemporal variations from 2013 to 2018 in China. *Atmospheric Environment*, 2021, 250, 118265.
30. Hu, M., **Wei, J.**[#], Hu, Y., Guo, X., Li, Z., Liu, Y., Li, S., Xue, Y., Li, Y., Liu, M., Wang, L., and Liu, X. Long-term effect of submicronic particulate matter (PM_1) and intermodal particulate matter ($PM_{1\text{-}2.5}$) on incident dyslipidemia in China: A nationwide 5-year cohort study. *Environmental Research*, 2023, 216, 114860.
31. Li, S., **Wei, J.**[#], Hu, Y., Liu, Y., Hu, M., Shi, Y., Xue, Y., Liu, M., Xie, W., Guo, X., and Liu, X. Long-term effect of intermediate particulate matter ($PM_{1\text{-}2.5}$) on incident asthma among middle-aged and elderly adults: A national population-based longitudinal study. *Science of The Total Environment*, 2023, 859, 160204.
32. Li, X., Xue, W., Wang, K., Che, Y., and **Wei, J.*** Environmental regulation and synergistic effects of $PM_{2.5}$ control in China. *Journal of Cleaner Production*, 2022, 337, 130438.
33. Lin, H., Zhu, J., Jiang, P., Cai, Z., Yang, X., Zhou, Z., and **Wei, J.*** Assessing drivers of coordinated control of ozone and fine particulate pollution: Evidence from Yangtze River Delta in China. *Environmental Impact Assessment Review*, 2022, 96, 106840.
34. Liu, W., Cai, M., Long, Z., Tong, X., Li, Y., Wang, L., Zhou, M., **Wei, J.***, Lin, H., and Yin, P. Association between ambient sulfur dioxide pollution and asthma mortality: Evidence from a nationwide analysis in China. *Ecotoxicology and Environmental Safety*, 2023, 249, 114442.
35. Liu, W., **Wei, J.**[#], Cai, M., Qian, Z., Long, Z., Wang, L., Vaughn, M., Aaron, H., Tong, X., Li, Y., Yin, P., Lin, H., and Zhou, M. Particulate matter pollution and asthma mortality in China: A nationwide time-stratified case-crossover study from 2015 to 2020. *Chemosphere*, 2022, 308, 136316.
36. Lu, D., Mao, W., Zheng, L., Xiao, W., Zhang, L., and **Wei, J.*** Ambient $PM_{2.5}$ estimates and variations during COVID-19 pandemic in the Yangtze River Delta using machine learning and big data. *Remote Sensing*, 2021, 13(8), 1423.

37. Song, J., Ding, Z., Zheng, H., Xu, Z., Cheng, J., Pan, R., Yi, W., **Wei, J.***, and Su, H. Short-term PM_1 and $PM_{2.5}$ exposure and asthma mortality in Jiangsu Province, China: What's the role of neighborhood characteristics? *Ecotoxicology and Environmental Safety*, 2022, 241, 113765.
38. Song, J., Du, P., Yi, W., **Wei, J.**[#], Fang, J., Pan, R., Zhao, F., Zhang, Y., Xu, Z., Sun, Q., Liu, Y., Chen, C., Cheng, J., Liu, Y., Li, T., Su, H., and Shi, X. Using an exposome-wide approach to explore the impact of urban environments on blood pressure among adults in Beijing–Tianjin–Hebei and surrounding areas of China. *Environmental Science & Technology*, 2022, 56, 8395−8405.
39. Sun, L., **Wei, J.***, Bilal, M., Tian, X., Jia, C., Guo, Y., and Mi, X. Aerosol optical depth retrieval over bright areas using Landsat 8 OLI images. *Remote Sensing*, 2016, 8(1), 23. **[104]**
40. Sun, L., **Wei, J.***, Duan, D., Guo, Y., Yang, D., Jia, C., and Mi, X. Impact of land-use and land-cover change on urban air quality in representative cities of China. *Journal of Atmospheric and Solar-Terrestrial Physics*, 2016, 142, 43–54. **[106]**
41. Sun, L., **Wei, J.***, Wang, J., Mi, X., Guo, Y., Lv, Y., Yang, Y., Gan, P., Zhou, X., Jia, C., and Tian, X. A universal dynamic threshold cloud detection algorithm (UDTCDA) supported by a prior surface reflectance database. *Journal of Geophysical Research Atmospheres*, 2016, 121(12), 7172–7196.
42. Sun, Z., **Wei, J.**[#], Zhang, N., He, Y., Sun, Y., Liu, X., Yu, H., and Sun, L. Retrieving high-resolution aerosol optical depth from GF-4 PMS imagery in Eastern China. *Remote Sensing*, 2021, 13, 3752.
43. Tian, X., Liu, Q., Gao, Z., Wang, Y., Li, X., and **Wei, J.*** Improving MODIS aerosol estimates over land with the surface BRDF reflectances using the 3-D discrete cosine transform and RossThick-LiSparse models. *IEEE Transactions on Geoscience and Remote Sensing*, 2021, 59(12), 9851-9860.
44. Wang, L., Zhang, J., **Wei, J.**[#], Zong, J., Lu, C., Du, Y., and Wang, Q. Role of liver enzymes in the relationship between particulate matter exposure and diabetes risk: a longitudinal cohort study. *Environmental Pollution*, 2022, 312, 120020.
45. Wang, X., Guo, B., Yang, X., Li, J., Baima, Y., Yin, J., Yu, J., Xu, H., Zeng, C., Feng, S., **Wei, J.***, Hong, F., and Zhao, X. Role of liver enzymes in the relationship between particulate matter exposure and diabetes risk: a longitudinal cohort study. *Journal of Clinical Endocrinology & Metabolism*, 2022, 107, e4086–e4097.
46. Wang, X., Xu, Z., Ho, H., Song, Y., Zheng, H., Hossain, M., Khan, M., Bogale, D., **Wei, J.***, and Cheng, J. Ambient particular matters (PM_1, $PM_{2.5}$, PM_{10}) and childhood pneumonia: the smaller particle, the greater short-term impact? *Science of the Total Environment*, 2021, 772, 145509.
47. Wang, Y., **Wei, J.**[#], Zhang, Y., Guo, T., Chen, S., Wu, W., Chen, S., Li, Z., Qu, Y., Xiao, J., Deng, X., Liu, Y., Du, Z., Zhang, W., and Hao, Y. Estimating causal links of long-term exposure to particulate matters with all-cause mortality in South China. *Environment International*, 2023, 171, 107726.
48. Wang, Y., Cao, R., Xu, Z., Jin, J., Wang, J., Yang, T., **Wei, J.***, Huang, J., and Li, G. Long-term exposure to ozone and diabetes incidence: A longitudinal cohort study in China. *Science of the Total Environment*, 2022, 816, 151634.
49. Wu, H., Zhang, B., **Wei, J.**[#], Lu, Z., Zhao, M., Liu, W., Bovet, P., Guo, X., and Xi, B. Short-term effects of exposure to ambient PM_1, $PM_{2.5}$, and PM_{10} on ischemic and hemorrhagic stroke incidence in Shandong Province, China. *Environmental Research*, 2022, 212, 113350.
50. Wu, H., Zhang, Y., Zhao, M., Liu, W., Magnussen, C., **Wei, J.***, and Xi, B. Short-term effects of exposure to ambient PM_1 on blood pressure in children and adolescents aged 9 to 18 years in Shandong Province, China. *Atmospheric Environment*, 2022, 283, 119180.
51. Xiong, J., Li, J., Wu, X., Wolfson, J., Lawrence, J., Stern, R., Koutrakis, P., **Wei, J.***, and Huang, S. The association between daily-diagnosed COVID-19 morbidity and short-term exposure to PM_1 is larger than associations with $PM_{2.5}$ and PM_{10}. *Environmental Research*, 2022, 210, 113016.
52. Xu, R., **Wei, J.**[#], Liu, T., Li, Y., Yang, C., Shi, C., Chen, G., Zhou, Y., Sun, H., and Liu, Y. Association of short-term exposure to ambient PM_1 with total and cause-specific cardiovascular disease mortality. *Environment International*, 2022, 169, 107519.
53. Xue, W., Zhang, J., Hu, X., Yang, Z., and **Wei, J.*** Hourly seamless surface O_3 estimates by integrating the chemical transport and machine learning models in the Beijing-Tianjin-Hebei region. *International Journal of Environmental Research and Public Health*, 2022, 19, 8511.
54. Xue, W., Zhang, J., Ji, D., Che, Y., Lu, T., Deng, X., Li, X., Tian, Y., and **Wei, J.*** Aerosol-induced direct radiative forcing effects on terrestrial ecosystem carbon fluxes over China. *Environmental Research*, 2021, 200, 111464.
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