

施伟东，镇江市侨联副主席，民革镇江市委会副主委，江苏科技大学副校长。研究员，博士生导师，国家杰出青年科学基金获得者，2007年毕业于中国科学院长春应用化学研究所稀土资源高效利用国家重点实验室，获理学博士学位。先后在英国皇家学会国际人才引进计划奖学金和德国洪堡奖学金的资助下，分别英国格拉斯哥大学和德国科隆大学从事博士后研究。目前研究主要集中在纳米催化剂宏量制备及其功能强化方向。主持或完成国家自然科学基金委优秀青年科学项目、中德科学中心国际合作项目、国家自然科学基金委面上项目、江苏省重点研发计划项目等 10 余项国家/省部级科研项目。入选国家重大人才工程青年项目、科睿唯安全球高被引科学家、教育部新世纪优秀人才、霍英东教育基金会高等学校青年教师基础性基金获得者、江苏省双创人才、江苏省杰出青年基金、江苏省双创团队领军人才、江苏省 333 高层次人才培养工程（第二层次）等重要人才项目。主编《能源化工前沿》等专著。以第一完成人获中国石油和化学工业联合会科技进步一等奖、江苏省科技进步二等奖等学术奖励、江苏省化学化工学会时钧青年化工奖。在 Chem. Soc. Rev, Nat. Commun, J. Am. Chem. Soc, Angew. Chem. Int. Ed., AIChE Journal, Chem. Eng. Sci 等化学化工领域高水平 SCI 期刊发表论文 100 余篇。授权国家发明专利 20 余项。

1. Yang Zhang, Shuna Zhao, Jing Feng, Shuyan Song*, Weidong Shi*, Dan Wang, Hongjie Zhang*. Unraveling the physical chemistry and materials science of CeO₂-based nanostructures. Chem. 2021, in press, DOI: 10.1016/j.chempr.2021.02.015.

2. Yuanyong Huang, Yaping Jian, Longhua Li, Di Li, Zhenyuan Fang, Weixuan Dong, Yahui Lu, Bifu Luo, Ruijie Chen, Yingchen Yang, Min Chen, Weidong Shi*. A NIR - Responsive Phytic Acid Nickel Biomimetic Complex Anchored on Carbon Nitride for Highly Efficient Solar Hydrogen Production. Angew. Chem. Int. Ed. 2021, 60, 5245–5249.

3. Bifu Luo, Yan - Zhai Wang, Di Li, Hongqiang Shen, Li - Xia Xu, Zhen Fang, Zhenglong Xia, Jianlin Ren, Weidong Shi*, Yang - Chun

Yong*. A Periplasmic Photosensitized Biohybrid System for Solar Hydrogen Production. *Adv. Energy Mater.* 2021, 2100256. DOI: 10.1002/aenm.202100256.

4. Yang-Yang Yu, Yan-Zhai Wang, Zhen Fang, Yu-Tong Shi, Qian-Wen Cheng, Yu-Xuan Chen, Weidong Shi*, Yang-Chun Yong*. Single cell electron collectors for highly efficient wiring-up electronic abiotic/biotic interfaces. *Nat. Commun.* 2020, 11,4087.

5. Hongqiang Shen, Yan-Zhai Wang, Guiwu Liu, Longhua Li, Rong Xia, Bifu Luo, Jixiang Wang, Di Suo, Weidong Shi*, Yang-Chun Yong*. *ACS Catal.* 2020, 10, 22, 13290–13295.

6. Qingjun Yang, Qishun Wang, Yan Long, Fan Wang, Lanlan Wu, Jing Pan, Jie Han, Yong Lei, Weidong Shi*, Shuyan Song*. In Situ Formation of Co₉S₈ Quantum Dots in MOF - Derived Ternary Metal Layered Double Hydroxide Nanoarrays for High - Performance Hybrid Supercapacitors. *Adv. Energy Mater.* 2020, 10, 1903193.

7. Zhenyuan Fang, Yajie Bai, Longhua Li, Di Li, Yuanyong Huang, Ruijie Chen, Weiqiang Fan, Weidong Shi*. In situ constructing intramolecular ternary homojunction of carbon nitride for efficient photoinduced molecular oxygen activation and hydrogen evolution. *Nano Energy* 2020, 75, 104865.

8. Zhengyuan Zhang, Jinhui Hao, Yahui Lu, Yuqi Xu, Longhua Li, Weidong Shi*. Ink - Assisted Synthetic Strategy for Stable and Advanced Composite Electrocatalysts with Single Fe Sites. *Small* 2020, 16, 2006113.

9. Lei Xing*, Yuanxiang Xu, Željko Penga, Qian Xu, Huaneng Su, Weidong Shi*, Frano Barbir. A novel flow field with controllable pressure gradient to enhance mass transport and water removal of PEM fuel cells. *AIChE J.* 2020;66: e16957.

10. Biyi Chen, Baoxin Ge, Shimeng Fu, Qi Li, Xue Chen, Longhua Li, Jian Wang, Zhidong Yang, Jinrui Ding, Weiqiang Fan, Baodong Mao, Weidong Shi*. Ex-situ flame co-doping of tin and tungsten ions in TiO₂

nanorod arrays for synergistic promotion of solar water splitting. Chem. Eng. Sci. 2020, 226: 115843.

11. Jin-Rui Ding, Sang-Hyeok Yoon, Weidong Shi*, Kyo-Seon Kim*. Nanowire-based branched nanotrees prepared by flame vapour deposition system incorporated with double wire feeders, AIChE J. 2019, 65(4): 1138-1143.

12. Weidong Shi, Jian Wang, Siming You, Wei-Cheng Yan*, Numerical simulation of particle focusing dynamics of DNA-laden fluids in a microtube, Chem. Eng. Sci., 2019, 209: 115213.

13. Jixiang Wang, Jiangdong Dai, Yeqing Xu, Xiaohui Dai, Yunlei Zhang, Weidong Shi*, Börje Sellergren, Guoqing Pan*. Molecularly Imprinted Fluorescent Test Strip for Direct, Rapid, and Visual Dopamine Detection in Tiny Amount of Biofluid, Small, 2019, 15(1): 1803913.

14. Lei Xing*, Yan Wang, Prodip K. Das, Keith Scott, Weidong Shi*. Homogenization of current density of PEM fuel cells by in-plane graded distributions of platinum loading and GDL porosity. Chem. Eng. Sci. 2018, 192:699-713.

15. Lei Xing*, Weidong Shi*, Prodip K. Das, Keith Scott, Inhomogeneous distribution of platinum and ionomer in the porous cathode to maximize the performance of a PEM fuel cell, AIChE J. 2017, 63(11): 4895-4910.