

Bo Zheng

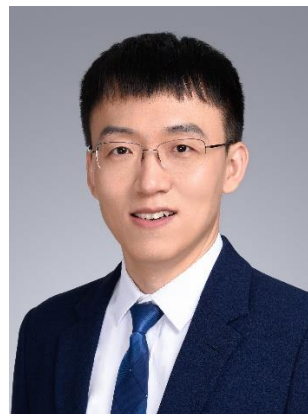
Born in: December 1988

Assistant Professor

Tsinghua Shenzhen International Graduate School,
Tsinghua University, China

Highly Cited Researcher 2020–2022

Google Scholar citations: >16000, H-index: 55



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Research Interest

Atmospheric carbon cycle; Source and sink of atmospheric trace gases; Anthropogenic emissions and drivers; Climate change and wildfire emissions.

Awards & Honors

Highly Cited Researcher in the field of Cross-Field in 2020

Highly Cited Researcher in the field of Geosciences in 2021

Highly Cited Researcher in the field of Geosciences in 2022

Young Elite Scientist Sponsorship Program by the China Association for Science and Technology in 2021

Academic Service

Topical editor of *Earth System Science Data* (IF = 11.333)

Associate editor of *Journal of Geophysical Research: Atmospheres* (IF = 4.261)

Early-Career Editorial Board member of *Environmental Science & Ecotechnology*

CEDS advisory committee member (one of eight members)

Key expert in the GEIA COVID-19 emissions Working Group

Journal Review

Aerosol and Air Quality Research, AGU Advances, Applied Energy, Atmospheric Chemistry and Physics, Atmospheric Environment, Atmospheric Pollution Research, Chemosphere, Environment International, Environmental Monitoring and Assessment, Environmental Pollution, Environmental Research Letters, Environmental Science and Ecotechnology, Earth System Science Data, Environmental Science & Technology, Environmental Science & Technology Letters, Journal of Cleaner Production, Journal of Environmental Management, Journal of Environmental Sciences, Journal of Geophysical Research: Atmospheres, Nature

Communications, Nature Geoscience, One Earth, Resources Conservation & Recycling, Remote Sensing of Environment, Science Advances, Science Bulletin, Science China Earth Sciences, Science of the Total Environment, Scientific Reports, The Innovation

Professional Experience

- 2021.01–present** **Assistant professor**
Tsinghua Shenzhen International Graduate School, China
- 2016.11–2020.12** **Postdoctoral researcher**
Laboratory for Sciences of Climate and Environment, France
Research topic: global carbon cycle modeling and inversion
Collaborator: Philippe Ciais & Frederic Chevallier

Education

- 2016** **PhD, Environmental Science and Engineering**
Tsinghua University, Beijing, P. R. China
Dissertation: “High-Resolution Mapping of Anthropogenic Emissions”
Advisor: Kebin He
- 2011** **BA, Environmental Science and Engineering**
Tsinghua University, Beijing, P. R. China

Research Experience

- 2013.6–2013.8** **Young Scientists Summer Program**
International Institute for Applied Systems Analysis, Austria
Advisor: Jens Borken-Kleefeld
- 2012.12–2013.5** **Visiting Scholar**
Department of Marine, Earth, and Atmospheric Sciences
North Carolina State University, Raleigh, USA
Advisor: Yang Zhang

Journal Publications

Google Scholar h-index: 55; Google Scholar citations: >16000

Published papers (#co-first author, *corresponding author)

- 2023** 1. **Zheng, B.***, et al.: Record high CO₂ emissions from boreal fires in 2021, Science, in press.
- 2022** 2. Kong, Y., **Zheng, B.***, Zhang, Q., and He, K.: Global and regional carbon budget for 2015–2020 inferred from OCO-2 based on an ensemble Kalman filter coupled with GEOS-Chem, Atmos. Chem. Phys., 22, 10769–10788, doi: 10.5194/acp-22-10769-2022, 2022.
3. Shi, Q.#, **Zheng, B.#**, Zheng, Y., Tong, D., Liu, Y., Ma, H., Hong, C., Geng, G., Guan, D., He, K., and Zhang, Q.*: Co-benefits of CO₂ emission reduction from China’s clean air

- actions between 2013-2020, *Nature Communications*, 13, 5061, doi: 10.1038/s41467-022-32656-8, 2022.
- 2021** 4. **Zheng, B.***, Ciais, P., Chevallier, F., Chuvieco, E., Chen, Y., and Yang, H.: Increasing forest fire emissions despite the decline in global burned area, *Science Advances*, 7, eabh2646, doi: 10.1126/sciadv.abh2646, 2021.
5. **Zheng, B.**, Zhang, Q.*, Geng, G., Chen, C., Shi, Q., Cui, M., Lei, Y., and He, K.: Changes in China's anthropogenic emissions and air quality during the COVID-19 pandemic in 2020, *Earth Syst. Sci. Data*, 13, 2895–2907, doi: 10.5194/essd-13-2895-2021, 2021.
6. **Zheng, B.**, Cheng, J., Geng, G., Wang, X., Li, M.*, Shi, Q., Qi, J., Lei, Y., Zhang, Q., and He, K.*: Mapping anthropogenic emissions in China at 1 km spatial resolution and its application in air quality modeling, *Science Bulletin*, 66, 612-620, doi: 10.1016/j.scib.2020.12.008, 2021.
7. Yan, L., **Zheng, B.***, Geng, G., Hong, C., Tong, D., and Zhang, Q.: Evaporation process dominates vehicular NMVOC emissions in China with enlarged contribution from 1990 to 2016, *Environ. Res. Lett.*, 16, 124036, doi: 10.1088/1748-9326/ac3872, 2021.
8. Sun, Y., Yin, H., Cheng, Y.*, Zhang, Q.*, **Zheng, B.***, Notholt, J., Lu, X., Liu, C., Tian, Y., and Liu, J.: Quantifying variability, source, and transport of CO in the urban areas over the Himalayas and Tibetan Plateau, *Atmos. Chem. Phys.*, 21, 9201–9222, doi: 10.5194/acp-21-9201-2021, 2021.
- 2020** 9. **Zheng, B.#**, Geng, G.#, Ciais, P., Davis, S. J., Martin, R. V., Meng, J., Wu, N., Chevallier, F., Broquet, G., Boersma, F., van der A, R., Lin, J., Guan, D., Lei, Y., He, K., and Zhang, Q.*: Satellite-based estimates of decline and rebound in China's CO₂ emissions during COVID-19 pandemic, *Science Advances*, 6, eabd4998, doi: 10.1126/sciadv.abd4998, 2020.
10. **Zheng, B.***, Chevallier, F., Ciais, P., Broquet, G., Wang, Y., Lian, J., and Zhao, Y.: Observing carbon dioxide emissions over China's cities and industrial areas with the Orbiting Carbon Observatory-2, *Atmos. Chem. Phys.*, 20, 8501–8510, doi: 10.5194/acp-20-8501-2020, 2020.
11. Zhao, Y.*, Saunio, M., Bousquet, P., Lin, X., Berchet, A., Hegglin, M. I., Canadell, J. G., Jackson, R. B., Deushi, M., Jöckel, P., Kinnison, D., Kirner, O., Strode, S., Tilmes, S., Dlugokencky, E. J., and **Zheng, B.***: On the role of trend and variability in the hydroxyl radical (OH) in the global methane budget, *Atmos. Chem. Phys.*, 20, 13011–13022, doi: 10.5194/acp-20-13011-2020, 2020.
12. Huang, X.#, Ding, A.#*, Gao, J.#, **Zheng, B.#**, Zhou, D., Qi, X., Tang, R., Wang, J., Ren, C., Nie, W., Chi, X., Xu, Z., Chen, L., Li, Y., Che, F., Pang, N., Wang, H., Tong, D., Qin, W., Cheng, W., Liu, W., Fu, Q., Liu, B., Chai, F., Davis, S. J., Zhang, Q.*, and He, K.: Enhanced secondary pollution offset reduction of primary emissions during COVID-19 lockdown in China, *National Science Review*, doi: 10.1093/nsr/nwaa137, 2020.
- 2019** 13. **Zheng, B.***, Chevallier, F., Yin, Y., Ciais, P., Fortems-Cheiney, A., Deeter, M. N., Parker, R. J., Wang, Y., Worden, H. M., and Zhao, Y.: Global atmospheric carbon monoxide budget 2000–2017 inferred from multi-species atmospheric inversions, *Earth Syst. Sci. Data*, 11, 1411–1436, doi: 10.5194/essd-11-1411-2019, 2019.
- 2018** 14. **Zheng, B.***, Chevallier, F., Ciais, P., Yin, Y., and Wang, Y.: On the role of the flaming to smoldering transition in the seasonal cycle of African fire emissions, *Geophys. Res. Lett.*,

- 45, 11,998-912,007, doi: 10.1029/2018GL079092, 2018.
15. **Zheng, B.**, Tong, D., Li, M., Liu, F., Hong, C., Geng, G., Li, H., Li, X., Peng, L., Qi, J., Yan, L., Zhang, Y., Zhao, H., Zheng, Y., He, K., and Zhang, Q.*: Trends in China's anthropogenic emissions since 2010 as the consequence of clean air actions, *Atmos. Chem. Phys.*, 18, 14095-14111, doi: 10.5194/acp-18-14095-2018, 2018.
 16. **Zheng, B.**, Zhang, Q.*, Davis, S. J., Ciais, P., Hong, C., Li, M., Liu, F., Tong, D., Li, H., and He, K.: Infrastructure Shapes Differences in the Carbon Intensities of Chinese Cities, *Environ. Sci. Technol.*, 52, 6032-6041, doi: 10.1021/acs.est.7b05654, 2018.
 17. **Zheng, B.***, Chevallier, F., Ciais, P., Yin, Y., Deeter, M., Worden, H., Wang, Y. L., Zhang, Q., and He, K. B.: Rapid decline in carbon monoxide emissions and export from East Asia between years 2005 and 2016, *Environ. Res. Lett.*, 13, 044007, doi: 10.1088/1748-9326/aab2b3, 2018.
 18. Li, M.*, Klimont, Z., Zhang, Q., Martin, R. V., **Zheng, B.***, Heyes, C., Cofala, J., Zhang, Y., and He, K.: Comparison and evaluation of anthropogenic emissions of SO₂ and NO_x over China, *Atmos. Chem. Phys.*, 18, 3433-3456, doi: 10.5194/acp-18-3433-2018, 2018.
 - 2017 19. **Zheng, B.**, Zhang, Q.*, Tong, D., Chen, C., Hong, C., Li, M., Geng, G., Lei, Y., Huo, H., and He, K.*: Resolution dependence of uncertainties in gridded emission inventories: a case study in Hebei, China, *Atmos. Chem. Phys.*, 17, 921-933, doi: 10.5194/acp-17-921-2017, 2017.
 20. Qi, J.#, **Zheng, B.#**, Li, M., Yu, F., Chen, C., Liu, F., Zhou, X., Yuan, J., Zhang, Q., and He, K.*: A high-resolution air pollutants emission inventory in 2013 for the Beijing-Tianjin-Hebei region, China, *Atmos. Environ.*, 170, 156-168, doi: 10.1016/j.atmosenv.2017.09.039, 2017.
 - 2015 21. **Zheng, B.**, Zhang, Q., Borken-Kleefeld, J., Huo, H.*, Guan, D., Klimont, Z., Peters, G. P., and He, K.: How will greenhouse gas emissions from motor vehicles be constrained in China around 2030?, *Appl. Energy*, 156, 230-240, doi: 10.1016/j.apenergy.2015.07.018, 2015.
 22. **Zheng, B.**, Zhang, Q.*, Zhang, Y., He, K. B.*, Wang, K., Zheng, G. J., Duan, F. K., Ma, Y. L., and Kimoto, T.: Heterogeneous chemistry: a mechanism missing in current models to explain secondary inorganic aerosol formation during the January 2013 haze episode in North China, *Atmos. Chem. Phys.*, 15, 2031-2049, doi: 10.5194/acp-15-2031-2015, 2015.
 - 2014 23. **Zheng, B.**, Huo, H., Zhang, Q.*, Yao, Z. L., Wang, X. T., Yang, X. F., Liu, H., and He, K. B.*: High-resolution mapping of vehicle emissions in China in 2008, *Atmos. Chem. Phys.*, 14, 9787-9805, doi: 10.5194/acp-14-9787-2014, 2014.

Published papers as co-author

- 2023 24. Zhao, Y.*, Saunio, M., Bousquet, P., Lin, X., Hegglin, M. I., Canadell, J. G., Jackson, R. B., and **Zheng, B.**: Reconciling the bottom-up and top-down estimates of the methane chemical sink using multiple observations, *Atmos. Chem. Phys.*, 23, 789–807, doi: 10.5194/acp-23-789-2023, 2023.
- 2022 25. Buchholz, R. R.*, Park, M., Worden, H. M.*, Tang, W., Edwards, D. P., Gaubert, B.,

- Deeter, M. N., Sullivan, T., Ru, M., Chin, M., Levy, R. C., **Zheng, B.**, and Magzamen, S.: New seasonal pattern of pollution emerges from changing North American wildfires, *Nat. Commun.*, 13, 2043, doi: 10.1038/s41467-022-29623-8, 2022.
26. Cao, J., Pan, Y.*, Yu, S., **Zheng, B.**, Ji, D., Hu, J., and Liu, J.: Rapid decline in atmospheric organic carbon deposition in North China between 2016 and 2020, *Atmos. Environ.*, 119030, doi: 10.1016/j.atmosenv.2022.119030, 2022.
27. Chen, C., Xu, R., Tong, D.*, Qin, X., Cheng, J., Liu, J., **Zheng, B.**, Yan, L., and Zhang, Q.: A striking growth of CO₂ emissions from the global cement industry driven by new facilities in emerging countries, *Environ. Res. Lett.*, 17, 044007, doi: 10.1088/1748-9326/ac48b5, 2022.
28. Chevallier, F.*, Broquet, G., **Zheng, B.**, Ciais, P., and Eldering, A.: Large CO₂ Emitters as Seen From Satellite: Comparison to a Gridded Global Emission Inventory, *Geophys. Res. Lett.*, 49, e2021GL097540, doi: 10.1029/2021GL097540, 2022.
29. Ciais, P.*, Bastos, A., Chevallier, F., Lauerwald, R., Poulter, B., Canadell, P., Hugelius, G., Jackson, R. B., Jain, A., Jones, M., Kondo, M., Lujikx, I. T., Patra, P. K., Peters, W., Pongratz, J., Petrescu, A. M. R., Piao, S., Qiu, C., Von Randow, C., Regnier, P., Saunois, M., Scholes, R., Shvidenko, A., Tian, H., Yang, H., Wang, X., and **Zheng, B.**: Definitions and methods to estimate regional land carbon fluxes for the second phase of the REgional Carbon Cycle Assessment and Processes Project (RECCAP-2), *Geosci. Model Dev.*, 15, 1289–1316, doi: 10.5194/gmd-15-1289-2022, 2022.
30. Davis, S. J.*, Liu, Z.*, Deng, Z., Zhu, B., Ke, P., Sun, T., Guo, R., Hong, C., **Zheng, B.**, Wang, Y., Boucher, O., Gentine, P., and Ciais, P.*: Emissions rebound from the COVID-19 pandemic, *Nat. Clim. Change*, doi: 10.1038/s41558-022-01332-6, 2022.
31. Friedlingstein, P.*, O'Sullivan, M., Jones, M. W., Andrew, R. M., Gregor, L., Hauck, J., Le Quééré, C., Lujikx, I. T., Olsen, A., Peters, G. P., Peters, W., Pongratz, J., Schwingshackl, C., Sitch, S., Canadell, J. G., Ciais, P., Jackson, R. B., Alin, S. R., Alkama, R., Arneeth, A., Arora, V. K., Bates, N. R., Becker, M., Bellouin, N., Bittig, H. C., Bopp, L., Chevallier, F., Chini, L. P., Cronin, M., Evans, W., Falk, S., Feely, R. A., Gasser, T., Gehlen, M., Gkritzalis, T., Gloege, L., Grassi, G., Gruber, N., Gürses, Ö., Harris, I., Hefner, M., Houghton, R. A., Hurtt, G. C., Iida, Y., Ilyina, T., Jain, A. K., Jersild, A., Kadono, K., Kato, E., Kennedy, D., Klein Goldewijk, K., Knauer, J., Korsbakken, J. I., Landschützer, P., Lefèvre, N., Lindsay, K., Liu, J., Liu, Z., Marland, G., Mayot, N., McGrath, M. J., Metzl, N., Monacchi, N. M., Munro, D. R., Nakaoka, S. I., Niwa, Y., O'Brien, K., Ono, T., Palmer, P. I., Pan, N., Pierrot, D., Pockock, K., Poulter, B., Resplandy, L., Robertson, E., Rödenbeck, C., Rodriguez, C., Rosan, T. M., Schwinger, J., Séférian, R., Shutler, J. D., Skjelvan, I., Steinhoff, T., Sun, Q., Sutton, A. J., Sweeney, C., Takao, S., Tanhua, T., Tans, P. P., Tian, X., Tian, H., Tilbrook, B., Tsujino, H., Tubiello, F., van der Werf, G. R., Walker, A. P., Wanninkhof, R., Whitehead, C., Willstrand Wranne, A., Wright, R., Yuan, W., Yue, C., Yue, X., Zaehle, S., Zeng, J., and **Zheng, B.**: Global Carbon Budget 2022, *Earth Syst. Sci. Data*, 14, 4811-4900, doi: 10.5194/essd-14-4811-2022, 2022.
32. Jiang, Z.*, Zhu, R., Miyazaki, K., McDonald, B. C., Klimont, Z., **Zheng, B.**, Boersma, K. F., Zhang, Q., Worden, H., Worden, J. R., Henze, D. K., Jones, D. B. A., Denier van der Gon, H. A. C., and Eskes, H.: Decadal Variabilities in Tropospheric Nitrogen Oxides Over United States, Europe, and China, *J. Geophys. Res. Atmos.*, 127, e2021JD035872, doi:

- 10.1029/2021JD035872, 2022.
33. Li, X., Zhang, F.*, Ren, J., Han, W., **Zheng, B.**, Liu, J., Chen, L., and Jiang, S.: Rapid narrowing of the urban–suburban gap in air pollutant concentrations in Beijing from 2014 to 2019, *Environ. Pollut.*, 304, 119146, doi: 10.1016/j.envpol.2022.119146, 2022.
 34. Liu, Z.#*, Deng, Z.#, Zhu, B., Ciais, P., Davis, S. J., Tan, J., Andrew, R. M., Boucher, O., Arous, S. B., Canadell, J. G., Dou, X., Friedlingstein, P., Gentine, P., Guo, R., Hong, C., Jackson, R. B., Kammen, D. M., Ke, P., Le Quéré, C., Monica, C., Janssens-Maenhout, G., Peters, G. P., Tanaka, K., Wang, Y., **Zheng, B.**, Zhong, H., Sun, T., and Schellnhuber, H. J.: Global patterns of daily CO₂ emissions reductions in the first year of COVID-19, *Nature Geoscience*, doi: 10.1038/s41561-022-00965-8, 2022.
 35. Nicolini, G., Antoniella, G., Carotenuto, F., Christen, A., Ciais, P., Feigenwinter, C., Gioli, B., Stagakis, S., Velasco, E., Vogt, R., Ward, H. C., Barlow, J., Chrysoulakis, N., Duce, P., Graus, M., Helfter, C., Heusinkveld, B., Järvi, L., Karl, T., Marras, S., Masson, V., Matthews, B., Meier, F., Nemitz, E., Sabbatini, S., Scherer, D., Schume, H., Sirca, C., Steeneveld, G.-J., Vagnoli, C., Wang, Y., Zaldei, A., Zheng, B., and Papale, D.: Direct observations of CO₂ emission reductions due to COVID-19 lockdown across European urban districts, *Sci. Total Environ.*, 830, 154662, doi: 10.1016/j.scitotenv.2022.154662, 2022.
 36. Peng, S.#*, Lin, X.#*, Thompson, R. L., Xi, Y., Liu, G., Hauglustaine, D., Lan, X., Poulter, B., Ramonet, M., Saunois, M., Yin, Y., Zhang, Z., **Zheng, B.**, and Ciais, P.: Wetland emission and atmospheric sink changes explain methane growth in 2020, *Nature*, 612, 477-482, doi: 10.1038/s41586-022-05447-w, 2022.
 37. Qin, X., Tong, D., Liu, F., Wu, R., Zheng, B., Zheng, Y., Liu, J., Xu, R., Chen, C., Yan, L., and Zhang, Q.: Global and Regional Drivers of Power Plant CO₂ Emissions Over the Last Three Decades Revealed From Unit-Based Database, *Earth's Future*, 10, e2022EF002657, doi: 10.1029/2022EF002657, 2022.
 38. Qin, Y., Xiao, X.*, Wigneron, J.-P.*, Ciais, P., Canadell, J. G., Brandt, M., Li, X., Fan, L., Wu, X., Tang, H., Dubayah, R., Doughty, R., Crowell, S., **Zheng, B.**, and Moore, B.: Large loss and rapid recovery of vegetation cover and aboveground biomass over forest areas in Australia during 2019–2020, *Remote Sens. Environ.*, 278, 113087, doi: 10.1016/j.rse.2022.113087, 2022.
 39. Stavert, A. R.*, Saunois, M., Canadell, J. G., Poulter, B., Jackson, R. B., Regnier, P., Lauerwald, R., Raymond, P. A., Allen, G. H., Patra, P. K., Bergamaschi, P., Bousquet, P., Chandra, N., Ciais, P., Gustafson, A., Ishizawa, M., Ito, A., Kleinen, T., Maksyutov, S., McNorton, J., Melton, J. R., Müller, J., Niwa, Y., Peng, S., Riley, W. J., Segers, A., Tian, H., Tsuruta, A., Yin, Y., Zhang, Z., **Zheng, B.**, and Zhuang, Q.: Regional trends and drivers of the global methane budget, *Global Change Biol.*, 28, 182-200, doi: 10.1111/gcb.15901, 2022.
 40. Su, Y.*, Wu, J., Ciais, P., **Zheng, B.**, Wang, Y., Chen, X., Li, X., Li, Y., Wang, Y., Wang, C., Jiang, L., and Laforcezza, R.: Differential impacts of urbanization characteristics on city-level carbon emissions from passenger transport on road: Evidence from 360 cities in China, *Building and Environment*, 109165, doi: 10.1016/j.buildenv.2022.109165, 2022.
 41. Zhao, Y.*, Xi, M., Zhang, Q., Dong, Z., Ma, M., Zhou, K., Xu, W., Xing, J., **Zheng, B.**,

- Wen, Z., Liu, X., Nielsen, C. P., Liu, Y., Pan, Y., and Zhang, L.: Decline in bulk deposition of air pollutants in China lags behind reductions in emissions, *Nature Geoscience*, doi: 10.1038/s41561-022-00899-1, 2022.
42. Zhu, H.[#], Chen, Y.[#], Zhao, Y.^{*}, Zhang, L., Zhang, X., **Zheng, B.**, Liu, L., Pan, Y., Xu, W., and Liu, X.: The Response of Nitrogen Deposition in China to Recent and Future Changes in Anthropogenic Emissions, *J. Geophys. Res. Atmos.*, 127, e2022JD037437, doi: 10.1029/2022JD037437, 2022.
- 2021** 43. Cheng, J., Tong, D., Liu, Y., Bo, Y., **Zheng, B.**, Geng, G., He, K., and Zhang, Q.^{*}: Air quality and health benefits of China's current and upcoming clean air policies, *Faraday Discussions*, doi: 10.1039/D0FD00090F, 2021.
44. Cheng, J., Tong, D., Liu, Y., Yu, S., Yan, L., Zheng, B., Geng, G., He, K., and Zhang, Q.^{*}: Comparison of current and future PM_{2.5} air quality in China under CMIP6 and DPEC emission scenarios, *Geophys. Res. Lett.*, 48, e2021GL093197, doi: 10.1029/2021GL093197, 2021.
45. Cheng, J., Tong, D., Zhang, Q.^{*}, Liu, Y., Lei, Y., Yan, G., Yan, L., Yu, S., Cui, R. Y., Clarke, L., Geng, G., **Zheng, B.**, Zhang, X., Davis, S. J., and He, K.: Pathways of China's PM_{2.5} air quality 2015–2060 in the context of carbon neutrality, *National Science Review*, doi: 10.1093/nsr/nwab078, 2021.
46. Cheng, Y.^{*}, Yu, Q.-q., Liu, J.-m.^{*}, Zhu, S., Zhang, M., Zhang, H., **Zheng, B.**, and He, K.-b.: Model vs. observation discrepancy in aerosol characteristics during a half-year long campaign in Northeast China: The role of biomass burning, *Environ. Pollut.*, 269, 116167, doi: 10.1016/j.envpol.2020.116167, 2021.
47. Cheng, Y., Yu, Q.-q., Liu, J.-m.^{*}, Du, Z.-Y., Liang, L.-l., Geng, G.-n., **Zheng, B.**, Ma, W.-l., Qi, H., Zhang, Q., and He, K.-b.: Strong biomass burning contribution to ambient aerosol during heating season in a megacity in Northeast China: Effectiveness of agricultural fire bans?, *Sci. Total Environ.*, 754, 142144, doi: 10.1016/j.scitotenv.2020.142144, 2021.
48. Dufour, G.^{*}, Hauglustaine, D., Zhang, Y., Eremenko, M., Cohen, Y., Gaudel, A., Siour, G., Lachatre, M., Bense, A., Bessagnet, B., Cuesta, J., Ziemke, J., Thouret, V., and **Zheng, B.**: Recent ozone trends in the Chinese free troposphere: role of the local emission reductions and meteorology, *Atmos. Chem. Phys.*, 21, 16001–16025, doi: 10.5194/acp-21-16001-2021, 2021.
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50. Geng, G., Zheng, Y., Zhang, Q.^{*}, Xue, T., Zhao, H., Tong, D., **Zheng, B.**, Li, M., Liu, F., Hong, C., He, K., and Davis, S. J.: Drivers of PM_{2.5} air pollution deaths in China 2002–2017, *Nature Geoscience*, doi: 10.1038/s41561-021-00792-3, 2021.
51. Geng, G., Xiao, Q., Liu, S., Liu, X., Cheng, J., Zheng, Y., Xue, T., Tong, D., **Zheng, B.**, Peng, Y., Huang, X., He, K., and Zhang, Q.^{*}: Tracking Air Pollution in China: Near Real-Time PM_{2.5} Retrievals from Multisource Data Fusion, *Environ. Sci. Technol.*, doi: 10.1021/acs.est.1c01863, 2021.
52. Lei, T., Guan, D.^{*}, Shan, Y., **Zheng, B.**, Liang, X., Meng, J., Zhang, Q., and Tao, S.:

- Adaptive CO₂ emissions mitigation strategies of global oil refineries in all age groups, *One Earth*, 4, 1114-1126, doi: 10.1016/j.oneear.2021.07.009, 2021.
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