武文俊

所属学院 化学与分子工程学院
学科领域 新能源材料与器件
邮箱 wjwu@ecust.edu.cn

个人简介

武文俊，男，博士，副教授，博士生导师。2008 年毕业于华东理工大学，获博士学位。2016.03-2017.03，英国爱丁堡大学访问学者。科研兴趣包括碳基钙钛矿太阳能电池、染料敏化太阳能电池和超级电容器等相关功能材料的开发和应用。目前，已在 Solar RRL、ACS Applied Materials & Interfaces、Chemsuschem、Chemical Science、Carbon、Chemical Communication 等发表论文 98 篇，在太阳能电池，尤其是在染料敏化太阳能电池的相关研究成果在国际上已有一定的影响力。

研究方向

染料敏化太阳能电池、钙钛矿太阳能电池和超级电容器

研究成果及主要发表文章

1. L. Xu, Y. M. Li, J. J. Shi, N. Robertson, W. J. Wu*, Q. B. Meng, H. Tian, Suppressing Shallow Defect of Printable Mesoscopic Perovskite Solar Cells with a N719@TiO2 Inorganic-Organic Core-Shell Structured Additive, Solar RRL, 2020, 2000042;

2. Y. Zhong, L. Xu, C. Li, B. Zhang, W. J. Wu, *, Needle coke: A predominant carbon black alternative for printable triple mesoscopic perovskite solar cells, Carbon, 2019, 153, 602-608;

3. L. Xu, C. Li, Y. Zhong, Z. H. Pang, W. J. Wu*, Relaying delivery of excited state electrons for fully printable perovskite solar cells via ultra-thin gradient PCBM/perovskite heterojunction, Solar Energy, 2019, 187, 352-357;

4. W. J. Wu, H. D. Xiang, W. Fan, J. L. Wang, H. F. Wang, X. Hua, Z. H. Wang, Y. T. Long, H. Tian, W. H. Zhu*, Cosensitized Porphyrin System for High-Performance Solar Cells with TOF-SIMS Analysis, ACS Applied Materials & Interfaces, 2017, 9, 16081-16090;

5. H. D. Xiang, W. Fan, J. H. Li, T. Y. Li, N. Robertson, X. R. Song, W. J. Wu*, Z. H. Wang, W. H. Zhu, H. Tian,* High-Performance Porphyrin-Based Dye-Sensitized Solar Cells with Iodine and Cobalt Redox Shuttles, Chemsuschem, 2017, 10, 938-945;

6. Y. Wang, Z. W. Zheng, T. Y. Li, N. Robertson, H. D. Xiang, W. J. Wu,* J. L. Hua, W. H. Zhu, H. Tian, D-A-π-A Motif Quinoxaline-Based Sensitizers with High Molar Extinction Coefficient for Quasi-Solid-State Dye-Sensitized Solar Cells, ACS Applied Materials & Interfaces, 2016, 8, 31016-31024;

7. Y. Wang, Z. W. Zheng, T. Y. Li, N. Robertson, H. D. Xiang, W. J. Wu,* J. L. Hua, W. H. Zhu, H. Tian, D-A-π-A Motif Quinoxaline-Based Sensitizers with High Molar Extinction Coefficient for Quasi-Solid-State Dye-Sensitized Solar Cells, ACS Applied Materials & Interfaces, 2016, 8, 31016-31024;

8. Y. S. Xie#, W. J. Wu#, H. B. Zhu, J. C. Liu, W. W. Zhang, H. Tian, W. H. Zhu*, Unprecedentedly targeted customization of molecular energy levels with auxiliary-groups in organic solar cell sensitizers, Chemical Science, 2016, 7, 544-549