

Zheng Liang



Position : Assistant Professor
Faculty : Faculties of Humanities and Arts
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Teaching and Research Areas:

AI-architecture innovation, AI-driven generative design, intelligent urban prediction, building material performance evaluation.

Academic Qualifications

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| 2020 - 2024 | Ph.D. in Architecture (Sustainable Design), Faculty of Humanities and Arts, Macau University of Science and Technology |
| 2018 - 2020 | M.A. in Design (Artistic Design Practice), Faculty of Humanities and Arts, Macau University of Science and Technology |
| 2015 - 2018 | B.B.A. in Business Management (Self-study), Jinan University |
| 2014 - 2018 | B.A. in Arts (Landscape Design), Faculty of Humanities and Arts, Macau University of Science and Technology |

Teaching Experience

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| 2025- Present | Assistant Professor in Architecture, Faculty of Humanities and Arts, Macau University of Science and Technology |
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Representative Publications

Journal Articles

- [1] **Zheng, L.**, Chen, Y., Yan, L., & Zheng, J. (2023). The Impact of High-Density Urban Wind Environments on the Distribution of COVID-19 Based on Machine Learning: A Case Study of Macau. *Buildings*, 13(7), 1711. (SCIE, Q2, IF=3.8)
- [2] **Zheng, L.**, Chen, Y., Yan, L., & Zhang, Y. (2024). Automatic detection and recognition method of Chinese clay tiles based on YOLOv4: a case study in Macau. *International Journal of Architectural Heritage*, 18(10), 1551-1570. (SCIE, A&HCI, Q2, IF=2.4)
- [3] **Zheng, L.**, Chen, Y., Jiang, S., Song, J., & Zheng, J. (2023). Predicting the distribution of COVID-19 through CGAN—Taking Macau as an example. *Frontiers in big Data*, 6, 1008292. (ESCI, Q2, IF=3.1)
- [4] Yang, S., Chen, Y., **Zheng, L.***, Chen, J., Huang, Y., Huang, Y., Wang, N., & Hu, Y. (2025). Investigating and Identifying the Surface Damage of Traditional Ancient Town Residence Roofs in Western Zhejiang Based on YOLOv8 Technology. *Coatings*, 15(2), 205. (SCIE, Q2, IF=2.9)
- [5] Tang, Q., **Zheng, L.***, Chen, Y., Chen, J., & Yang, S. (2025). Innovative Design Method for Lingnan Region Veranda Architectural Heritage (Qi-Lou) Facades Based on

Computer Vision. Buildings, 15(3), 368. (SCIE, EI, Q2, IF=3.1)

- [6] Zhang, L., Chen, Y., **Zheng, L.***, Yan, B., Zhang, J., Xie, A., & Lou, S. (2024). Investigating the Surface Damage to Fuzhou's Ancient Houses (Gu-Cuo) Using a Non-Destructive Testing Method Constructed via Machine Learning. Coatings, 14(11), 1466. (SCIE, Q2, IF=2.9)
- [7] Tang, Q., **Zheng, L.***, Chen, Y., Yan, L., & Chen, J. (2024). Artificial intelligence empowering museum space layout design: Insights from China. Plos one, 19(11), e0310594. (SCIE, Q1, IF=2.9)
- [8] Yang, S., Chen, Y., Huang, Y., **Zheng, L.***, & Huang, Y. (2024). Investigating the Satisfaction of Residents in the Historic Center of Macau and the Characteristics of the Townscape: A Decision Tree Approach to Machine Learning. Buildings, 14(9), 2925. (SCIE, EI, Q2, IF=3.1)
- [9] Fan, J., Chen, Y., & **Zheng, L.*** (2024). Artificial Intelligence for Routine Heritage Monitoring and Sustainable Planning of the Conservation of Historic Districts: A Case Study on Fujian Earthen Houses (Tulou). Buildings, 14(7), 1915. (SCI, EI, Q2, IF=3.1)
- [10] Li, Y., Zhao, M., Mao, J., Chen, Y., **Zheng, L.***, & Yan, L. (2024). Detection and recognition of Chinese porcelain inlay images of traditional Lingnan architectural decoration based on YOLOv4 technology. Heritage Science, 12(1), 137. (SCIE, A&HCI, Q2, IF=2.5)
- [11] Yan, L., Chen, Y., **Zheng, L.***, & Zhang, Y. (2024). Application of computer vision technology in surface damage detection and analysis of shedthin tiles in China: a case study of the classical gardens of Suzhou. Heritage Science, 12(1), 72. (SCIE, A&HCI, Q2, IF=2.5)
- [12] Min, X., **Zheng, L.***, & Chen, Y. (2023). The floor plan design method of exhibition halls in CGAN-assisted museum architecture. Buildings, 13(3), 756. (SCIE, Q2, IF=3.8)
- [13] Lin, H., Huang, L., Chen, Y., **Zheng, L.***, Huang, M., & Chen, Y. (2023). Research on the application of CGAN in the design of historic building facades in urban renewal—taking Fujian Putian historic districts as an example. Buildings, 13(6), 1478. (SCIE, Q2, IF=3.8)
- [14] Chen, Y., Yan, L., & **Zheng, L.*** (2025). Intelligent approach to Mining cultural tourism potential areas Based on YOLOv4: insights from Macau. Journal of Asian Architecture and Building Engineering, 24(1), 395-423. (SCIE, A&HCI, Q3, IF=1.3)
- [15] Li, Q., **Zheng, L.***, Chen, Y., Yan, L., Li, Y., & Zhao, J. (2023). Non-destructive testing research on the surface damage faced by the Shanhaiguan Great Wall based on machine learning. Frontiers in Earth Science, 11, 1225585. (SCIE, Q3, IF=2.9)
- [16] Li, Y., Chen, H., Mao, J., Chen, Y., **Zheng, L.***, Yu, J., ... & He, L. (2024). Artificial Intelligence to Facilitate the Conceptual Stage of Interior Space Design: Conditional Generative Adversarial Network-Supported Long-Term Care Space Floor Plan Design of Retirement Home Buildings. Applied Artificial Intelligence, 38(1), 2354090. (SCIE, Q2, IF=2.8)

- [17] Wang, T., Chen, Y., Wei, Z., Chen, J., Fang, J., Dong, Z., & **Zheng, L.** (2025). Images of Architectural Landmarks Integrated into Spatial Vision Based on Urban Image Theory: A Case Study on the Wuhan Design Biennale Exhibition Space. *Buildings*, 15(4), 530. (SCIE, EI, Q2, IF=3.1)
- [18] Huang, Y., Huang, Y., Chen, Y., Yan, Y., **Zheng, L.**, & Ying, Z. (2025). Interpretation of the Jiangnan Landscape and Countryside (Shan-Shui) Pattern: Evidence from the Classification and Spatial Form of Traditional Settlements in the Nanxi River Basin. *Buildings*, 15(3), 413. (SCIE, EI, Q2, IF=3.1)
- [19] Zhang, L., Chen, Y., **Zheng, L.**, & Zheng, R. (2025). Research on the Composition and Casting Technology of Bronze Arrowheads Unearthed from the Ruins of the Imperial City of the Minyue Kingdom. *Materials*, 18(2), 402. (SCIE, Q1, IF=3.1)
- [20] Pan, Z., Chen, Y., Huang, Y., & **Zheng, L.** (2024). The vernacular cultural landscape in traditional villages: global hotspots, emerging trends, and a case study of China's Qilu cultural district. *Frontiers in Earth Science*, 12, 1511292. (SCIE, Q3, IF=2)
- [21] Wang, T., Chen, Y., Huang, Y., **Zheng, L.**, & Zhang, C. (2024). Renewal Design of Art University Campuses Using Urban Image Theory: A Case Study on the Hubei Institute of Fine Arts (HIFA). *Buildings*, 14(12), 3964. (SCIE, EI, Q2, IF=3.1)
- [22] Zhao, M., Li, Y., Chen, H., Chen, Y., **Zheng, L.**, Wu, Y., ... & Wang, T. (2024). Metagenomic study of the microbiome and key geochemical potentials associated with architectural heritage sites: a case study of the Song Dynasty city wall in Shou County, China. *Frontiers in Microbiology*, 15, 1453430. (SCIE, Q2, IF=4.0)
- [23] Zhou, S., Zhang, L., Chen, Y., **Zheng, L.**, Lei, N., & Zhang, J. (2024). Archaeological Excavation, Protection, and Display Engineering Design Practice: A Case Study in the Ruins of the Imperial City of the Minyue Kingdom. *Coatings*, 14(9), 1220. (SCIE, Q2, IF=2.9)
- [24] Chen, Y., **Zheng, L.**, & Zheng, J. (2024). The Correlation Between Asian Port Cities and Traditional Portuguese Urban Forms Based on Map and Machine Learning Analyses. *Island Studies Journal*. (SSCI, Q2, IF=1.5)
- [25] Yan, L., **Zheng, L.**, & Chen, Y. (2024). Landscape sightline analysis on height control of land around architectural heritage sites: Nanshan Temple and Nanping Academy in Zhangzhou, China. *Geocarto International*, 39(1), 2350172. (SCIE, Q2, IF=3.8)
- [26] Song, J., Chen, Y., **Zheng, L.**, & Tang, Q. (2024). The evolution of traditional ancient towns in South China: Tangjiawan Ancient Town in Zhuhai city. *Journal of Asian Architecture and Building Engineering*, 1-19. (SCIE, A&HCI, Q3, IF=1.3)
- [27] Zhang, L., **Zheng, L.**, Chen, Y., Huang, L., & Zhou, S. (2022). CGAN-assisted renovation of the styles and features of street facades—A case study of the wuyi area in fujian, china. *Sustainability*, 14(24), 16575. (SSCI, SCIE, Q2, IF=3.9)
- [28] Yan, L., Chen, Y., **Zheng, L.**, Zhang, Y., Liang, X., & Zhu, C. (2023). Intelligent Generation Method and Sustainable Application of Road Systems in Urban Green Spaces: Taking Jiangnan Gardens as an Example. *International Journal of Environmental*

Research and Public Health, 20(4), 3158. (EI, Q1, IF=4.614)

- [29] He, J., Chen, Y., **Zheng, L.**, & Zheng, J. (2023). Research on Wind Environment and Morphological Effects of High-Rise Buildings in Macau: An Example from the New Reclamation Area around Areia Preta. *International Journal of Environmental Research and Public Health*, 20(5), 4143. (EI, Q1, IF=4.614)
- [30] Chen, Y., **Zheng, L.**, & Yan, L. (2024). Research on the intelligent generation of the spatial form of the island city historic district Based on parameterization: Taking Macau Taipa Village as an example. *Journal of Asian Architecture and Building Engineering*, 23(3), 1094-1125. (SCIE, A&HCI, Q3, IF=1.3)
- [31] Yang, X., **Zheng, L.**, Chen, Y., Feng, J., & Zheng, J. (2023). Recognition of damage types of Chinese gray-brick ancient buildings based on machine learning—taking the Macau world heritage buffer zone as an example. *Atmosphere*, 14(2), 346. (SCIE, Q3, IF=2.9)
- [32] Chen, Y., **Zheng, L.**, Song, J., Huang, L., & Zheng, J. (2022). Revealing the Impact of Urban Form on COVID-19 Based on Machine Learning: Taking Macau as an Example. *Sustainability*, 14(21), 14341. (SSCI, SCIE, Q2, IF=3.9)

Conference Proceedings

- [1] **Zheng, L.**, & Chen, Y. (2022). Research on the Spatial Characteristics of High-Density Urban Road Network and Functional Agglomeration Taking the Northern Part of Macau as an Example. In *International Conference on Spatial Data and Intelligence* (pp. 189-206). Cham: Springer Nature Switzerland.
- [2] **Zheng, L.**, Cao, J., & Chen, Y. (2021). Analysis of the development and application of passive building technology in Macau. In *E3S Web of Conferences* (Vol. 284, p. 05002). EDP Sciences.
- [3] **Zheng, L.**, & Chen, Y. (2021). Problems and countermeasures in the restoration project of cultural relics of Macao Chong Sai Pharmacy. In *E3S Web of Conferences* (Vol. 284, p. 05005). EDP Sciences.
- [4] **Zheng, L.**, & Chen, Y. (2021). The protection process and measures of Macau's heritage buildings. In *IOP Conference Series: Earth and Environmental Science* (Vol. 783, No. 1, p. 012120). IOP Publishing.
- [5] **Zheng, L.**, & Chen, Y. (2021). Research on the Restoration Techniques and Prevention Strategies of Historic Buildings in Macao. In *IOP Conference Series: Earth and Environmental Science* (Vol. 783, No. 1, p. 012111). IOP Publishing.
- [6] Wang, T., Sun, S., Liu, N., Chen, Y., & **Zheng, L.** (2024). Quantifying University Campus Imagery: A Social Survey of Three University Campuses in China based on Internet Image Data. In *Proceedings of the 2024 International Conference on Digital Society and Artificial Intelligence* (pp. 441-450).
- [7] Tang, Q., Song, J., Chen, Y., **Zheng, L.**, & Chen, J. (2024). Intelligent Management and Analysis of B&B Commercial Space Based on Space Syntax: IKKYO RESORT in Yangshuo City, Guangxi Zhuang Autonomous Region. In *Proceedings of the 2024 International Conference on Smart City and Information System* (pp. 103-109).
- [8] Tang, Q., Song, J., Chen, Y., & **Zheng, L.** (2024). Intelligent People Flow Simulation Analysis of Community Activity Space Based on Space Syntax in Huangpu Youth Palace of Guangzhou. In *Proceedings of the 2024 International Conference on Smart City and Information System* (pp. 166-171).
- [9] Tam, H. I., Chen, Y., **Zheng, L.**, & Huang, L. (2024). Research on Machine Learning-assisted Floor Plan Generation in Old-style Residential Buildings: Taking Tong Lau in Macau as an Example. In *Proceedings of the 3rd International Conference on Computer, Artificial Intelligence and Control Engineering* (pp. 470-475).

- [10] Tam, H. I., **Zheng, L.**, Chen, Y., & Wang, X. (2022). Analysis of the Plan Form of Prefabricated Buildings Based on the Space Syntax—A Case Study of the Son Lei House in Macau. In International Conference on Civil Engineering and Architecture (pp. 405-429). Singapore: Springer Nature Singapore.
- [11] Cao, J., **Zheng, L.**, Guo, Y. (2023). Research on adaptive application of traditional lingnan building materials – taking Macau as an example. E3S Web of Conferences, 2023, 371, 02039.
- [12] Chen, Y., Chen, J., **Zheng, L.**, Tang, Q. (2023). Experience space practice based on ecological building materials: Paper bamboo house architectural design in Panyu, China. E3S Web of Conferences, 2023, 371, 02051.
- [13] Tang, Q., Chen, Y., Chen, J., & **Zheng, L.** (2022). Research on the Development of Modern Mosaic Wall Decoration Materials Based on Nostalgic Memory—Taking Wumi Congee (Congee Shop) in Cantonese Area of China as an Example. In International Conference on Green Building, Civil Engineering and Smart City (pp. 319-328). Singapore: Springer Nature Singapore.
- [14] Tang, Q., Chen, Y., **Zheng, L.**, & Chen, J. (2022). Research on the Innovative Design Mode of Guangzhou Vernacular Architecture Under the Background of Carbon Neutrality. In International Conference on Green Building, Civil Engineering and Smart City (pp. 1201-1208). Singapore: Springer Nature Singapore.
- [15] Yan, L., Chen, Y., **Zheng, L.**, Zhang, Y., & Zhu, C. (2022, March). Research on the quantification of historical street space based on image semantic segmentation. In International Conference on Computer Graphics, Artificial Intelligence, and Data Processing (ICCAID 2021) (Vol. 12168, pp. 249-253). SPIE.
- [16] Chen, Y., Cao, J., & **Zheng, L.** (2021). Research on the building restoration engineering and materials of the Night Watch House in Macau-taking the Patane Night Watch House in Patane as an example. In E3S Web of Conferences (Vol. 284, p. 05004). EDP Sciences.
- [17] Chen, Y., & **Zheng, L.** (2021). Sustainable Optimal Design Based on the Upgrade Demand of Macau's Traditional Stalls. In E3S Web of Conferences (Vol. 236, p. 03035). EDP Sciences.

Research Grants/Projects

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| 2024-2025 | Project Participant, <i>Development of Intelligent Detection Technology and Equipment for Damage Assessment of Traditional Chinese Brick Walls in Macau</i> , Science and Technology Development Fund (FDCT), Macau |
| 2024-2025 | Project Participant, <i>Optimization Study on Barrier-Free Travel Planning in Macau</i> (Project No. 18/2024/DVPS), Municipal Affairs Bureau, Macau SAR Government |
| 2023-2025 | Project Participant, <i>Innovative Facade Design Methods for Lingnan Arcade Heritage Based on Computer Vision</i> , 2023 China-Portugal Belt and Road Joint Laboratory for Cultural Heritage Conservation Open Project |
| 2023-2024 | Project Participant, <i>Generative AI for Enhancing Rural Agricultural Heritage Protection Methods and Theories</i> , Digital Rural Research Center, Zhejiang University City College (2023-2024) |
| 2022-2024 | Project Participant, <i>Construction and Practice of a First-Class Course in Digital Mapping of Architectural Heritage Supported by PIE Software</i> , Ministry of Education Industry-University Collaboration Project (Wuyi University & Aerospace Hongtu Information Technology Co., Ltd., 2022) |
| 2022 | Project Participant, <i>Consultancy Services for the Restoration of the Old City Wall and Rammed Earth Wall Behind the Ruins of St. Paul's</i> , Cultural Affairs Bureau, Macau SAR Government |
| 2021-2022 | Project Participant, <i>Research on Piers No. 8 and No. 11 at the Inner Harbor for the Cultural Affairs Bureau</i> , Cultural Affairs Bureau, Macau SAR Government |
| 2021 | Project Participant, <i>Exhibition Design for the "Galaxy Excavated Ancient Cannons" in Sanmen</i> , Cultural Affairs Bureau, Macau SAR Government |
| 2021 | Project Participant, <i>Research on the Pier and Related Structures on D.</i> |

Belchior Carneiro Avenue, Cultural Affairs Bureau, Macau SAR Government

- 2020-2021 Project Participant, *Study on Epidemic Buffer Spaces for Macau's Cross-Border Commuters* (HSS-MUST-2020-9), Higher Education Fund of Macau SAR Government (Special Research on the Prevention and Response to Major Infectious Diseases)
- 2020 Project Participant, *Investigation and Strategic Study on the Protection and Development of Macau's Walled Villages*, Cultural Affairs Bureau, Macau SAR Government

Construction Project

- 2023 End-Terminal Power Distribution Upgrade Project for Provincial Center (Guangzhou) Data Room, 6th Floor, Recording Building, Provincial Center (Guangzhou) Data Room, No. 331 Huanshi East Road, Yuexiu District, Guangzhou, Guangdong Broadcast & Television Network Co., Ltd.
- 2023 Guangqi Honda Development Zone Data Room Construction Project, No. 1 Guangben Road, Huangpu District, Guangzhou, Portwidth Technology (Shanghai) Co., Ltd. Guangzhou Branch
- 2023 Guangqi Honda Huangpu New Data Center IT Room Construction Project, No. 1 Guangben Road, Huangpu Factory, Guangqi Honda Automobile Co., Ltd., Portwidth Technology (Shanghai) Co., Ltd. Guangzhou Branch
- 2022 Guangzhou Electronic Port Project, No. 9, Shazibei Road, Huangge Town, Nansha District, Guangzhou, Suite 202, Dasheng Technology Co., Ltd.
- 2022 E2 Logistics Center IT Room Construction Phase I, 8th Floor, Baodi Plaza, No. 83 Pazhou Avenue, Haizhu District, Guangzhou, Dasheng Technology Co., Ltd.
- 2021 Zheshang Bank Huizhou Branch (Preparation) Low-Voltage Engineering, Including Structured Cabling System, UPS Power System, Conference System, Queue Management System, Video Wall System, Data Room Management System, and Lightning Protection & Grounding System, No. 45 Dongjiang Third Road, Jiangbei, Huizhou (Yuerong Bay), Zheshang Bank Co., Ltd. Guangzhou Branch

Patents

- [1] **Zheng Liang**. Thermal Insulation and Fireproof Component for Data Centers [P]. Guangdong Province: CN117822959A, 2024-04-05. (Invention Patent)
- [2] **Zheng Liang**. Power Cable Connecting Server and Power Module [P]. Guangdong Province: CN116895983A, 2023-10-17. (Invention Patent)
- [3] **Zheng Liang**, Chen Yile. Visual Field Analysis Method and System for Landscape [P]. Guangdong Province: CN112435337B, 2024-09-10. (Invention Patent)
- [4] Zheng Liang, Zheng Hongbin, Long Hongxiu. Intelligent Security Screening and Disinfection Machine and Its Control Method [P]. Guangdong Province: CN113144254A, 2021-07-23. (Invention Patent)
- [5] Zheng Hongbin, Zheng Hongjun, **Zheng Liang**. Disinfection Equipment [P]. Guangdong Province: CN113786504A, 2021-12-14. (Invention Patent)
- [6] Zheng Hongbin, Zheng Hongjun, **Zheng Liang**. Disinfection Machine [P]. Guangdong Province: CN114470275A, 2022-05-13. (Invention Patent)
- [7] Yan Lina, **Zheng Liang**, Chen Yile, Zhang Yi, Liang Xiao, Zhu Chun. Intelligent Layout Method and System for Garden Roads [P]. Guangdong Province: CN116776428B, 2023-12-05. (Invention Patent)
- [8] Chen Yile, Zheng Jianyi, **Zheng Liang**, Yang Xiaohong, Feng Jingzhao. Identification

- Method for Damage Types on Exterior Walls of Traditional Brick Buildings [P]. Macau: CN117636047A, 2024-03-01. (Invention Patent)
- [9] **Zheng Liang**. Data Center Module Cabinet (Small Hybrid Air-Liquid Cooling) [P]. Guangdong Province: CN307991945S, 2023-04-21. (Design Patent)
- [10] **Zheng Liang**. Anti-Tailgating Device for Data Center Entrance [P]. Guangdong Province: CN219197095U, 2023-06-16. (Utility Model Patent)
- [11] **Zheng Liang**. Anti-Rodent Device for Data Center Entrance [P]. Guangdong Province: CN219205670U, 2023-06-20. (Utility Model Patent)
- [12] **Zheng Liang**, Zheng Hongbin, Zheng Hongjun. Hybrid Liquid Cooling System for Front-End Data Rooms [P]. Guangdong Province: CN218336930U, 2023-01-17. (Utility Model Patent)
- [13] **Zheng Liang**, Zheng Hongbin, Long Hongxiu. Intelligent Express Package Disinfection Machine [P]. Guangdong Province: CN306648185S, 2021-06-29. (Design Patent)
- [14] **Zheng Liang**, Zheng Hongbin, Long Hongxiu. Intelligent Security Screening and Disinfection Machine [P]. Guangdong Province: CN215230615U, 2021-12-21. (Utility Model Patent)
- [15] **Zheng Liang**, Chen Yile. Containerized Data Center [P]. Guangdong Province: CN213818605U, 2021-07-27. (Utility Model Patent)
- [16] Zheng Hongbin, Zheng Hongjun, **Zheng Liang**. Host Cabinet [P]. Guangdong Province: CN307096389S, 2022-02-01. (Design Patent)
- [17] Zheng Hongbin, Zheng Hongjun, **Zheng Liang**. Disinfection Machine for Luggage Conveyor Systems [P]. Guangdong Province: CN307205527S, 2022-03-25. (Design Patent)
- [18] Zheng Hongbin, Zheng Hongjun, **Zheng Liang**. Disinfection Equipment [P]. Guangdong Province: CN216169012U, 2022-04-05. (Utility Model Patent)
- [19] Zheng Hongbin, Zheng Hongjun, **Zheng Liang**. Disinfection Machine [P]. Guangdong Province: CN216652962U, 2022-06-03. (Utility Model Patent)
- [20] Zheng Hongbin, Zheng Hongjun, **Zheng Liang**. Disinfection Machine for Aircraft Cargo Hold Bulk Cargo Entrances [P]. Guangdong Province: CN307060924S, 2022-01-11. (Design Patent)
- [21] Chen Yile, **Zheng Liang**. Intelligent Street Vendor Cart [P]. Guangdong Province: CN214072347U, 2021-08-31. (Utility Model Patent)

Academic institutions and social positions

- Guest Editor, *Coatings* (SCIE, Q2)
- Peer Reviewer, *Scientific Reports* (SCIE, Q1)
- Peer Reviewer, *Frontiers in Public Health* (SCIE, SSCI, Q2)
- Peer Reviewer, *Frontiers in Environmental Science* (SCIE, Q2)

Professional Qualifications

- 2022 Senior Carbon Emission Manager (P21XZ01Z011453), China National Human Resources and Talent Training Network
- 2021 Green Building Design Certification (21100042099), Education and Training Center, Ministry of Human Resources and Social Security
- 2021 Smart Construction Engineer (210461020307278), Post and Telecommunication Talent Exchange Center
- 2020 Senior Prefabricated Construction Engineer (200861020349957), Post and Telecommunication Talent Exchange Center

- 2020 Smart Fire Protection Engineer (200161020398468), Post and Telecommunication Talent Exchange Center
- 2020 Senior BIM Engineer (200161020302474), Post and Telecommunication Talent Exchange Center