

Associate Professor Qingbin Song

Macau University of Science and Technology
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Department of Environmental Science and Engineering
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Academic Qualification:

Ph.D. in Civil and Environmental Engineering, University of Macau

MSc in School of Environmental and Biological Science, Dalian University of Technology

BSc in Department of Environment Science and Engineering, Hebei University of Science and Technology

Teaching Area

Solid Waste Management and Recycling

Environmental Impact Assessment

Special Topic of Environmental Science and Engineering

Research Area

Whole process management and recycling technology of solid waste (E-waste and Organic waste);

Urban metabolism mechanism of resource and energy

Environmental impact and risk assessment (LCA and MFA method)

Urban GHG emissions and its reduction.

Environmental and energy-saving behavior and willingness analysis

Working Experience

2020.07- Associate Professor, Department of Environmental Science and Engineering, FIE, MUST

2017.08- Deputy secretary-general, Circular Economy Branch, Chinese Society of Environmental Science

2016.01-2020.07 Assistant Professor, Macao Environmental Research Institute, MUST

2015.08-2015.12 Project director, Basel Convention Regional Centre for Asia and the Pacific (BCRC China)

2013.05-2015.08 Post doctorate, School of Environment, Tsinghua University

Research Grants

2021.03-2023.03 Research and demonstration on the environmentally sound recycling technology with high economic value of waste mobile phones; FDCT-GDST, **PI**

2022.06-2023.03 Monitoring of wild plant in Macao; Macau Municipal Affairs Bureau, **PI**

2020.04-2021.04 The whole process management and risk control mechanism of medical waste under new coronavirus pneumonia epidemic in Macau; FDCT, **PI**

2020.01-2020.12 Research on the mid- and long term pathway of energy transformation in Guangdong-Hong Kong- Macau Great Bay; Chinese academy of engineering, **PI** of sub-project 4.

2019.10-2022.09 Characterizing the influence mechanism of the use activities and its carbon emissions of urban household e-products in Guangdong-Hong Kong-Macao Natural Science Foundation of Guangdong Province, **PI**

2019.09-2021.08 Environmental quality monitoring of walking trail in Taipai House museum; Macau Municipal Affairs Bureau, **PI**

2019.05-2022.04 Mechanism research of mechanochemically enhanced leaching of rare earth elements from typical e-waste; FDCT, **PI**

2018.12-2021.12 Characterizing the PBDEs composition feature and its emission and migration mechanism of typical e- waste plastics during the recycling process in Macau; FDCT, **PI**

2018.06-2019.05 Researches on the quantitative evaluation model and its application of E-waste transboundary movements; Research Grants for Macau University of Science and Technology, **PI**

Representative publications (Complete publication refer to my webpage)

Books/Edited Volumes

1. **Qingbin Song**, Zhishi Wang, Jinhui Li. E-waste Management and Assessment in Macau. LAMBERT Academic Publishing. 2014.
2. , , . , 2015.
3. Jinhui Li, **Qingbin Song**. Sustainability from Global E-waste in the book of Sustainability: Global Challenges, Consequences, and John Wiley & Sons, Ltd, 2016. (Book chapter)
4. **Qingbin Song**, Zhishi Wang. Generation and Management Status of Waste Office in the book of Regulations, Management Strategies and Current Nova Science Publishers, Inc, 2017. (Book chapter)
- 5.

8. Liang, Y., **Song, Q.***, Wu, N.*, Li, J., Zhong, Y., Zeng, W. (2021) Repercussions of COVID-19 pandemic on solid waste generation and management strategies. *Front Environ Sci Eng* 15, 115.
10. Cai, K., **Song, Q.***, Yuan, W., Ruan, J., Duan, H., Li, Y., Li, J. (2020) Human exposure to PBDEs in e-waste areas: A review. *Environmental Pollution* 267, 115634.
11. * (2020) . . 30, 18-26.
12. Zhang, Z., Yuan, W.*, Li, P., **Song, Q.***, Wang, X., Xu, W., Zhu, X., Zhang, Q., Yue, J., Bai, J., Wang, J. (2020) Mechanochemical immobilization of lead contaminated soil

28. Song Q.*, Li J., Duan H., Yu D., Wang Z.*, 2017. Towards to sustainable energy-efficient city: A case study of Macau. *Renewable and Sustainable Energy Reviews*, 75, 504-514.
29. Yu, D., Duan, H.*, Song, Q.*, Liu, Y., Li, Y., Li, J., Shen, W., Luo, J., Wang, J., 2017. Characterization of brominated flame retardants from e-waste components in China. *Waste Management*, 68, 498-507.
30. Yu, D., Song, Q.*, Wang, Z., Li, J., Duan, H.*, Wang, J., Wang, C., Wang, X., 2017. Quantifying the potential export flows of used electronic products in Macau: a case study of PCs. *Environmental science and pollution research international* 24, 28197-28204.
31. Mao, R., Duan, H*, Dong, D., Zuo, J., Song, Q.*, Liu, G., Hu, M., Zhu, J., Dong, B., 2017. Quantification of carbon footprint of urban roads via life cycle assessment: Case study of a megacity- Shenzhen, China. *Journal of Cleaner Production*, 166, 40-48.
32. Song, Q., Wang, Z., Li, J., 2016. Exploring attitudes and willingness to pay for solid waste management in Macau. *Environmental Science and Pollution Research*, 23, 16456-16462.
33. Song Q., Li J., Liu L., et al, 2016. Measuring the generation and management status of waste office equipment in China: a case study of waste printers. *Journal of Cleaner Production*, 112, 4461-4468.
34. , , , & + .
35. Song Q., Li J, 2015. Greenhouse gas emissions from the usage of typical e-products by households: a case study of China. *Climatic Change*, 132 (4), 615-629.
36. Song Q., Zeng, X., Li J., et al., 2015. Environmental risk assessment of CRT and PCBs workshops in a mobile e-waste recycling plant. *Environmental Science and Pollution Research*, 22(16), 12366-12373.
37. Song Q., Li J., 2015. A review on human health consequences of heavy metals exposure to e-waste in China. *Environmental Pollution*, 196, 450-461.
38. Song, Q., Li, J., Zeng, X., 2015. Minimizing the increasing solid waste through zero waste strategy. *Journal of Cleaner Production* 104, 199-210.
39. , , , , 2015. [J]. , 2015, 33(7): 113-117.
40. Song, Q., Li, J., 2014. Environmental effects of heavy metals derived from the e-waste recycling activities in China: A systematic review. *Waste management*, 35, 2587-2594.
41. Song Q., Li J., 2014. A systematic review of the human body burden of e-waste exposure in China. *Environment International*. 68, 82-93.
42. Song, Q., Wang, Z., Li, J., 2013. Environmental performance of municipal solid waste strategies based on LCA method: a case study of Macau. *Journal of Cleaner Production* 57, 92-100.
43. Song, Q., Wang, Z., Li, J., Zeng, X., 2013. The life cycle assessment of an e-waste treatment enterprise in China. *Journal of Material Cycles and Waste Management* 15, 469-475.
44. Song, Q., Wang, Z., Li, J., 2013. Sustainability evaluation of e-waste treatment based on emergy analysis and the LCA method: A case study of a trial project in Macau. *Ecological Indicators* 30, 138-147.
45. Song, Q., Wang, Z., Li, J., Yuan, W., 2012. Life cycle assessment of desktop PC in Macau. *The International Journal of Life Cycle Assessment*, 3(18): 553-566.
46. Song, Q., Wang, Z., Li, J., Zeng, X., 2012. Life cycle assessment of TV sets in China: A case study of the impacts of CRT monitors. *Waste management*, 32(10):1926-1936.
47. Song, Q., Wang, Z., Li, J., 2012. behaviors, attitudes, and willingness to pay for recycling e-waste in Macau. *Journal of Environmental Management*, 106, 8-16.
48. Song, Q., Wang, Z., Li, J., Duan, H., 2012. Sustainability evaluation of an e-waste treatment enterprise based on emergy analysis in China. *Ecological Engineering*, 42, 223-231.
49. , , , , 2010. 3(31), 127-131.

50. , , , 2008.

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Professional Certification and Awards

2018 BOC Research Excellence Award, Macau University of Science and Technology

2020 BOC Research Excellence Award, Macau University of Science and Technology

Excellent papers; International Conference on Waste Management and Technology (ICWMT), 2016; 2019; and 2021

Journal Editorship

Editor Board Member of Circular Economy

Reviewer for Resources, Conservation and Recycling; Journal of Cleaner Production; Waste Management; Science of the Total Environment; Energy; Environmental Impact Assessment Review, etc

Personal Website

<https://scholar.must.edu.mo/scholar/101097>