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EDUCATION

Tsinghua University, Ph.D of Environmental Science and Technology, Beijing, China (2011.09 – 2016.10)

Beihang University, Bachelor of Environmental Engineering, Beijing, China (2007.09 – 2011.07)

WORKING EXPERIENCE

CIRES / NOAA CSL, Research Scientist I, Boulder, United States (2019.04 - present)

Max Planck Institute for Chemistry, Postdoctoral Researcher, Mainz, Germany (2016.12 – 2019.03)

International Institute for Applied System Analysis, Visiting Scholar, Laxenburg, Austria (2016.06 – 2016.08)

Dalhousie University, Visiting Scholar, Halifax, Canada (2014.03 – 2014.09)

PUBLICATIONS

First-author / Corresponding Journal Papers (H-index = 23, Total Citations = 3352)*

- 1 **Li, M.**, Zhang, Q., Zheng, B., Tong, D., Lei, Y., Liu, F., Hong, C., Kang, S., Yan, L., Zhang, Y., Bo, Y., Su, H., Cheng, Y., and He, K.: Persistent growth of anthropogenic non-methane volatile organic compound (NMVOC) emissions in China during 1990–2017: drivers, speciation and ozone formation potential, *Atmos. Chem. Phys.*, 19, 8897-8913, doi: 10.5194/acp-19-8897-2019, 2019. (IF2020 = 5.414)
- 2 **Li, M.**, Su, H., Li, G., Ma, N., Pöschl, U., and Cheng, Y.: Relative importance of gas uptake on aerosol and ground surfaces characterized by equivalent uptake coefficients, *Atmos. Chem. Phys.*, 19, 10981-11011, doi: 10.5194/acp-19-10981-2019, 2019. (IF2020 = 5.414)
- 3 **Li, M.***, Klimont, Z., Zhang, Q., Martin, R. V., Zheng, B.*, Heyes, C., Cofala, J., 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. (IF2020 = 5.414)
- 4 Zhang, Y., Li, X., **Li, M.***, Zheng, Y., Geng, G., Hong, C., Li, H., Tong, D., Zhang, X., Cheng, Y., Su, H., He, K., and Zhang, Q.*: Reduction in black carbon light absorption due to multi-pollutant emission control during APEC China 2014, *Atmos. Chem. Phys.*, 18, 10275-10287, doi: 10.5194/acp-18-10275-2018, 2018. (IF2020 = 5.414)
- 5 **Li, M.**, Zhang, Q., Kurokawa, J. I., Woo, J. H., He, K., Lu, Z., Ohara, T., Song, Y., Streets, D. G., Carmichael, G. R., Cheng, Y., Hong, C., Huo, H., Jiang, X., Kang, S., Liu, F., Su, H., and Zheng, B.: MIX: a mosaic Asian anthropogenic emission inventory under the international collaboration framework of the MICS-Asia and HTAP, *Atmos. Chem. Phys.*, 17, 935-963, doi: 10.5194/acp-17-935-2017, 2017. (**Hot paper, Highly cited paper, 437 citations based on Web of Science**, IF2020 = 5.414)
- 6 **Li, M.**, Liu, H., Geng, G., Hong, C., Liu, F., Song, Y., Tong, D., Zheng, B., Cui, H., Man, H., Zhang, Q., and He, K.: Anthropogenic emission inventories in China: a review, *National Science Review*, 4, 834-866, doi: 10.1093/nsr/nwx150, 2017. (**Highly cited paper, 78 citations based on Web of Science**, IF2020=16.693)
- 7 **Li, M.**, Zhang, Q., Streets, D. G., He, K. B., Cheng, Y. F., Emmons, L. K., Huo, H., Kang, S. C., Lu, Z., Shao, M., Su, H., Yu, X., and Zhang, Y.: Mapping Asian anthropogenic emissions of non-methane volatile organic compounds to multiple chemical mechanisms, *Atmos. Chem. Phys.*, 14, 5617-5638, doi: 10.5194/acp-14-5617-2014, 2014. (**Highly cited paper, 152 citations based on Web of Science**, IF2020 = 5.414)

Book Chapters

- 1 Zhang, Q., Song, Y., **Li, M.**, and Zheng, B.: Anthropogenic Emissions of SO₂, NO_x, and NH₃ in China, in: Atmospheric Reactive Nitrogen in China: Emission, Deposition and Environmental Impacts, edited by: Liu, X., and Du, E., *Springer Singapore*, Singapore, 13-40, doi: 10.1007/978-981-13-8514-8_2, 2020.

2020

- 1 Coggon, M. M., Gkatzelis, G. I., McDonald, B. C., Gilman, J. B., Schwantes, R. H., Abuhassan, N., Aikin, K. C., Arend, M., Berkoff, T., Brown, S. S., Campos, T., Dickerson, R. R., Gronoff, G., Hurley, J., Isaacman-VanWertz, G., Koss, A. R., **Li, M.**, McKeen, S. A., Moshary, F., Peischl, J., Pospisilova, V., Ren, X., Wilson, A., Wu, Y., Trainer, M., and Warneke, C.: Volatile chemical product emissions enhance ozone and modulate urban chemistry, [submitted to PNAS](#).
- 2 Francoeur, C. B., McDonald, B. C., Gilman, J. B., Zarzana, K., Brown, S., Gouw, J. A. d., Dix, B., Frost, G. J., **Li, M.**, McKeen, S. A., Peischl, J., Pollack, I. B., Ryerson, T. B., Thompson, C., Warneke, C., and Trainer, M.: Quantifying Methane and Ozone Precursor Emissions from Oil and Gas Production Regions across the Continental US, [submitted to Environ. Sci. & Technol.](#)
- 3 Nault, B. A., Jo, D. S., McDonald, B. C., Campuzano-Jost, P., Day, D. A., Hu, W., Schroder, J. C., Allan, J., Blake, D. R., Canagaratna, M. R., Coe, H., Coggon, M. M., DeCarlo, P. F., Diskin, G. S., Dunmore, R., Flocke, F., Fried, A., Gilman, J. B., Gkatzelis, G., Hamilton, J. F., Hanisco, T. F., Hayes, P. L., Henze, D. K., Hodzic, A., Hopkins, J., Hu, M., Huey, L. G., Jobson, B. T., Kuster, W. C., Lewis, A., **Li, M.**, Liao, J., Nawaz, M. O., Pollack, I. B., Peischl, J., Rappenglück, B., Reeves, C. E., Richter, D., Roberts, J. M., Ryerson, T. B., Shao, M., Sommers, J. M., Walega, J., Warneke, C., Weibring, P., Wolfe, G. M., Young, D. E., Yuan, B., Zhang, Q., de Gouw, J. A., and Jimenez, J. L.: Anthropogenic Secondary Organic Aerosols Contribute Substantially to Air Pollution Mortality, [Atmos. Chem. Phys. Discuss.](#), 2020, 1-53, doi: 10.5194/acp-2020-914, 2020.
- 4 Mo, Z., Cui, R., Yuan, B., Cai, H., McDonald, B. C., **Li, M.**, Zheng, J., and Shao, M.: A mass balance-based emission inventory of non-methane volatile organic compounds (NMVOCs) for solvent use in China, [submitted to Atmos. Chem. Phys.](#)
- 5 Tao, W., Su, H., Zheng, G., Wang, J., Wei, C., Liu, L., Ma, N., **Li, M.**, Zhang, Q., Pöschl, U., and Cheng, Y.: Aerosol pH and chemical regimes of sulfate formation in aerosol water during winter haze in the North China Plain, [Atmos. Chem. Phys.](#), 20, 11729-11746, doi: 10.5194/acp-20-11729-2020, 2020.
- 6 Li, G., Su, H., Ma, N., Zheng, G., Kuhn, U., *Li, M.*, Klimach, T., Pöschl, U., and Cheng, Y.: Multifactor colorimetric analysis on pH-indicator papers: an optimized approach for direct determination of ambient aerosol pH, [Atmos. Meas. Tech.](#), 13, 6053-6065, doi: 10.5194/amt-13-6053-2020, 2020.
- 7 Ge, B., Itahashi, S., Sato, K., Xu, D., Wang, J., Fan, F., Tan, Q., Fu, J. S., Wang, X., Yamaji, K., Nagashima, T., Li, J., Kajino, M., Liao, H., Zhang, M., Wang, Z., **Li, M.**, Woo, J. H., Kurokawa, J., Pan, Y., Wu, Q., Liu, X., and Wang, Z.: Model Inter-Comparison Study for Asia (MICS-Asia) phase III: multimodel comparison of reactive nitrogen deposition over China, [Atmos. Chem. Phys.](#), 20, 10587-10610, doi: 10.5194/acp-20-10587-2020, 2020.
- 8 Liu, J., Zheng, Y., Geng, G., Hong, C., **Li, M.**, Li, X., Liu, F., Tong, D., Wu, R., Zheng, B., He, K., and Zhang, Q.: Decadal changes in anthropogenic source contribution of PM_{2.5} pollution and related health impacts in China, 1990–2015, [Atmos. Chem. Phys.](#), 20, 7783-7799, doi: 10.5194/acp-20-7783-2020, 2020.
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- 10 Tong, D., Cheng, J., Liu, Y., Yu, S., Yan, L., Hong, C., Qin, Y., Zhao, H., Zheng, Y., Geng, G., **Li, M.**, Liu, F., Zhang, Y., Zheng, B., Clarke, L., and Zhang, Q.: 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, [Atmos. Chem. Phys.](#), 20, 5729-5757, doi: 10.5194/acp-20-5729-2020, 2020.
- 11 Itahashi, S., Ge, B., Sato, K., Fu, J. S., Wang, X., Yamaji, K., Nagashima, T., Li, J., Kajino, M., Liao, H., Zhang, M., Wang, Z., **Li, M.**, Kurokawa, J., Carmichael, G. R., and Wang, Z.: MICS-Asia III: overview of model intercomparison and evaluation of acid deposition over Asia, [Atmos. Chem. Phys.](#), 20, 2667-2693, doi: 10.5194/acp-20-2667-2020, 2020.
- 12 Gao, M., Han, Z., Tao, Z., Li, J., Kang, J. E., Huang, K., Dong, X., Zhuang, B., Li, S., Ge, B., Wu, Q., Lee, H. J., Kim, C. H., Fu, J. S., Wang, T., Chin, M., **Li, M.**, Woo, J. H., Zhang, Q., Cheng, Y., Wang, Z., and Carmichael, G. R.: Air quality and climate change, Topic 3 of the Model Inter-Comparison Study for Asia Phase III (MICS-Asia III) – Part 2: aerosol radiative effects and aerosol feedbacks, [Atmos. Chem. Phys.](#), 20, 1147-1161, doi: 10.5194/acp-20-1147-2020, 2020.

- 13 Kong, L., Tang, X., Zhu, J., Wang, Z., Fu, J. S., Wang, X., Itahashi, S., Yamaji, K., Nagashima, T., Lee, H. J., Kim, C. H., Lin, C. Y., Chen, L., Zhang, M., Tao, Z., Li, J., Kajino, M., Liao, H., Wang, Z., Sudo, K., Wang, Y., Pan, Y., Tang, G., **Li, M.**, Wu, Q., Ge, B., and Carmichael, G. R.: Evaluation and uncertainty investigation of the NO₂, CO and NH₃ modeling over China under the framework of MICS-Asia III, *Atmos. Chem. Phys.*, 20, 181-202, doi: 10.5194/acp-20-181-2020, 2020.

2019

- 1 Zhang, Q., Zheng, Y., Tong, D., Shao, M., Wang, S., Zhang, Y., Xu, X., Wang, J., He, H., Liu, W., Ding, Y., Lei, Y., Li, J., Wang, Z., Zhang, X., Wang, Y., Cheng, J., Liu, Y., Shi, Q., Yan, L., Geng, G., Hong, C., **Li, M.**, Liu, F., Zheng, B., Cao, J., Ding, A., Gao, J., Fu, Q., Huo, J., Liu, B., Liu, Z., Yang, F., He, K., and Hao, J.: Drivers of improved PM_{2.5} air quality in China from 2013 to 2017, *Proceedings of the National Academy of Sciences*, 116, 24463, doi: 10.1073/pnas.1907956116, 2019. (**Hot paper, Highly cited paper**)
- 2 Li, G., Su, H., Ma, N., Zheng, G., Kuhn, U., **Li, M.**, Klimach, T., Pöschl, U., and Cheng, Y.: Multifactor colorimetric analysis on pH-indicator papers: an optimized approach for direct determination of ambient aerosol pH, *Atmos. Meas. Tech. Discuss.*, 2019, 1-19, doi: 10.5194/amt-2019-394, 2019.
- 3 Li, J., Nagashima, T., Kong, L., Ge, B., Yamaji, K., Fu, J. S., Wang, X., Fan, Q., Itahashi, S., Lee, H. J., Kim, C. H., Lin, C. Y., Zhang, M., Tao, Z., Kajino, M., Liao, H., **Li, M.**, Woo, J. H., Kurokawa, J., Wang, Z., Wu, Q., Akimoto, H., Carmichael, G. R., and Wang, Z.: Model evaluation and intercomparison of surface-level ozone and relevant species in East Asia in the context of MICS-Asia Phase III – Part 1: Overview, *Atmos. Chem. Phys.*, 19, 12993-13015, doi: 10.5194/acp-19-12993-2019, 2019.
- 4 Zhao, H., Geng, G., Zhang, Q., Davis, S. J., Li, X., Liu, Y., Peng, L., **Li, M.**, Zheng, B., Huo, H., Zhang, L., Henze, D. K., Mi, Z., Liu, Z., Guan, D., and He, K.: Inequality of household consumption and air pollution-related deaths in China, *Nat Commun.*, 10, 4337, doi: 10.1038/s41467-019-12254-x, 2019.
- 5 Wu, R., Liu, F., Tong, D., Zheng, Y., Lei, Y., Hong, C., **Li, M.**, Liu, J., Zheng, B., Bo, Y., Chen, X., Li, X., and Zhang, Q.: Air quality and health benefits of China's emission control policies on coal-fired power plants during 2005–2020, *Environmental Research Letters*, 14, 094016, doi: 10.1088/1748-9326/ab3bae, 2019.
- 6 Zhang, Y., **Li, M.**, Cheng, Y., Geng, G., Hong, C., Li, H., Li, X., Tong, D., Wu, N., Zhang, X., Zheng, B., Zheng, Y., Bo, Y., Su, H., and Zhang, Q.: Modeling the aging process of black carbon during atmospheric transport using a new approach: a case study in Beijing, *Atmos. Chem. Phys.*, 19, 9663-9680, doi: 10.5194/acp-19-9663-2019, 2019.

2018

- 1 Silva, S. J., Heald, C. L., and **Li, M.**: Space-Based Constraints on Terrestrial Glyoxal Production, *Journal of Geophysical Research: Atmospheres*, 123, 13,583-513,594, doi: 10.1029/2018JD029311, 2018.
- 2 Moch, J. M., Dovrou, E., Mickley, L. J., Keutsch, F. N., Cheng, Y., Jacob, D. J., Jiang, J., **Li, M.**, Munger, J. W., Qiao, X., and Zhang, Q.: Contribution of Hydroxymethane Sulfonate to Ambient Particulate Matter: A Potential Explanation for High Particulate Sulfur During Severe Winter Haze in Beijing, *Geophys. Res. Lett.*, 45, 11,969-911,979, doi: 10.1029/2018GL079309, 2018.
- 3 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. (**Hot paper, Highly cited paper**)
- 4 Zhang, Y., Zhang, Q., Cheng, Y., Su, H., Li, H., **Li, M.**, Zhang, X., Ding, A., and He, K.: Amplification of light absorption of black carbon associated with air pollution, *Atmos. Chem. Phys.*, 18, 9879-9896, doi: 10.5194/acp-18-9879-2018, 2018.
- 5 Tong, D., Zhang, Q., Davis, S. J., Liu, F., Zheng, B., Geng, G., Xue, T., **Li, M.**, Hong, C., Lu, Z., Streets, D. G., Guan, D., and He, K.: Targeted emission reductions from global super-polluting power plant units, *Nature Sustainability*, 1, 59-68, 2018. (**Highly cited paper**)
- 6 Gao, M., Han, Z., Liu, Z., **Li, M.**, Xin, J., Tao, Z., Li, J., Kang, J. E., Huang, K., Dong, X., Zhuang, B., Li, S., Ge, B., Wu, Q., Cheng, Y., Wang, Y., Lee, H. J., Kim, C. H., Fu, J. S., Wang, T., Chin, M., Woo, J. H., Zhang, Q., Wang, Z., and Carmichael, G. R.: Air quality and climate change, Topic 3 of the Model Inter-Comparison Study for Asia Phase III (MICS-Asia III) - Part1: Overview and model evaluation, *Atmos. Chem. Phys.*, 18, 4859-4884, doi: 10.5194/acp-18-4859-2018, 2018. (IF2018 = 5.318)
- 7 Hoesly, R. M., Smith, S. J., Feng, L., Klimont, Z., Janssens-Maenhout, G., Pitkanen, T., Seibert, J. J., Vu, L., Andres, R. J., Bolt, R. M., Bond, T. C., Dawidowski, L., Kholod, N., Kurokawa, J. I., **Li, M.**, Liu, L., Lu, Z., Moura, M. C. P., O'Rourke, P. R., and Zhang, Q.:

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- 8 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. (IF2018 = 6.198)
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2017

- 1 Gao, M., Liu, Z., Wang, Y., Lu, X., Ji, D., Wang, L., Li, M., Wang, Z., Zhang, Q., and Carmichael, G. R.: Distinguishing the roles of meteorology, emission control measures, regional transport, and co-benefits of reduced aerosol feedbacks in “APEC Blue”, *Atmos. Environ.*, 167, 476-486, 2017. (IF2018 = 3.629)
- 2 Geng, G., Zhang, Q., Tong, D., Li, M., Zheng, Y., Wang, S., and He, K.: Chemical composition of ambient PM_{2.5} over China and relationship to precursor emissions during 2005-2012, *Atmos. Chem. Phys.*, 17, 9187-9203, doi: 10.5194/acp-17-9187-2017, 2017. (IF2018 = 5.318)
- 3 He, J., Zhang, Y., Wang, K., Chen, Y., Leung, L. R., Fan, J., Li, M., Zheng, B., Zhang, Q., Duan, F., and He, K.: Multi-year application of WRF-CAM5 over East Asia-Part I: Comprehensive evaluation and formation regimes of O₃ and PM_{2.5}, *Atmos. Environ.*, 165, 122-142, 2017. (IF2018 = 3.629)
- 4 Hong, C., Zhang, Q., He, K., Guan, D., Li, M., Liu, F., and Zheng, B.: Variations of China's emission estimates: response to uncertainties in energy statistics, *Atmos. Chem. Phys.*, 17, 1227-1239, doi: 10.5194/acp-17-1227-2017, 2017. (IF2018 = 5.318)
- 5 Li, X., Zhang, Q., Zhang, Y., Zhang, L., Wang, Y., Zhang, Q., Li, M., Zheng, Y., Geng, G., Wallington, T. J., Han, W., Shen, W., and He, K.: Attribution of PM_{2.5} exposure in Beijing–Tianjin–Hebei region to emissions: implication to control strategies, *Sci. Bull.*, 62, 957-964, 2017. (IF2018 = 4.092)
- 6 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, 2017. (IF2018 = 3.629)
- 7 Zhang, L., Li, Q., Wang, T., Ahmadov, R., Zhang, Q., Li, M., and Lv, M.: Combined impacts of nitrous acid and nitryl chloride on lower-tropospheric ozone: new module development in WRF-Chem and application to China, *Atmos. Chem. Phys.*, 17, 9733-9750, doi: 10.5194/acp-17-9733-2017, 2017. (IF2018 = 5.318)
- 8 Zhao, H., Li, X., Zhang, Q., Jiang, X., Lin, J., Peters, G. P., Li, M., Geng, G., Zheng, B., Huo, H., Zhang, L., Wang, H., Davis, S. J., and He, K.: Effects of atmospheric transport and trade on air pollution mortality in China, *Atmos. Chem. Phys.*, 17, 10367-10381, doi: 10.5194/acp-17-10367-2017, 2017. (IF2018 = 5.318)
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Before 2017

- 1 Liu, F., Zhang, Q., Tong, D., Zheng, B., Li, M., Huo, H., and He, K. B.: High-resolution inventory of technologies, activities, and emissions of coal-fired power plants in China from 1990 to 2010, *Atmos. Chem. Phys.*, 15, 13299-13317, doi: 10.5194/acp-15-13299-2015, 2015. (**Highly cited paper**, IF2018 = 5.318)
- 2 Janssens-Maenhout, G., Crippa, M., Guizzardi, D., Dentener, F., Muntean, M., Pouliot, G., Keating, T., Zhang, Q., Kurokawa, J., Wankmüller, R., Denier van der Gon, H., Kuenen, J. J. P., Klimont, Z., Frost, G., Darras, S., Koffi, B., and Li, M.: HTAP_v2.2: a mosaic of regional and global emission grid maps for 2008 and 2010 to study hemispheric transport of air pollution, *Atmos. Chem. Phys.*, 15, 11411-11432, doi: 10.5194/acp-15-11411-2015, 2015. (**Highly cited paper**, IF2018 = 5.318)
- 3 Wang, S., Zhang, Q., Martin, V. R., Philip, S., Liu, F., Li, M., Jiang, X., and He, K.: Satellite measurements oversee China's sulfur dioxide emission reductions from coal-fired power plants, *Environ. Res. Lett.*, 10, 114015, 2015. (IF2016 = 4.404)

To Be Submitted

- 1 Li, M., McDonald, B., McKeen, S., Frost, G., Levelt, P., and Trainer, M.: Evaluation of a fuel-based inventory over the contiguous united states using high resolution NO₂ retrievals from TROPOMI, to be submitted.
 - 2 Li, M., McDonald, B., McKeen, S., Peischl, J., Aikin, Kenneth, Brown, S., Frost, G., and Trainer, M.: Ozone changes over the United States due to COVID-19, in prep..
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CONFERENCE PROCEEDINGS & PRESENTATIONS

- 1 **Li, M.**, McDonald, B. C., McKeen, S. A., Peischl, J., Aikin, K. C., Brown, S., Frost, G. J., and Trainer, M.: Ozone Changes Over the United States Due to COVID-19, **AGU Fall Meeting**, Virtual, 2020.
 - 2 Bela, M., Schwantes, R., McKeen, S. A., Ahmadov, R., James, E., Schnell, J., Pereira, G., **Li, M.**, McDonald, B. C., Schmidt, C. C., Pierce, R. B., O'Neill, S., Zhang, X., Kondragunta, S., Wiedinmyer, C., Gargulinski, E. M., Soja, A. J., and Choi, H.: Effects of Emissions, Transport, and Chemistry on Prediction of Air Quality Impacts from Fires, **AGU Fall Meeting**, Virtual, 2020.
 - 3 Dix, B. K., **Li, M.**, Francoeur, C., McDonald, B. C., Roosenbrand, E., Veeffkind, P., Levelt, P., and Gouw, J. A. d.: Analysis of Measured and Modeled Formaldehyde over the Permian Basin, **AGU Fall Meeting**, Virtual, 2020.
 - 4 Middlebrook, A., Aikin, K. C., Alvarez, R. J., Asher, E., Bela, M., Brock, C. A., Brown, S. S., Coggon, M. M., Farmer, D., Gilman, J., Gkatzelis, G., Hayden, K. L., He, J., Lamplugh, A., Langford, A. O. N., **Li, M.**, McCarty, B., McDonald, B. C., McKeen, S. A., Peischl, J., Roberts, J., Robinson, M. A., Rollins, A. W., Schwantes, R., Senff, C. J., Thornberry, T. D., Trainer, M., and Warneke, C.: An Examination of the Impact of Local Shelter-in-Place Orders on Atmospheric Aerosol Mass and Chemical Composition in Boulder Colorado During the COVID-19 Pandemic, **AGU Fall Meeting**, Virtual, 2020.
 - 5 **Li, M.**, McDonald, B., McKeen, S., Frost, G., Levelt, P., and Trainer, M.: Spatial distribution of emissions at city scales over the U.S.: validations based on the high resolution NO₂ retrievals of TROPOMI, **AGU Fall Meeting**, San Francisco, United States, 2019.
 - 6 McDonald, B. C., Francoeur, C., Dix, B. K., Gouw, J. d., **Li, M.**, Peischl, J., Gilman, J., Warneke, C., Levelt, P., Eskes, H., Veeffkind, P., Ryerson, T. B., Frost, G. J., and Trainee, M.: Evaluating a Fuel-Based Bottom-up Inventory of Oil and Natural Gas Emissions with OMI and TROPOMI Satellite Retrievals, **AGU Fall Meeting**, San Francisco, 2019.
 - 7 **Li, M.**, Zhang, Q., Zheng B., and Tong, D.: Emission evolution of the anthropogenic sources in China, **9th MICS-Asia Workshop**, Fukuoka, Japan, 2018.
 - 8 **Li, M.**, Su, H., Pöschl, U., and Cheng, Y.: Bounding the multi-phase gas uptake on aerosols and ground using resistance model, **EGU**, Vienna, Austria, 2018.
 - 9 **Li, M.**, Klimont, Z., Zhang, Q., and He, K.: Comparison and evaluation of emission inventories over Asia, **8th MICS-Asia Workshop**, Laxenburg, Austria, 2017.
 - 10 **Li, M.**, Zhang, Q., Kurokawa, J., Woo, J. H., He, K. B., Lu, Z., Ohara, T., Song, Y., Streets, D. G., Carmichael, G. R., Cheng, Y. F., Hong, C. P., Huo, H., Jiang, X. J., Kang, S. C., Liu, F., Su, H., and Zheng, B.: The MIX Asian emission inventory development and outlook for validation, **7th MICS-Asia Workshop**, Chengdu, 2016.
 - 11 **Li, M.**, Martin, R., Zhang, Q., Vinken, G., and He, K. B.: Satellite-based constraints on NO_x emissions from anthropogenic area sources, **7th GEOS-Chem User Meeting**, Harvard University, 2015.
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 - 13 **Li, M.**, Zhang, Q., Streets, D. G., He, K. B., Cheng, Y. F., Emmons, L. K., Huo, H., Kang, S. C., Lu, Z., Shao, M., Su, H., Yu, X., and Zhang, Y.: Mapping Asian anthropogenic emissions of non-methane volatile organic compounds to multiple chemical mechanisms, **AGU Fall Meeting**, San Francisco, United States, 2013.
 - 14 **Li, M.**, Zhang, Q., and He, K.B.: A speciated NMVOC emission inventory for anthropogenic sources in China, **Better Air Quality**, Hong Kong, 2012.
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CURRENT PROJECTS

- 1 Detecting oil and gas emissions from space and modeling impacts on tropospheric ozone, supported by NASA Atmospheric Composition Modeling and Analysis Program (5/2/2019 – 5/1/2022)
 - 2 Evaluating chemical mechanisms with recent field data to account for the contributions of volatile chemical product emissions to urban ozone pollution, supported by EPA Science To Achieve Results (STAR) Research Grants Program (Co-PI, 8/1/2020 – 7/31/2023)
 - 3 Diagnosing VOC chemistry in wildfire and urban plumes by connecting airborne and space-based observations (Co-PI, pending, NASA ACCDAM)
 - 4 U.S. urban air quality during the COVID-19 outbreak: ozone and secondary VOC formation and their sensitivity to changes in NO_x and VOC emissions (Co-PI, pending, NOAA Climate Program Office)
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AWARDS & RECOGNITIONS

- ✧ National scholarship for Graduate Student, Ministry of Education, P.R. China (2014)
- ✧ Journal Reviewer: Atmospheric Chemistry and Physics, Journal of Geophysical Research, Atmospheric Pollution Research, Scientific Data, Atmospheric Environment, etc.