

常州大学材料学院教师信息表

姓 名	张斌	性 别	男	学 历/学 位	博 士
专 业	高分子化学与物理		专业技术职务		助理研究员
所在学科	材料化学				
联系方式	msbinzhang@outlook.com				
					
教育背景及 工作经历	2018.6-现在 2015.4-2017.7 2013.2-2015.2 2009.9-2012.12 2005.9-2008.7 2001.9-2005.7	助理研究员，硕士研究生导师 材料科学与工程学院，常州大学 博士后，助理研究员 光电子器件与系统教育部重点实验室，深圳大学 博士后，助理研究员 发光材料与器件国家重点实验室，华南理工大学 理学博士，高分子化学与物理 发光材料与器件国家重点实验室，华南理工大学 工学硕士，材料学 发光材料与器件国家重点实验室，华南理工大学 工学学士，材料化学 材料科学与工程系，东华理工大学			
研究领域及 研究方向	有机半导体与光电器件				

代表荣誉及奖励	
代表性论文	<ol style="list-style-type: none"> 1. Qifan Xue, Guiting Chen, Meiyue Liu, Jingyang Xiao, Ziming Chen, Zhicheng Hu, Xiao-Fang Jiang, Bin Zhang,* Fei Huang, Wei Yang, Hin-Lap Yip,* Yong Cao, Improving Film Formation and Photovoltage of Highly Efficient Inverted-Type Perovskite Solar Cells Through the Incorporation of New Polymeric Hole Selective Layers, <i>Advanced Energy Materials</i>, 2016, 6, 1502021. ‘高被引论文’ (影响因子: 25.245, 中科院 1 区) 2. Xiugang Wu, Chun-Ying Huang, Deng-Gao Chen, Denghui Liu, Chichi Wu, Keh-Jiunh Chou, Bin Zhang, Yafei Wang, Yu Liu, Elise Y. Li, Weiguo Zhu,* and Pi-Tai Chou*, Racemism Enhanced Organic Room-Temperature Phosphorescence: Application of Wallach’s Rule to the Lighting Chiral Chromophores, <i>Nature Communications</i>, 2020, 11, 2145. (影响因子: 12.121, 中科院 1 区) 3. Zhenhua Yu, Linxing Zhang, Sen Tian, Fan Zhang, Bin Zhang, Fangfang Niu, Pengju Zeng, Junle Qu, Peter Neil Rudd, Jinsong Huang,* and Jiarong Lian,* Hot-Substrate Deposition of Hole- and Electron-Transport Layers for Enhanced Performance in Perovskite Solar Cells, <i>Advanced Energy Materials</i>, 2018, 8, 1701659. (影响因子: 25.245, 中科院 1 区) 4. Guiting Chen, Fan Zhang, Meiyue Liu, Jun Song,* Jiarong Lian, Pengju Zeng, Hin-Lap Yip,* Wei Yang, Bin Zhang,* Yong Cao, Fabrication of High-Performance and Low-Hysteresis Lead Halide Perovskite Solar Cells by Utilizing a Versatile Alcohol-Soluble Bispyridinium Salt as An Efficient Cathode Modifier, <i>Journal of Materials Chemistry A</i>, 2017, 5, 17943-17953. (影响因子: 11.301, 中科院 1 区) 5. Fan Zhang, Jun Song,* Rui Hu, Yuren Xiang, Junjie He, Yuying Hao, Jiarong Lian, Bin Zhang,* Pengju Zeng, Junle Qu*, Interfacial Passivation of the p-Doped Hole-Transporting Layer Using General Insulating Polymers for High-Performance Inverted Perovskite Solar Cells, <i>Small</i>, 2018, 18, 1704007. (影响因子: 11.459, 中科院 1 区) 6. Ji Xiong, Jingui Xu, Yufan Jiang, Zuo Xiao,* Qinye Bao, Feng Hao, Yaqing Feng,* Bin Zhang,* Zhiwen Jin, Liming Ding,* Fused-Ring Bislactone Building Blocks for Polymer Donors, <i>Science Bulletin</i>, 2020, 65, 1792-1795. (影响因子: 9.511, 中科院 1 区) 7. Guiting Chen, Gaoheng Qian, Shuwang Yi, Zhicai He,* Hong-Bin Wu, Wei Yang, Bin Zhang,* Yong Cao, Molecular Engineering on Bis(benzothiophene-<i>S,S</i>-dioxide)-Based Large Band-Gap Polymers for Interfacial Modifications in Polymer Solar Cells, <i>ACS Applied Materials and Interfaces</i>, 2019, 11, 45969-45978. ‘封面论文’ (影响因子: 8.758, 中科院 1 区) 8. Guiting Chen, Sha Liu, Jin Xu, Ruifeng He, Zhicai He,* Hongbin Wu, Wei Yang, Bin Zhang,* Yong Cao, Dibenzothiophene-<i>S,S</i>-dioxide and Bispyridinium-Based Cationic Polyfluorene Derivative as an Efficient Cathode Modifier for Polymer Solar Cells, <i>ACS Applied Materials and Interfaces</i>, 2017, 9, 4778-4787. (影响因子: 8.758, 中科院 1 区) 9. Bin Zhang, Yingzhi Zhou, Qifan Xue,* Jingjing Tian, Qin Yao, Yue Zang, Lei Wang, Wei Yang, Hin-Lap Yip,* Yong Cao, The Energy-Alignment Engineering in Polytriphenylamines-Based Hole Transport Polymers Realizes

- Low Energy Loss and High Efficiency for All-Inorganic Perovskite Solar Cells, *Solar RRL*, 2019, 3(9), 1900265. (影响因子: 7.527, 中科院 1 区)
10. Jingui Xu, Anxin Sun,, Guanhua Zong, Zuo Xiao*, Ergang Wang, [Bin Zhang,*](#) Yong Hua,* and Liming Ding,* Efficient Wide-Bandgap Copolymer Donors with Reduced Synthesis Cost, *Journal of Materials Chemistry C*, 2021, DOI: 10.1039/D1TC01746B. (影响因子: 7.059, 中科院 1 区)
 11. Liwen Hu, Siyang Liu, Guohua Xie,* Wei Yang, [Bin Zhang,*](#) Bis(Benzothiophene-*S,S*-Dioxide) Fused Small Molecules Realize Solution-Processible, High-Performance and Non-Doped Blue Organic Light-Emitting Diodes, *Journal of Materials Chemistry C*, 2020, 8, 1002-1009. '2019 Journal of Materials Chemistry C HOT Papers' (影响因子: 7.059, 中科院 1 区)
 12. [Bin Zhang,](#) Shuwang Yi, Guiting Chen, Zhicai He,* Hong-Bin Wu, Wei Yang, Fangfang Niu, Junle Qu, Pengju Zeng,* Yong Cao, Water- and Alcohol-Soluble Cationic Phenanthroline Derivatives as Efficient Cathode Interfacial Layers for Bulk-Heterojunction Polymer Solar Cells, *Journal of Materials Chemistry C*, 2017, 5, 4858-4866. '2017 Journal of Materials Chemistry C HOT Papers' (影响因子: 7.059, 中科院 1 区)
 13. Guiting Chen, Sheng Sun, Linfeng Lan,* Yong Yang, Wei Yang, [Bin Zhang,*](#) Yong Cao, A Solution-Processed and Low Threshold Voltage p-Type Small Molecule Based on Indolocarbazole- and Benzothiophene-Fused Rings, *Dyes and Pigments*, 2017, 144, 32-40. (影响因子: 4.613, 中科院 1 区)
 14. Guiting Chen, Sha Liu, Zhicai He,* Hong-Bin Wu, Wei Yang, [Bin Zhang,*](#) Yong Cao, Pyridine-Incorporated Alcohol-Soluble Neutral Polyfuorene Derivatives as Efficient Cathode-Modifying Layers for Polymer Solar Cells, *Polymer Chemistry*, 2017, 8, 6720-6732. '内封面论文' (影响因子: 5.342, 中科院 2 区)
 15. Xiaojing Wang, Shuwang Yi, Zhicai He,* Xinhua Ouyang, Hongbin Wu, Weiguo Zhu,* [Bin Zhang,*](#) Yong Cao, An Environmentally Friendly Natural Polymer as a Universal Interfacial Modifier for Fullerene and Non-Fullerene Polymer Solar Cells, *Sustainable Energy & Fuels*, 2020, 4, 1234-1241. (影响因子: 5.503, 中科院 2 区)
 16. Guiting Chen, Sha Liu, Shuwang Yi, Zhicai He,* Hong-Bin Wu, Wei Yang, [Bin Zhang,*](#) Efficient Interface Engineering Enhances Photovoltaic Performance of a Bulk-Heterojunction PCDTBT:PC₇₁BM System, *IEEE Journal of Photovoltaics*, 2019, 9(5),1258-1265. (影响因子: 3.052, 中科院 2 区)
 17. Shuwang Yi, Wanyuan Deng, Sheng Sun, Linfen Lan, Zhicai He,* Wei Yang, [Bin Zhang,*](#) Trifluoromethyl-Substituted Large Band-Gap Polytriphenylamines for Polymer Solar Cells with High Open-Circuit Voltages, *Polymers*, 2018, 10, 52. (影响因子: 3.426, 中科院 2 区)
 18. Xingye Zhang, [Bin Zhang \(共同一作\)](#), Xinhua Ouyang*, Lihui Chen, Hui Wu*, Polymer Solar Cells Employing Water-Soluble Polypyrrole Nanoparticles as Dopants of PEDOT:PSS with Enhanced Efficiency and Stability, *The Journal of Physical Chemistry C*, 2017, 121, 18378-18384. (影响因子: 4.189, 中科院 2 区)
 19. [Bin Zhang,*](#) Junfei Liang, Liwen Hu, Feng Peng, Guiting Chen, Wei Yang, Triphenylamine-Based Broad Band-Gap Polymers for Bulk-Heterojunction Polymer Solar Cells, *Journal of Materials Science*, 2015, 50, 5609-5619. (影响因子: 3.553, 中科院 3 区)
 20. Siyang Liu, Shuwang Yi, Peiling Qing, Weijun Li, Bin Gu, Zhicai He, [Bin Zhang,*](#) Molecular Engineering Enhances the Charge Carriers Transport in

- Wide Band-Gap Polymer Donors Based Polymer Solar Cells, *Molecules*, 2020, 25, 4101. (影响因子: 3.267, 中科院 3 区)
21. Liwen Hu, Na Wang, Dongcheng Chen*, Shi-Jian Su, Wei Yang, [Bin Zhang*](#), The Dibenzothiophene-*S,S*-dioxide and Spirobifluorene Based Small Molecules Promote Low Roll-off and Blue Organic Light-Emitting Diodes, *Journal of Photochemistry & Photobiology A: Chemistry*, 2019, 382, 111946. (影响因子: 3.306, 中科院 3 区)
 22. Siyang Liu, Pengju Lin, Fangfang Niu, Pengju Zeng* and [Bin Zhang*](#), π -Bridge Effect on Symmetric Carbazole-Based Small Molecules for Realizing Ultraviolet Fluorescent Emission, *Materials*, 2018, 11, 617. (影响因子: 3.057, 中科院 3 区)
 23. [Bin Zhang*](#), Jin Xu, Liwen Hu, Guiting Chen, Wei Yang, Absorption-Enhanced Polymer Solar Cells Based on Broad Band-Gap Poly(triphenylamine-*alt*-benzo[*c*][1,2,5]selenadiazole) Derivative, *Materials Letters*, 2015, 160, 9-13. (影响因子: 3.204, 中科院 3 区)
 24. Guiting Chen, Wei Yang, [Bin Zhang*](#), Synthesis and Optical and Electrochemical properties of a Bispyrimidinium-Dibenzothiophene-*S,S*-Dioxide- Based Cationic Conjugated Polymer, *Tetrahedron*, 2017, 73(18), 2649-2655. (影响因子: 2.233, 中科院 3 区)
 25. Guiting Chen, Ruifeng He, Wei Yang, [Bin Zhang*](#), Synthesis and Optical and Electrochemical Properties of Water-Soluble Cationic Fluorophores Based on Bispyridinium and Dibenzothiophene-*S,S*-dioxide, *New Journal of Chemistry*, 2017, 41, 1696-1703. (影响因子: 3.288, 中科院 3 区)
 26. [Bin Zhang*](#), Guiting Chen, Jin Xu, Liwen Hu, Wei Yang, Feasible Energy Level Tuning in Polymer Solar Cells Based on Broad Band-Gap Polytriphenylamine Derivatives, *New Journal of Chemistry*, 2016, 40, 402-412. (影响因子: 3.288, 中科院 3 区)
 27. Yong Yang, Junfei Liang, Liwen Hu, [Bin Zhang*](#), Wei Yang, Synthesis and Optical and Electrochemical Properties of Polycyclic Aromatic Compounds with *S,S*-Dioxide Benzothiophene Fused Seven Rings, *New Journal of Chemistry*, 2015, 39, 6513-6521. (影响因子: 3.288, 中科院 3 区)
 28. [Bin Zhang*](#), Lei Yu, Li Fan, Na Wang, Liwen Hu and Wei Yang, Indolo[3,2-*b*]carbazole and Benzofurazan Based Narrow Band-Gap Polymers for Photovoltaic Cells, *New Journal of Chemistry*, 2014, 38, 4587-4593. (影响因子: 3.288, 中科院 3 区)
 29. [Bin Zhang*](#), Xiaowen Hu, Minquan Wang, Huiping Xiao, Xiong Gong, Wei Yang*, Yong Cao, Highly Efficient Polymer Solar Cells Based on Poly (Carbazole-*alt*-Thiophene-Benzofurazan), *New Journal of Chemistry*, 2012, 36, 2042-2047. (影响因子: 3.288, 中科院 3 区)
 30. [Bin Zhang*](#), Liwen Hu, Jin Xu, Guiting Chen, Wei Yang, Synthesis of Planar Fluorenimine Derivative Based Broad Band-Gap Polymers for Bulk-Heterojunction Polymer Solar Cells, *Materials Technology*, 2017, 32, 16-21. (影响因子: 1.738, 中科院 4 区)
 31. Wenkai Zhong, Chao Xu, Biao Xiao, Li Fan, Hongbin Wu, [Bin Zhang*](#), Wei Yang, High Molecular Weight Broad Band-Gap Polymers Based on Indolo[3,2-*b*]carbazole and Thiazolo[5,4-*d*]thiazole Derivatives for Solar Cells, *Polymer Science, Series B*, 2016, 58, 587-593. (影响因子: 0.976, 中科院 4 区)
 32. Liwen Hu, Wanzhu Cai, Wei Zhao, [Bin Zhang*](#), Wei Yang, Synthesis, Characterization and Photovoltaic Properties of Polycarbazole Derived Random Copolymers with Enhanced Light Absorption, *Journal of Macromolecular*

	<p><i>Science, Part A: Pure and Applied Chemistry</i>, 2015, 52, 155-161. (影响因子: 1.349, 中科院 4 区)</p> <p>33. Xiongfeng Li, Jingui Xu, Zuo Xiao,* Xingzhu Wang,* Bin Zhang,* Liming Ding,* Dithieno[3',2':3,4;2'',3'':5,6]benzo[1,2-c][1,2,5]oxadiazole-Based Polymer Donors with Deep HOMO Levels, <i>Journal of Semiconductors</i>, 2021, 42, 060501.</p>
<p>近年主持的科研项目</p>	<ol style="list-style-type: none"> 1. 溶液加工型环化 S, S'-二氧苯并噻吩蓝光小分子的合成及电致发光性能研究, 发光材料与器件国家重点实验室开放基金, 2019.1-2020.12, 已结题, 主持 2. 用于聚合物太阳电池厚膜阴极界面层的植物纤维素改性物, 江苏省高等学校自然科学研究面上项目, 2018.8-2020.7, 已结题, 主持 3. 新型氟代吡啶衍生物类共轭聚合物的设计、合成及光伏性能研究, 深圳市基础研究项目, 2016-2018, 已结题, 主持 4. 可溶液加工的新型蓝光小分子的合成及发光性能研究, 中国博士后基金面上项目, 2015-2017, 已结题, 主持 5. 具有二维结构的葱并二噻吩类聚合物太阳电池的研究, 中央高校科研业务费, 2013-2015, 已结题, 主持 6. 纳米分辨荧光寿命信息获取, 科技部 973 课题, 已结题, 参与 7. 应用白光技术的有机显示材料, 科技部 973 课题, 已结题, 参与 8. 新型水/醇溶性 p/n-型共轭聚合物及叠成发光器件, 国家自然科学基金面上项目, 已结题, 参与 9. 基于 S,S'-二氧-二苯并噻吩的蓝光聚合物的研究, 国家自然科学基金面上项目, 已结题, 参与
<p>其他成果</p>	<ol style="list-style-type: none"> 1. 张斌, 朱卫国, 一种以天然植物纤维素或其衍生物作为阴极界面修饰层的有机/聚合物太阳电池器件, 申请号: CN201910827343.8, 公开号: CN110620184A 2. 张斌, 许金桂, 朱卫国, 有机自由基及其衍生物在光伏器件中的应用, 申请号: CN201910687246.3, 公开号: CN110400880A 3. 张斌, 一类基于大环单元的发光小分子材料及其制备方法与应用, 申请号: CN201910635537.8, 公开号: CN110330508A 4. 张斌, 刘斯扬, 林鹏举, 牛芳芳, 曾鹏举, 一种萘酰亚胺衍生物与太阳能电池, 申请号: CN201910017162.9, 公开号: CN109535078A 5. 张斌, 刘斯扬, 林鹏举, 牛芳芳, 曾鹏举, 主链含有炔键或者烯键的聚合物及制备方法与晶体管, 申请号: CN201811088863.3, 公开号: CN109280155A。 6. 张斌, 胡黎文, 杨伟, 曹镛, 一种共轭聚合物的合成方法及应用, 专利号: ZL201510014324.5, 公开号: CN104558531A [授权] 7. 张斌, 徐进, 余磊, 杨伟, 曹镛, 一种有机/聚合物太阳电池器件及其制备方法, 专利号: ZL201510013492.2, 公开号: CN104576931A [授权] 8. 张斌, 陈桂庭, 杨伟, 曹镛, 一种侧链含吡啶的水/醇溶性共轭聚合物及其制备方法与应用, 专利号: ZL201510738022.2, 公开号: CN105330825A [授权] 9. 张斌, 陈桂庭, 杨伟, 曹镛, 一类含联吡啶/菲啉鎓盐的水/醇溶性共轭小分子及其制备方法与应用, 专利号: ZL201610202829.9 [授权] 10. 张斌, 杨勇, 杨伟, 曹镛, 一类九元稠环衍生物及其合成方法与应用, 专利号: ZL201510504626.0 [授权]

社会兼职	中国化学会(CCS)会员, 美国化学会(ACS)会员, 中国化工学会会员, 担任 Advanced Energy Materials, ACS Applied Materials & Interfaces, Chemical Engineering Journal, ChemSusChem, Polymer Chemistry, New Journal of Chemistry, ChemElectroChem, Advanced Materials Technologies, Journal of Applied Polymer Science 等高水平 SCI 学术期刊通讯审稿人。
------	--