# Resume of Hui ZHANG

# **Basic Information**



School : Gender: Date of Birth: Title: Education: Tutor: Email: Interest of research: School of Civil Engineering, Architecture and Environment Male 198008 Associate Professor Ph.D of Architecture Master degree zhhust@hbut.edu.cn Research on Green and Low-carbon Building Design & Building Performance Assessment; Sustainable Urban and Buildings Performance Simulation and Digital Technologies Application

## Academic Background

PhD (Architecture), Huazhong University of Science and Technology (2007 - 2011) Master (Architectural Science), Huazhong University of Science and Technology (2004 - 2011);

Bachelor (Architecture), Wuhan University of Science and Technology (1999 - 2004)

## **Oversea visiting**

2022/12-2023/12, Visiting scholar, National University of Singapore, Singapore; 2016/12-2017/01, Visiting scholar, Long Beach, California State University, USA;

## **Enrollment Information**

- 1. Enrollment Discipline: Master of Architecture, Master of Civil Engineering
- 2. Research direction: International finance, management of financial institutions
- 3. Enrollment Year: 2023-2024

# <u>Membership</u>

1. Member of Green Building and Energy Conservation Committee of China Urban Scientific Research Council

2. Member of Green Building and Energy Conservation Committee of Hubei Province Civil Engineering and Architecture

### **Research Projects**

1. Natural Science Foundation of China (NSFC): Research on Parametric Passive Energy Saving Design for High-rise Buildings (No. 51508169, Project Leader)

2. Humanities and Social Science Research Project of the Ministry of Education of China: Research on spatial assessment and implementation strategy of energy landscape availability in urban settlements under complex environments (No. 22YJAZH146, Project Leader)

3. 2017 Scientific Plan Project of Ministry of Housing and Urban-rural Development (MHUD) : Research and Application of Green Performance Design and Decision System for Railway Transport Buildings (No. 2017-k1-009, Sub-project Leader)

4. Natural Science Foundation of Hubei Province, China: Research on Integrated Solar Energy Design Countermeasures for Residential Buildings Adapting to Climate Change. (No. 2014CFB475, Project Leader)

5. China Postdoctoral Science Foundation: Research on Low-energy Building Technologies in Hot Summer and Cold Winter zone. (No. 2013M531697, Project Leader)

### Selected publication

#### **Journal Papers**

1. Hu, H.; **Zhang, H**.; Wang, L.; Ke, Z. Evaluation and Design of Parameterized Dynamic Daylighting for Large-Space Buildings. Sustainability 2023, 15, 10773.

2. Ke, Z.; Liu, X.; **Zhang, H**.; Jia, X.; Zeng, W.; Yan, J.; Hu, H.; Hien, W.N. Energy Consumption and Carbon Emissions of Nearly Zero-Energy Buildings in Hot Summer and Cold Winter Zones of China. Sustainability 2023, 15, 11453.

3. Jia, X.; **Zhang, H**.; Yao, X.; Yang, L.; Ke, Z.; Yan, J.; Huang, X.; Jin, S. Research on Technology System Adaptability of Nearly Zero-Energy Office Buildings in the Hot Summer and Cold Winter Zone of China. Sustainability 2023, 15, 13061.

4. Yan, J.; **Zhang, H**.; Liu, X.; Ning, L.; Hien, W.N. The Impact of Residential Cluster Layout on Building Energy Consumption and Carbon Emissions in Regions with Hot Summers and Cold Winters in China. Sustainability 2023, 15, 11915.

5. Yu, H.; **Zhang, H**.; Han, X.; Gao, N.; Ke, Z.; Yan, J. An Empirical Study of a Passive Exterior Window for an Office Building in the Context of Ultra-Low Energy. Sustainability 2023, 15, 13210.

6. Gao, N.; **Zhang, H**.; Wang, P.; Ning, L.; Wong, N.H.; Yu, H.; Ke, Z. Research on Microclimate-Suitable Spatial Patterns of Waterfront Settlements in Summer: A Case Study of the Nan Lake Area in Wuhan, China. Sustainability 2023, 15, 15687.

7. Lin Liu, Zhuang Yu, **Hui Zhang \*** . Simulation study of an innovation ventilated facade utilizing indoor exhaust air, Energy Procedia, 2017(10):126-133. (English)

8. **HUI Zhang**, ZHOU Xuan. Research on green building design strategy of large space railwaystation: Taking Taiyuan south railway station as a case. Sichuan Building Science, 2016(12): 134-137. (Chinese)

9. **Hui Zhang**, Hang Gao, Xin Wei. Solar environmental purifier: Taking the design of solar energy research institute of HBUT as a case. Sichuan Building Science. 2016(10): 110-113. (Chinese)

10. **Hui Zhang**, Zhuang Yu. Research on climate adaptability of energy conservation building with renewable energy sources in hot summer and cold winter zone. Applied Mechanics and Materials. 448-453(2014):1289-1296. (English)

11. **Hui Zhang**, Zhuang Yu. Research on Energy Saving Design of Urban Planning under Climatic Environment Influence. Advanced Materials Research, 616-618(2013): 1254-2159. (English)

#### **Conference Papers**

1. Xie Dong, **Zhang Hui**, Xie Hu. Research on parametric shading design of high-residential buildings adapting to environmental performance changes. 2019 International Conference on Green and Energy-efficient Building, 2019.4.3-2018.4.4, Shenzhen, China. (Chinese)

2. **Zhang Hui**, Cheng Jiayang, Wang Li. Design and analysis of solar and thermal performance of railway station waiting hall skylight in hot summer and cold winter area. 2019 International Conference on Green and Energy-efficient Building, 2019.4.3-2018.4.4, Shenzhen, China. (Chinese)

3. **Hui Zhang**, Huihui Wang, Di Wei. Performance analysis of buildings based on Genetic Algorithm: A case study of residential buildings. 2018 International Conference on Green and Energy-efficient Building, 2018.3.28-2018.3.29, Shenzhen, China. (Chinese)

4. **Hui Zhang**, Huihui Wang, Xuan Zhou. Applicability research on passive design of residential buildings in hot summer and cold winter zone in China, 3 rd International Conference on Energy Materials and Environment Engineering, 2017.5.20-2017.5.21. (English)

#### **Published Book**

Green Building Performance Design and Analysis[M]. ISBN: 978-7-112-21760-1. China Construction Industry Press. 2019.12.