

2. 天津市自然科学基金青年项目：水热碳包覆层的孔道和表面化学调控及其提升一维光催化剂催化性能的研究（2018.07-2021.07，主持）
3. 中国博士后科学基金面上一等资助：水热碳包覆型光催化剂的设计、制备及其光催化性能研究（No.2016M590204，2016.03-2017.07，主持）

代表性学术论文：

2018

- Xiaoyan Yang, Yi Li, **Peng Zhang***, Rongmei Zhou, Hailong Peng, Dan Liu*, and Jianzhou Gui*, Photoinduced In-Situ Deposition of Uniform and Well-Dispersed PtO₂ Nanoparticles on ZnO Nanorods for Efficient Catalytic Reduction of 4-Nitrophenol, *ACS Appl. Mater. Interfaces*, 2018, 10, 23154–23162. (IF=7.504)
- Songfang Zhao*, Haobo Jiang, Jinhui Li, Xiangying Meng, Tianyu Chao, Zhe Zhang, **Peng Zhang***, Yongju Gao, and Duxia Cao*, Amorphizing of Ag Nanoparticles under Bioinspired One-step Assembly of Fe₃O₄-Ag/rGO Hybrids via Self-redox Process with Enhanced Activity, *Appl. Organometal. Chem.*, 2018, e4428. (IF=2.319)

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- **Peng Zhang**, Xiaoyan Yang, Zongbin Zhao, Beibei Li, Jianzhou Gui*, Dan Liu, and Jieshan Qiu*, One-Step Synthesis of Flowerlike C/Fe₂O₃ Nanosheet Assembly with Superior Adsorption Capacity and Visible Light Photocatalytic Performance for Dye Removal, *Carbon*, 2017, 116, 59-67. (IF=6.337)
- **Peng Zhang**, Xuedan Song, Chang Yu, Jianzhou Gui, and Jieshan Qiu*, Biomass-Derived Carbon Nanospheres with Turbostratic Structure as Metal-Free Catalysts for Selective Hydrogenation of *o*-Chloronitrobenzene, *ACS Sustainable Chem. Eng.* 2017, 5, 7481-7485. (IF=5.951)
- **Peng Zhang**, Yang Chen, Xiaoyan Yang, Jianzhou Gui*, Yi Li, Hailong Peng, Dan Liu, and Jieshan Qiu*, Pt/ZnO@C Nanocable with Dual-Enhanced Photocatalytic Performance and Superior Photostability, *Langmuir*, 2017, 33, 4452-4460. (IF=3.833)
- **Peng Zhang**, Xiaoyan Yang, Hailong Peng, Dan Liu*, Hui Lu, Junfu Wei, and Jianzhou Gui*, Magnetically Recoverable Hierarchical Pt/Fe₂O₃ Microflower: Superior Catalytic Activity and Stability for Reduction of 4-Nitrophenol, *Catal. Comm.*, 2017, 100, 214-218.

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- **Peng Zhang**, Xiaotong Han, Han Hu, Jianzhou Gui*, Mingyu Li, and Jieshan Qiu*, In-Situ Growth of Highly Uniform and Single Crystalline Co₃O₄ Nanocubes on Graphene for Efficient Oxygen Evolution, *Catal. Comm.*, 2017, 88, 81–84. (IF=3.330)

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- **Peng Zhang**, Zongbin Zhao, Boris Dyatkin, Chang Liu and Jieshan Qiu*, In-Situ Synthesis of Cotton-Derived Ni/C Catalysts with Controllable Structure and Enhanced Catalytic Performance. *Green Chem.*, 2016, 18, 3594-3599. (IF=9.125)
- **Peng Zhang**, Chang Yu, Xiaoming Fan, Xiuna Wang, Zheng Ling, Zonghua Wang, and Jieshan Qiu*, Magnetically Recoverable Ni/C Catalysts with Hierarchical Structure and High-Stability for Selective Hydrogenation of Nitroarenes, *Phys. Chem. Chem. Phys.*, 2015, 17, 145–150. (IF=4.123, highlighted as the back cover)
- **Peng Zhang**, Beibei Li, Zongbin Zhao, Chang Yu, Chao Hu, and Jieshan Qiu*, Furfural-Induced Hydrothermal Synthesis of ZnO@C Gemel Hexagonal Microrods with Enhanced Photocatalytic Activity and Stability, *ACS Appl. Mater. Interfaces*, 2014, 6, 8560–8566. (IF=7.504)