

## Associate Professor Qingbin Song

Macau University of Science and Technology  
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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 pland 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 bZ2 11. 1 1Qq51.48 628.27 493.32 41.

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.

### 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>