陈江照

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一、个人简介

陈江照，重庆大学研究员，博士生导师，重庆大学“百人计划”入选者。2016年6月在华中科技大学武汉光电国家研究中心韩宏伟教授课题组获得工学博士学位；2016年8月至2019年3月于韩国成均馆大学化学与工程学院从事博士后研究，合作导师为全固态钙钛矿太阳能电池创始人Nam-Gyu Park教授；2019年3月至2019年11月于香港大学电子与电器工程学院从事博士后研究，合作导师为Wallace C.H. Choy (蔡植豪)教授。主要从事染料敏化太阳能电池和钙钛矿太阳能电池领域的研究，包括器件制备与机理研究、材料设计与合成、器件表界面微观分子级别调控。迄今为止，在***Science***, ***Advanced Materials***, ***Advanced Energy Materials***等国际知名学术期刊上发表SCI学术论文20余篇，SCI总引用2500余次，其中2篇为高被引论文；以第一或者共同第一作者发表SCI学术论文15篇，其中影响因子大于10的论文有8篇，包括***Advanced Materials*** （3篇），***Advanced Energy Materials*** （2篇），***Nano Energy*** （1篇），***ACS Energy Letters***（1篇）和***Journal of Materials Chemistry A***（1篇）。

二、主要研究方向

1. 钙钛矿太阳能电池研究

2. 染料敏化太阳能电池研究

3. 光电探测器研究

4. 发光二极管研究

三、 代表性研究成果(#代表共同第一作者和*代表通讯作者)

1. **Jiangzhao Chen#,** Xing Zhao#, Seul-Gi Kim, Nam-Gyu Park***.** Multifunctional Chemical Linker Imidazoleacetic Acid Hydrochloride for 21% Efficient and Stable Planar Perovskite Solar Cells. ***Advanced Materials***, 2019, 31, 1902902. **(IF = 25.81)**

2. **Jiangzhao Chen**, Nam-Gyu Park*. Causes and Solutions of Recombination in Perovskite Solar Cells. ***Advanced Materials***, 2018, 1803019. **(IF = 25.81)**

3. **Jiangzhao Chen**, Seul-Gi Kim, Nam-Gyu Park*. $FA_{0.88}Cs_{0.12}PbI_{3-x}(PF_6)_x$ Interlayer Formed by Ion Exchange Reaction between Perovskite and Hole Transporting Layer for Improving Photovoltaic Performance and Stability. ***Advanced Materials***, 2018, 1801948. **(IF = 25.81)**

4. **Jiangzhao Chen**, Ja-Young Seo, Nam-Gyu Park*. Simultaneous Improvement of Photovoltaic Performance and Stability by *in-situ* formation of 2-Dimensioanl Perovskite at $(FAPbI_3)_{0.88}(CsPbBr_3)_{0.12}$/CuSCN Interface. ***Advanced Energy Materials***, 2018, 8, 1702714. **(IF = 24.88)**

5. **Jiangzhao Chen#,** Yaoguang Rong#, Anyi Mei, Yuli Xiong, Tongfa Liu, Yusong Sheng, Pei Jiang, Li Hong, Yanjun Guan, Xiaotong Zhu, Xiaomeng Hou, Miao Duan, Jianquan Zhao, Xiong Li, and Hongwei Han*. Hole-conductor-free fully printable mesoscopic solar cell with mixed-anion perovskite $CH_3NH_3PbI_{(3-x)}(BF_4)_x$. ***Advanced Energy Materials***, 2016, 6, 1502009. **(IF = 24.88)**

6. **Jiangzhao Chen#**, Yuli Xiong#, Yaoguang Rong, Anyi Mei, Yusong Sheng, Pei Jiang, Yue Hu, Xiong Li, Hongwei Han*. Solvent effect on the hole-conductor-free fully printable perovskite solar cells. ***Nano Energy***, 2016, 27, 130-137. **(IF = 15.55)**

7. Lin Xie#, **Jiangzhao Chen#** (co-first author), Parth Vashishtha, Xing Zhao, Gwang-Su Shin, Subodh Mhaisalkar*, Nam-Gyu Park*. Importance of functional group in cross-linking methoxysilane additives for high efficiency and stable perovskite solar cells. ***ACS Energy Letters***, 2019, 4, 2192-2200. (**IF = 16.33**)

8. **Jiangzhao Chen**, Seul-Gi Kim, Xiaodong Ren, Hyun Suk Jung and Nam-Gyu Park*. Effect of bidentate and tridentate additives on the photovoltaic performance and stability of perovskite solar cells. ***Journal of Materials Chemistry A***, 2019, **7**, 4977-4987. (**IF = 10.73**)

9. **Jiangzhao Chen**, Donghwa Lee*, and Nam-Gyu Park*. Stabilizing the Ag Electrode and Reducing *J-V* Hysteresis through Suppression of Iodide Migration in Perovskite Solar Cells. ***ACS Applied Materials & Interfaces***, 2017, 9, 36338-36349. **(IF = 8.46)**

10. **Jiangzhao Chen**, Nam-Gyu Park*. Inorganic Hole Transporting Materials for Stable and High Efficiency Perovskite Solar Cells. ***Journal of Physical Chemistry C***, 2018, 122, 14039−14063. **(IF = 4.31)**

11. **Jiangzhao Chen**, Songguk Ko, Linfeng Liu, Yusong Sheng, Hongwei Han and Xiong Li*. The effect of porphyrins suspended with different electronegative moieties on the photovoltaic performance of monolithic porphyrin-sensitized solar cells with carbon counter electrodes. ***New Journal of Chemistry***, 2015, 39, 2889-2900. **(IF = 3.07)**

12. **Jiangzhao Chen**, Songguk Ko, Linfeng Liu, Yusong Sheng, Hongwei Han and Xiong Li*, The effect of different alkyl chains on the photovoltaic performance of D–π–A porphyrin-sensitized solar cells. ***New Journal of Chemistry***, 2015, 39, 3736-3746. **(IF = 3.07)**

13. **Jiangzhao Chen**, Yusong Sheng, Songguk Ko, Linfeng Liu, Hongwei Han and Xiong Li*. Push–pull porphyrins with different anchoring group orientations for fully printable monolithic dye-sensitized solar cells with mesoscopic carbon counter electrodes. ***New Journal of Chemistry***, 2015, 39, 5231-5239. **(IF = 3.07)**

14. Seul-Gi Kim#, **Jiangzhao Chen#** (co-first author), Ja-Young Seo, Dong-Ho Kang, and Nam-Gyu Park*. Rear surface passivation by melaminium iodide additive for stable and hysteresis-less perovskite solar cells. ***ACS Applied Materials & Interfaces***, 2018, 10(30), 25372-25383. **(IF = 8.46)**

15. Mei Lyu#, **Jiangzhao Chen#** (co-first author), Nam-Gyu Park*. Improvement of efficiency and stability of CuSCN-based inverted perovskite solar cells by post-treatment with potassium thiocyanate. ***Journal of Solid State Chemistry***, 2018, 269, 367-374. **(IF = 2.29)**

16. Anyi Mei, Xiong Li, Linfeng Liu, Zhiliang Ku, Tongfa Liu, Yaoguang Rong, Mi Xu, **Jiangzhao Chen**, Ying Yang, Michael Grätzel, Hongwei Han*. A hole-conductor-free, fully printable mesoscopic solar cell with high stability. ***Science***, 2014, 345, 295-298. **(IF = 41.04)**

17. Linfeng Liu, **Jiangzhao Chen**, Zhiliang Ku, Xiong Li, Hongwei Han*. Unsymmetrical squaraine sensitizers containing auxiliary arylamine donor for NIR-harvesting on dye-sensitized solar cell. ***Dyes and Pigments***, 2014, 106, 128-135. **(IF = 4.02)**

18. Linfeng Liu，Xiong Li, **Jiangzhao Chen**, Yaoguang Rong, Zhiliang Ku and Hongwei Han*. Improvement of thiolate/disulfide mediated dye-sensitized solar cells through supramolecular lithium cation assembling of crown ether. ***Scientific Report***, 2013, 3, 2413. **(IF = 4.01)**

19. Yaoguang Rong, Zhiliang Ku, Mi Xu, Linfeng Liu, Min Hu, Ying Yang, **Jiangzhao Chen**, Anyi Mei, Tongfa Liu and Hongwei Han*, Efficient monolithic quasi-solid-state dye-sensitized solar cells based on poly(ionic liquids) and carbon counter electrodes. ***RSC Advance***, 2014, 4, 9271–9274. **(IF = 3.05)**

20. Mi Xu, Guanghui Liu, Xiong Li, Heng Wang, Yaoguang Rong, Zhiliang Ku, Min Hu, Ying Yang, Linfeng Liu, Tongfa Liu, **Jiangzhao Chen** and Hongwei Han*. Efficient monolithic solid-state dye-sensitized solar cell with a low-cost mesoscopic carbon based screen printable counter electrode. ***Organic Electronics***, 2013, 14, 628–634. **(IF = 3.50)**

21. Xing Zhao, **Jiangzhao Chen**, Nam-Gyu Park*. Importance of Oxygen Partial Pressure in Annealing NiO Film for High Efficiency Inverted Perovskite Solar Cells. ***Solar RRL***, 2019, 1800339.

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