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姓名: 刚文杰

出生年月: 1988-05

学历: 博士

职称: 副教授

专业方向: 分布式能源, 绿色建筑, 建筑节能

电话:

Email: gangwenjie@hust.edu.cn

个人主页:



个人简介

本人主要研究方向为分布式能源系统、区域供冷、考虑不确定性与系统可靠性的建筑能源系统优化设计、建筑节能、零（低）能耗建筑。目前已发表论文30余篇，主要发表在建筑与能源领域A类期刊如

Applied Energy, Energy and Buildings, Energy, Renewable Energy, Renewable and Sustainable Energy Reviews等，同时也是这些期刊的审稿人。

欢迎来自建筑、能源、环境等相关学科的学生，报考我的研究生

Education

- 2012.08-2015.11 香港理工大学 屋宇设备工程系 博士
- 2009.09-2012.06 华中科技大学 供热供燃气通风及空调工程系 硕士
- 2005.09-2009.06 华中科技大学 建筑环境与设备工程系 工学学士

Research Experience

- 2016.12-至今 华中科技大学 建筑环境与能源应用工程系 副教授
- 2015.11-2016.12 香港理工大学 屋宇设备工程系 博士后
- 2015.01-2015.04 美国佐治亚理工学院 建筑系 访问学者
- 2011.12-2012.03 澳大利亚阿德莱德大学 机械工程系 访问学者

Projects

- 2019-2021 基于随机不确定性与非概率不确定性量化分析的中央空调系统性能预测与优化配置方法研究，国家自然科学基金青年科学基金（26万），主持
- 2018-2021, Probabilistic Optimal and Adaptive Design and Test & Commissioning of District Cooling Systems Concerning Uncertainties and Reliability, Hong Kong Research Grants Council, (63.2万港币)，参与
- 2017.01-2019.12考虑需求侧随机特性的夏热冬冷地区分布能源系统研究，华中科技大学自主创新基金（8万），主持

- 2016.12-2019.12考虑不确定性与可靠性的中央空调系统优化设计，人才引进经费（50万），主持
- 2015.6-2016.12 零能耗建筑的供电供冷系统及可再生能源系统的设计优化，参与
- 2014.8-2015.12 香港新世界中心能源系统节能设计，参与
- 2012.8-2016.12 香港新界东北发展区区域供冷系统研究，主持

Publications

期刊论文:

- [1] Cheng Fan, Jiayuan Wang, **Wenjie Gang***, Shenghan Li. Assessment of deep recurrent neural network-based strategies for short-term building energy predictions. *Applied Energy* 2019; 236:700-710.
- [2] Chong Zhang, **Wenjie Gang**, Jinbo Wang, Xinhua Xu, Qianzhou Du. Numerical and experimental study on the thermal performance improvement of a triple glazed window by utilizing low-grade exhaust air. *Energy* 2019; 167: 1132-1143.
- [3] Tao Wen, Yimo Luo, Weifeng He, **Wenjie Gang**, Liyuan Sheng. Development of a novel quasi-3D model to investigate the performance of a falling film dehumidifier with CFD technology. *International Journal of Heat and Mass Transfer* 2019; 132: 431-442.
- [4] Jinbo Wang, Qianzhou Du, Chong Zhang, Xinhua Xu, **Wenjie Gang**. Mechanism and preliminary performance analysis of exhaust air insulation for building envelope wall. *Energy and Buildings* 2018; 173:516-529.
- [5] Jiajia Gao, Anbang Li, Xinhua Xu, **Wenjie Gang***, Tian Yan. Ground heat exchangers: Applications, technology integration and potentials for zero energy buildings. *Renewable Energy* 2018; 128: 337-349;
- [6] Chong Zhang, **Wenjie Gang**, Jinbo Wang, Xinhua Xu, Qianzhou Du. Experimental investigation and dynamic modeling of a triple-glazed exhaust air window with built-in venetian blinds in the cooling season. *Applied Thermal Engineering* 2018; 140: 73-85.
- [7] Jiajia Gao, Jing Kang, Chong Zhang, **Wenjie Gang***. Energy Performance and Operation Characteristics of Distributed Energy Systems with District Cooling Systems in Subtropical Areas Under Different Control Strategies. *Energy* 2018; 153: 849-860.
- [8] Jing Kang, Shengwei Wang, **Wenjie Gang**. Performance of Distributed Energy Systems in Buildings in Cooling Dominated Regions and the Impacts of Energy Policies. *Applied Thermal Engineering* 2017; 281-291.
- [9] Tian Yan, Xinhua Xu, Dun Qiu, **Wenjie Gang**. A Quasi-Steady-State Simplified Model for Pipe-encapsulated PCM. *Procedia Engineering* 2017; 205: 3243-3250.
- [10] Chengchu Yan, **Wenjie Gang**, Xiaofeng Niu, Xujian Peng, Shengwei Wang. Quantitative Evaluation of the Impact of Building Load Characteristics on Energy Performance of District Cooling Systems. *Applied*

Energy 2017; 205: 635-643.

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[12] Qianzhou Du, **Wenjie Gang***, Shengwei Wang, Jinbo Wang, Xinhua Xu. Application of Distributed Energy Systems in Subtropical and High Density Urban Areas. *Energy Procedia* 2017; 142: 2870-2876

[13] Jing Kang, Shengwei Wang, **Wenjie Gang**. Performance and Benefits of Distributed Energy Systems in Cooling Dominated Regions: A Case Study. Kang J, Wang S, Gang W. Performance and Benefits of Distributed Energy System. *Energy Procedia* 2017; 142:1991-1996.

[14] Shengwei Wang, **Wenjie Gang**. Design and Control Optimization of Energy Systems of Smart Buildings Today and in the Near Future. *Frontiers of Engineering Management* 2017; 4: 58-66.

[15] **Wenjie Gang**, Shengwei Wang, Fu Xiao. District Cooling Systems and Individual Cooling Systems: Comparative Analysis and Impacts of Key Factors. *Science and Technology for the Built Environment* 2017; 23: 241-250.

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[1] Qianzhou Du, Chengliao Cui, Ying Zhang, Chong Zhang, **Wenjie Gang**, Shengwei Wang. Promotion of distributed energy systems integrated with district cooling systems considering uncertainties in energy market and policy in China. Accepted by 16th International Symposium on District Heating and Cooling, DHC2018, 9–12 September 2018, Hamburg, Germany.

[2] Qianzhou Du, Jiaqi Yuan, Chengliao Cui, Ying Zhang, **Wenjie Gang***. Promotion of Distributed Energy Systems Integrated with District Cooling Systems Considering Uncertainties in Energy Markets. Accepted by The 16th International Symposium on District Heating and Cooling, September 9-12, 2018, Hamburg, Germany

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专利列表

[1] **刚文杰**, 薛雪, 颜承初, 孙雪. 基于医院并联冷冻水泵的等压变频控制装置: 中国, ZL.2017 2 0229414.0. 2017-12-08

[2] 孙雪, 薛雪, **刚文杰**, 赵阳. 一种医院冷辐射空调温度控制装置. ZL 2017 2 0244759.3. 2017-10-24.

[3] 颜承初, 薛雪, **刚文杰**, 孙雪. 一种医院冷辐射空调空气品质控制装置. ZL 2017 2 0240048.9. 2017-10-24.

[4] 薛雪, 袁宜峰, 刚文杰, 孙雪. 一种新型医院风机盘管温控装置. ZL 2017 2 0449524.8. 2018-01-05.

邮编: 430074 | 电话: (+86)027-87792101

地址: 中国·湖北省·武汉市珞瑜路1037号 华中科技大学东校区环境学院大楼

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