

Ni Sheng



Position : Professor/Dean
Faculty : School of Business / Macau
Environmental Research Institute
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Research Area: Environmental Management and Policy,
Low-Carbon Circular Economy

**(Recruiting Postdoctoral Fellow / Research Associate/
graduate students in Low-Carbon Circular Economy / Solid
Waste Management)**

Teaching Area: Statistics, Decision Modeling, Operations
Management

Academic Qualification

2006 - 2007 Postdoctoral Scholar / University of California, Berkeley
2002 - 2005 PhD / The University of Hong Kong
1998 - 2000 MEng / Nanyang Technological University, Singapore
1991 - 1995 BSc / Civil Engineering / Zhejiang University

Working Experience

2022 - Present Dean / School of Business / Macau University of Science and Technology
2020 - 2022 Executive Vice Dean / School of Business / Macau University of Science and
Technology
2018 - 2020 Vice Dean / School of Business / Macau University of Science and Technology
2013 - 2018 Assistant Dean / School of Business / Macau University of Science and
Technology
2007 - Present Assistant Professor / Associate Professor / Professor / Macau University of
Science and Technology
2005 - 2006 Research Associate / The University of Hong Kong
2000 - 2002 Research Engineer / Data Storage Institute, National University of Singapore

Recent Awards

- 2022 The 6th Outstanding Achievement Awards for Macao Research in Humanities and Social Sciences –3rd Prize (澳門人文社會科學研究優秀成果獎論文三等獎)
- 2019 The 5th Outstanding Achievement Awards for Macao Research in Humanities and Social Sciences – Outstanding Prize (澳門人文社會科學研究優秀成果獎論文優異獎)
- 2016 Macao Science and Technology Awards - Science and Technology Progress Award - 3rd Prize (Macao SAR) 澳門科學技術獎勵 - 科技進步獎三等獎 (唯一完成人)
- 2014 BOC Research Excellence Award (Macau University of Science and Technology)

Selected Publications

1. Wan YY, **Sheng N**, Wei XY, Su HY. Study on the spatial spillover effect and path mechanism of green finance development on China's energy structure transformation. *Journal of Cleaner Production*, 2023, 415: 137820. (SCIE, Q1)
2. Wan YY, **Sheng N**, Wei XY, Tan M, Ling JX. Effect of green finance reform and innovation pilot zone on improving environmental pollution: an empirical evidence from Chinese cities. *Environmental Science and Pollution Research*, 2023, published online. (SCIE, Q1)
3. Dai BL, **Sheng N**, Huang J, Mu FH, Chen X, Li T, Xu JM, He YL. Inland waterway traffic noise prediction model: a comparison. *International Journal of Environmental Science and Technology*, 2023, published online. (SCIE, Q3)
4. Zhang ZK, **Sheng N**, Zhao DQ, Cai KH, Yang GM, Song QB. Are residents more willing to buy and pay for electric vehicles under the “carbon neutrality”? *Energy Reports*, 2023, 9: 510-521. (SCIE, Q2)
5. Wan YY, **Sheng N**. Clarifying the relationship among green investment, clean energy consumption, carbon emissions, and economic growth: a provincial panel analysis of China. *Environmental Science and Pollution Research*, 2022, 29(6): 9038-9052. (SCIE, Q1)
6. Hsiao YL, **Sheng N**, Fu SZ, Wei XY. Evaluation of contagious effects of China's wind power industrial policies. *Energy*, 2022, 238: 121760. (SCIE, Q1)
7. Cai KH, Xie YF, Song QB, **Sheng N**, Wen ZG. Identifying the status and differences between urban and rural residents' behaviors and attitudes toward express packaging waste management in Guangdong Province, China. *Science of the Total Environment*, 2021, 797: 148996. (SCIE, Q1)
8. Hsiao YL, Wei XY, **Sheng N**, Shao CW. A joint test of policy contagion with application to the solar sector. *Renewable & Sustainable Energy Reviews*, 2021, 141:110762. (SCIE, Q1)

9. Chen C, Yao Z, Wen ZG, **Sheng N**. Impact of city characteristics on its phosphorus metabolism in the bay area: A comparative analysis of cities in the Greater Bay Area of China. *Journal of Cleaner Production*, 2021, 286:124925. (SCIE, Q1)
10. Hsiao YL, Ai D, Wei XY, **Sheng N**. The contagious effect of China's energy policy on stock markets: The case of the solar photovoltaic industry. *Renewable Energy*, 2021, 164:74-86. (SCIE, Q1)
11. Hsiao YL, Ou YL, **Sheng N**, Wei XY. Measuring contagion effects of nuclear energy policies and events. *International Journal of Energy Research*, 2021, 45:11510-11525. (SCIE, Q1)
12. Chen H, Li XY, Lu XR, **Sheng N**, Zhou W, Geng HP, Yu SW. A multi-objective optimization approach for the selection of overseas oil projects. *Computers & Industrial Engineering*, 2021, 151:106977. (SCIE, Q1)
13. Dai BL, **Sheng N**, Zhao W, Mu FH, He LY. Evaluation of urban inland waterway traffic noise using a modified Nord 2000 prediction model. *Environmental Research*, 2020, 185: 109437. (SCIE, Q1)
14. Wei XY, Che HY, **Sheng N**, Hsiao CYL, Tong Q, Yan GY. Research on the development status of China's renewable energy industry - The impact of capital structure on company performance. *Frontiers in Energy Research*, 2020, 8: 71. (SCIE, Q3)
15. Hsiao CYL, Lin WS, Wei XY, Yan GY, Li SQ, **Sheng N**. The impact of international oil prices on the stock price fluctuations of China's renewable energy enterprises. *Energies*, 2019, 12: 4630. (SCIE, Q3)
16. Dai BL, **Sheng N**, He YL, Mu FH, Xu JM, Zhu AF. Development of an inland waterway traffic noise prediction model considering water surface adsorption and embankment shielding influences. *International Journal of Environmental Science and Technology*, 2019, 16: 5927-5936. (SCIE, Q3)
17. Zhu LC, Song QB, **Sheng N**, Zhou X. Exploring the determinants of consumers' WTB and WTP for electric motorcycles using CVM method in Macau. *Energy Policy*, 2019, 127: 64-72. (SSCI/SCIE, Q1)
18. **Sheng N**, Tang UW, Grydehoj A. Urban morphology and urban fragmentation in Macau, China: island city development in the Pearl River Delta megacity region. *Island Studies Journal*, 2017, 12: 199-212. (SSCI, Q3)
19. **Sheng N**, Zhou X, Zhou Y. Environmental impact of electric motorcycles: Evidence from traffic noise assessment by a building-based data mining technique. *Science of the Total Environment*, 2016, 554: 73-82. (SCIE, Q1)
20. **Sheng N**, Tang UW. The first official city ranking by air quality in China - A review and analysis. *Cities*, 2016, 51: 139-149. (SSCI, Q1)

21. Dai BL, **Sheng N**, He YL, Xu JM, Zhu AF. An inland waterway traffic noise prediction model for environmental assessment in China. *International Journal of Environmental Science and Technology*, 2016, 13: 1235-1244. (SCIE, Q3)
22. Choy KL, **Sheng N**, Lam HY, Lai IKW, Chow KH, Ho GTS. Assess the effects of different operations policies on warehousing reliability. *International Journal of Production Research*, 2014, 52: 662-678. (SCIE, Q1)
23. **Sheng N**, Tang UW. Zhuhai. *Cities*, 2013, 32: 70-79. (SSCI, Q1)
24. **Sheng N**, Tang UW. Risk assessment of traffic-related air pollution in a world heritage city. *International Journal of Environmental Science and Technology*, 2013, 10: 11-18. (SCIE, Q3)
25. **Sheng N**, Tang UW. A building-based data capture and data mining technique for air quality assessment. *Frontiers of Environmental Science & Engineering*, 2011, 5: 543-551. (SCIE, Q4)
26. Tang UW, **Sheng N**. Macao. *Cities*, 2009, 24: 220-231. (SSCI, Q1)
27. **Sheng N**, Li SF. A multi-scale non-equilibrium molecular dynamics algorithm and its applications. *International Journal of Applied Mechanics*, 2009, 1: 405-420. (SCIE)
28. Li SF, **Sheng N**. On multiscale non-equilibrium molecular dynamics simulations. *International Journal for Numerical Methods in Engineering*, 2010, 83(8-9): 998-1038. (SCIE)
29. Wu D, Lo SH, **Sheng N**, Sze KY. Universal three-dimensional connection hexahedral elements based on hybrid-stress theory for solid structures. *International Journal for Numerical Methods in Engineering*, 2010, 81(3): 307-334. (SCIE)
30. **Sheng N**, Li SF. A non-equilibrium multiscale simulation of shock wave propagation. *Mechanics Research Communications*, 2008, 35: 10-16. (SCIE)
31. Li SF, **Sheng N**, Liu XH. A non-equilibrium multiscale simulation paradigm. *Chemical Physics Letters*, 2008, 451: 293-300. (SCIE)
32. Liu XH, Li SF, **Sheng N**. A cohesive finite element for quasi-continua. *Computational Mechanics*, 2007, 42: 543-553. (SCIE)
33. **Sheng N**, Sze KY, Cheung YK. Trefftz solutions for piezoelectricity by Lekhnitskii's formalism and boundary-collocation method. *International Journal for Numerical Methods in Engineering*, 2006, 65: 2113-2138. (SCIE)
34. **Sheng N**, Sze KY. Multi-region Trefftz boundary element method for fracture analysis in plane piezoelectricity. *Computational Mechanics*, 2006, 37: 381-393. (SCIE)
35. Sze KY, **Sheng N**. Polygonal finite element method for nonlinear constitutive modeling of polycrystalline ferroelectrics. *Finite Elements in Analysis & Design*, 2005, 42: 107-129. (SCIE)
36. Jin WG, **Sheng N**, Sze KY, Li J. Trefftz indirect methods for plane piezoelectricity. *International Journal for Numerical Methods in Engineering*, 2005, 63: 139-158. (SCIE)

Research Projects

- 2023 - 2026 Researches on Metabolic Mechanism of Multi-source Solid Waste and its Reduction Routine Optimization of Pollution and Carbon Emissions in Guangdong-Hong Kong-Macao Greater Bay Area (Funded by FDCT-NSFC, Principal Investigator)
- 2017 - 2018 Island City Land Reclamation and Urban Fragmentation in Macau (Funded by Faculty Research Grant, M.U.S.T., Principal Investigator)
- 2013 - 2015 High-Resolution Traffic Noise Mapping in the Macao Peninsula (Funded by FDCT, Principal Investigator)
- 2014 - 2015 Road Traffic Noise Prediction Model for Macao (Funded by Faculty Research Grant, M.U.S.T., Principal Investigator)
- 2012 - 2013 Impacts of Environmental Elements on Residential Property Values in Macao (Funded by Macau Foundation, Principal Investigator)
- 2012 - 2013 Survey for Residential Status in the Neighborhood of Kou Lou (Project commissioned by the Land, Public Works and Transport Bureau, Macao SAR)
- 2010 - 2011 Survey for Residential Status in the Neighborhood of Barra (Project commissioned by the Land, Public Works and Transport Bureau, Macao SAR)
- 2010 - 2011 Public Environmental Awareness Survey in Macao (Project commissioned by the Environmental Protection Bureau, Macao SAR)
- 2009 - 2010 Survey for Residential Status in the Neighborhood of Ha Wan (Project commissioned by the Land, Public Works and Transport Bureau, Macao SAR)
- 2009 - 2010 Environmental Economic Assessment of Macao Light Rail Transit System (Project commissioned by the Transportation Infrastructure Office, Macao SAR)