

张翼

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工作经历

香港大学	机械工程专业	博士后	2022.10-现在
<ul style="list-style-type: none">导师: 尹晓波教授 (香港大学副校长, 讲席教授)香港创新与科技局资助博士后			

教育背景

香港大学	机械工程专业	博士	2019.11-2022.09
<ul style="list-style-type: none">导师: 赵汝恒教授 (香港理工大学副校长, 讲席教授)毕业论文: 利用摩擦电纳米发电机的机械能采集			
香港科技大学	机械工程专业	MPhil	2017.09-2019.08
<ul style="list-style-type: none">导师: 赵汝恒教授毕业论文: 用于智能窗应用的钙钛矿材料热致变色特性研究			
西安交通大学	能源与动力工程专业	本科	2013.09-2017.06

科研项目

用于高能效建筑围护结构的昼间低于环境温度辐射冷却涂层	香港研究资助局协作研究基金	544,143 HKD	项目骨干
被动辐射冷却性能的校准与标准化	香港研究资助局优配研究基金	910,742 HKD	项目骨干
深红温室围护结构: 被动光合作用光质管理提升温室产量	创新科技署创新及科技基金	4,499,927 HKD	项目骨干
利用仿生被动振翅机制的强化散热器技术	香港研究资助局优配研究基金	1,624,880 HKD	项目骨干
表面处理冷却效应研究及其在智能绿色建筑中的应用	香港研究资助局协作研究基金	3,714,122 HKD	项目骨干

学术成果

- Yi Zhang**, Senji Li, Yucan Peng, Chenglong She, Minghao Dong, Keqiao Li, Fan Yang, Weiyang Hou, Han Gao, Chenshu Wu, Baoling Huang, Philip Chow, Xiaobo Yin*. "Heat reflective and RF transmissive composite for energy-saving buildings." *Materials Today* doi: 10.1016/j.mattod.2025.10.014 (JCR 一区, IF: 22.0)
- Chenglong She, **Yi Zhang**, Minghao Dong, Jingjing Chen, Xiaopeng Bai, Chenxi Wang, Fan Yang, and Xiaobo Yin*. "Scattering-enhanced light extraction for radiative thermal load mitigation in fluorescent films." *Advanced Science* (2025):e10643. (共同第一作者) (JCR 一区, IF: 14.1)
- Yi Zhang**, Chenglong She, Jingjing Chen, Kui Lai, Fan Yang, Chenxi Wang, Baoling Huang, Lihua Shen, Xiaobo Yin*. "Daytime radiative Freezing" *Science Bulletin* 70, 1 (2025): 29-32 (JCR 一区, IF: 21.1)
- Yi Zhang**, Yang Li, Keqiao Li, Ye Seul Kwon, Thilhara Tennakoon, Cunteng Wang, Ka Chung Chan*, Sau-Chung Fu, Baoling Huang*, Christopher YH Chao. "A large-area versatile textile for radiative warming and biomechanical energy harvesting" *Nano Energy* (2022):106996. (JCR 一区, IF: 17.1)
- Yi Zhang**, Thilhara Tennakoon, Yin Hoi Chan, Ka Chung Chan, Sau Chung Fu, Chi Yan Tso, Kin Man Yu, Christopher YH Chao*. "Energy consumption modelling of a passive hybrid system for office buildings in different climates." *Energy* 239 (2022): 121914. (JCR 一区, IF: 9.4)
- Yi Zhang**, Sau-Chung Fu*, Ka Chung Chan, Dong-Myeong Shin, and Christopher YH Chao. "Boosting power output of flutter-driven triboelectric nanogenerator by flexible flagpole." *Nano Energy* 88 (2021): 106284. (JCR 一区, IF: 17.1)
- Yi Zhang**, Chi Yan Tso, Juan Simon Iñigo, Sai Liu, Hijiri Miyazaki, Christopher YH Chao*, and Kin Man Yu. "Perovskite thermochromic smart window: Advanced optical properties and low transition temperature." *Applied Energy* 254 (2019):

113690. (JCR 一区, IF: 11.0)

8. Dong, Minghao, **Yi Zhang**, Chenglong She, Chenxi Wang, and Xiaobo Yin. "Continuous 24-hour solar photothermal distillation enabled by energy storage." *Next Energy* 8 (2025): 100378.
9. Feng, Jie, Cunteng Wang, **Yi Zhang**, Ka Chung Chan, Chun-Ho Liu, Christopher YH Chao, and Sau Chung Fu. "Particle resuspension from a flow-induced fluttering flexible substrate." *Powder Technology* 415 (2023): 118163. (IF: 4.6)
10. Chan, Yin Hoi, **Yi Zhang**, Thilhara Tennakoon, Sau Chung Fu, Ka Chung Chan, Chi Yan Tso, Kin Man Yu et al. "Potential passive cooling methods based on radiation controls in buildings." *Energy Conversion and Management* 272 (2022): 116342. (IF: 10.9)
11. Sau Chung Fu *, Xiao Ling Zhong, **Yi Zhang**, Tsz Wai Lai, Ka Chung Chan, K. Y. Lee, and Christopher YH Chao. "Bio-inspired cooling technologies and the applications in buildings." *Energy and Buildings* (2020): 110313. (IF: 7.1)
12. Liu, Sai, Chi Yan Tso*, Hau Him Lee, **Yi Zhang**, Kin Man Yu, and Christopher YH Chao. "Bio-inspired TiO₂ nano-cone antireflection layer for the optical performance improvement of VO₂ thermochromic smart windows." *Scientific reports* 10, no. 1 (2020): 1-14. (IF: 3.9)
13. Cao, Changqing*, **Yi Zhang**, Linhu Li, Wenwen Wei, Gaoyun Wang, and Ce Bian. "Supercritical water gasification of black liquor with wheat straw as the supplementary energy resource." *International Journal of Hydrogen Energy* 44, no. 30 (2019): 15737-15745. (IF: 8.3)
14. Cao, Changqing*, **Yi Zhang**, Wen Cao, Hui Jin, Liejin Guo, and Ziyang Huo. "Transition metal oxides as catalysts for hydrogen production from supercritical water gasification of glucose." *Catalysis Letters* 147, no. 4 (2017): 828-836. (IF: 2.4)

学术兼职

担任《Science advances》与《Energy and Buildings》的期刊审稿人