**Projects (**PI**)**

* **Project 1**: 绿色低碳先进技术分类识别及支持政策研究，国家发改委 2023年度碳达峰碳中和课题委托 (National Development and Reform Commission: 2023-Dual Carbon-3)
* **Project 2**: 基于不确定性随机优化的循环经济绿色低碳社区能量调度模型与多目标优化研究 广东省自然科学基金-面上项目 2024-Now
* **Project 3**: 相变材料-气凝胶光伏/光热系统光热电转换机理与气候适应性研究 广东省自然科学基金-青年项目 2023-Now
* **Project 4**: Passive and active technologies in zero-energy buildings and low-carbon communities(G0101000059)The Hong Kong University of Science and Technology (Guangzhou) startup grant Oct. 2021-Now
* **Project 5**: Application of artificial intelligence in tumor radiotherapy plan design (R00017-2001), Chongqing Zhonghaoda Technology Co., Ltd Nov. 2022-Now
* **Project 6**: Research on the Mechanism and Model of Carbon Neutrality Community Hydrogen Electric Heating Conversion Based on Integrated Building-Transportation Energy System , Guangzhou Project 2023-2025
* **Project 7**: Study on anti-condensation mechanism and energy-saving characteristics of a radiative cooling wall with PCM and nanoporous aerogel (SL2023A03J00039) 2023 Municipal University (Institute) Enterprise Joint Funding Project 2023.04-2025.03
* **Project 8**: Modelling and mechanism on hydrogen-electric-thermal conversion in a carbon neutral community with buildings and zero-emission vehicles (SL2023A04J00625) 2023 Basic and Applied Basic Research Project 2023.04-2025.03
* **Project 9**: Photothermoelectric conversion mechanism and climate adaptability of a phase change material aerogel-based photovoltaic/photothermal system (22201910240004334) 2023 Regional joint youth project 2023.04-2025.03
* **Project 10**: Advanced Radiant Cooling System (R00079), Media Group project 2023.09-2025.01
* **Project 11**: Optimization Design of Proton Exchange Membrane Fuel Cell Plate (R00072)Foshan Hydrogen Company, 2023.04-2026.04

**Projects (**Co-PI or Participation**)**

* **Project 12:** Advanced porous acrylonitrile butadiene styrene-tetraethylenepentamine (ABS-TEPA) microcapsules for onsite carbon capture in built environment (F0855) Sustainable Smart Campus As a Living lab in The Hong Kong University of Science and Technology (HKUST) 01/01/2022 - 31/12/2023
* **Project 13**: ‘Energy and Environment Youth Talent Training Plan’ China Association for Science and Technology 2022-Now
* **Project 14**: Energy saving and carbon reduction platform project of Ministry of Finance and National Development and Reform Commission 01/01/2012 - 31/12/2018
* **Project 15**: The optimal transitions from interactively-isolated systems to the mutually-integrated unity between zero-energy building(s) and zero-energy vehicle(s)) Hong Kong Research Grant Council（RGC）(Number: 25215618) 01/09/2018 - 31/08/2021

**International collaboration project**:

* **Project 16:** IEA EBC Annex 67 Energy Flexible Buildings （国际能源机构-建筑和社区） 2017 - 2019
* **Project 17:** IEA EBC Annex 83 Positive Energy Districts （国际能源机构-建筑和社区） 2019- 2021
* **Project 18:** Cooperation project of green energy-saving building system based on renewable resources (2014DFE70230) International cooperation project of the Ministry of Science and Technology of the People's Republic of China （科技部） 2014 -2017
* **Project 19:** Integration and demonstration application of energy-efficient ventilation technology for green buildings (2014DFA72190)International cooperation project of the Ministry of Science and Technology of the People's Republic of China （科技部） 2014 - 2016