

English Name: Taoyi Qi

Chinese Name: 漆淘懿

PhD Student

E-mail : yc37449@umac.mo

## Education

---

- Bachelor of Electrical Engineering  
Zhejiang University, China 2016.09 – 2020.06
- Master of Electrical Engineering  
Zhejiang University, China 2020.09 – 2023.03
- PhD student of Electrical and Computer Engineering  
Macau University, Macau 2023.08 – Present

## Publications

---

- **Taoyi Qi**, Chengjin Ye, Yuming Zhao, Lingyang Li, Yi Ding. “Deep-Reinforcement-Learning-Based Charging Scheduling for Household Electric Vehicles in Active Distribution Network” , Journal of Modern Power Systems and Clean Energy, early access.
- **Taoyi Qi**, Chaoming Zheng, Chengjin Ye, Peiyu He, Yi Ding, Chao Zhu, Weidong Bao, “Complementary Energy Storage Operation Strategy of Battery and Inverter Air Conditioners for Buildings with Integrated Photovoltaic System” , Power System Technology, vol. 46, no. 11, pp. 4277-4255, Nov., 2022.
- Yikai Sun, **Taoyi Qi\***, Lijun Zhang, Yishuang Hu, Chutian Yu, “Optimal Operation of Integrated Energy System Including Ice-Storage Air-Conditioning in Power Market” , Southern Power System Technology, vol. 16, no. 04, pp. 95-104, Apr., 2022.

- **Taoyi Qi**, Hongxun Hui, Lizhong Xu, Xiang Ma, Yi Ding. "Modelling and control of generalized demand response in micro-grids based on GridLAB-D" , Distribution & Utilization, vol. 37, no. 7, pp. 3-10, Jul., 2020.

## **Research Interests**

---

- Demand response
- Digital twins
- Intelligent buildings

## **Projects**

---

- |  |                                       |
|--|---------------------------------------|
| • Friendly Interactive Smart Grid Between Supply-and Demand-Sides<br>Supported by Ministry of Science and Technology of China (No. 2016YFB0901100)   | • Nanjing, China<br>06/2020 – 06/2021 |
| • Research on key technologies and business models of large-scale load resources participating in demand response<br>Supported by State Grid Zhejiang Electric Power Co., Ltd. (No. 5211JH1900M7)    | • Jinhua, China<br>06/2020-08/2022    |
| • Research on demand response technology of massive residential users based on data-driven highly elastic power grid<br>Supported by State Grid Zhejiang Electric Power Co., Ltd. (No. 5211YF200055) | • Hangzhou, China<br>04/2021-03/2023  |
| • Research and application of key technologies for interaction between urban buildings and power grids for large-scale renewable energy consumption  | • Shenzhen, China                     |

- |  |                      |
|--|----------------------|
| Supported by key science and technology project of China Southern Power Grid Corporation (No. 090000k52210134)                                     | 08/2021-<br>Present  |
| • Research on key technologies of virtual energy storage control in distribution network for power systems   | • Jiaxing,<br>China  |
| Supported by State Grid Zhejiang Electric Power Co., Ltd. (No. 5211JX190065)   | 10/2021-<br>08/2023  |
| • Research on key technologies and business models of demand-side resource cluster response in the ubiquitous power Internet of Things environment | • Hangzhou,<br>China |
| Supported by State Grid Zhejiang Electric Power Co., Ltd. (No. 5211JY19000V)   | 07/2021-<br>08/2022  |
| • Human-machine augmented large-scale multi-agent quantitative evaluation and autonomous evolution technology                                      | • Xi' an,<br>China   |
| Supported by National Key R&D Program of China (No.2021ZD0112700)  | 06/2021-<br>08/2023  |

### Selected Awards & Honors

---

- 

### Academic Services

---

-