个人简介：

于俊婷，女，1987 年生，辽宁辽阳人，中共党员，博士，副教授，硕士生导师。主要从事有机近红外电致磷光材料的设计合成及其器件(OLEDs/ PLEDs)研究和有机/聚合物太阳能电池及其器件(OPV)研究。目前主持了国家自然科学基金青年基金项目 1 项、湖南省自然科学基金等其它项目 4 项。2017 年获湖南科技大学“奋进学者”（青年创新人才）荣誉称号，并以第 1 作者或通讯联系人在 Chemical Engineering Journal、Advanced Optical Materials、Journal of Materials Chemistry C, Dyes and Pigments 和 Science China Chemistry 等国内外知名期刊上发表 SCI 论文 20 余篇。

主持、参与科研项目

主持的科研项目

- ✧ 1. 国家自然科学基金青年基金项目：树枝状 D-A 型环金属铱(III)配合物的分子构筑及其近红外电致发光性能研究（51703059）， 2018.01-2020.12。
- ✧ 2. 湖南省自然科学基金青年基金项目：双极传输 D-A 型近红外环金属铱(III)配合物的构筑及其电致发光性能研究（2018JJ3160），2018.01-2020.12。
- ✧ 3. 湖南省教育厅科研项目一般项目：含 D-A 结构的树枝化环金属铱(III)配合物近红外发光材料的合成及其性能研究（15C0531），2015.09-2017.06。
- ✧ 4. 理论有机化学与功能分子教育部重点实验室开放课题项目：供体-受体型双极传输环金属铱(III)配合物近红外发光材料的合成及其光电性能研究（E21747），2017.01-2018.12。
- ✧ 5. 湖南科技大学博士启动基金项目：环金属铂(II)配合物近红外发光材料的分子设计合成及其性能研究（E51522），2015.04-2017.12。

近年发表论文情况和授权专利

1. Hua Tan*, Bin Yuan, Zhengyong Shao, Wanyuan Deng*, **Junting Yu***, Manjun Xiao, Hongbin Wu, Weiguo Zhu*, A simple-structure small-molecule acceptor enables over 18% efficiency

ternary polymer solar cells with a broad composition tolerance. **Chemical Engineering Journal**, 2022, 445, 136691.

2. 曹丽琴, 杨小琴, 李茂秋, 刘琳, **于俊婷***, 谭华，双极传输 D-A 型铱（III）配合物近红外发光材料的合成及其性能研究. **有机化学**, 2022, 42, 1831-1838.
3. Xiaoqin Yang, Youming Zhang, Liqin Cao, Minghui Shao, Jiamin Cao, **Junting Yu*,** Hua Tan*, Weiguo Zhu，Achieving near-infrared emission platinum (II) complex by introducing dimerized benzothiadiazole unit. **Optical Materials**, 2022, 123, 111896。
4. Zhengyong Shao, Zhicheng Zhu, Hua Tan*, Xiankang Yu, **Junting Yu***, Weiguo Zhu. An A-D-D-A-type small-molecule electron acceptor with chlorine substitution for high-efficiency polymer solar cells. **Organic Electronics**, 2021, 99, 106329.
5. Maoqiu Li, **Junting Yu***, Denghui Liu, Shuai Tan, Xiaoqin Yang, Liqin Cao, Hua Tan*, Weiguo Zhu， Enhancing the efficiency of near-infrared iridium (III) complexes-based OLEDs by auxiliary ligand functionalization. **Synthetic Metals**, 2021, 281, 116917.
6. Caifa You, Denghui Liu, **Junting Yu***, Hua Tan, Mengbing Zhu, Bin Zhang, Yu Liu, Yafei Wang*, Weiguo Zhu*,Boosting Efficiency of near-infrared emitting iridium(III) phosphors by administrating their π–π conjugation effect of core-shell structure in solution-processed OLEDs. **Advanced Optical Materials**, 2020, 8, 2000154.
7. **Junting Yu***, Maoqiu Li, Chao Xu*, Fanyuan Meng, Jiamin Cao, Hua Tan, Weiguo Zhu*. Near-infrared cyclometalated iridium(III) complexes with bipolar feature for efficient OLEDs in solution-process. **Dalton Transactions**, 2020, 49, 8785-8790.
8. **Junting Yu***, Chao Xu, Fanyuan Meng, Hua Tan*, Maoqiu Li, Weiguo Zhu*. Triphenylamine-functionalized iridium(III) complexes for near-infrared phosphorescent organic light emitting diodes. **Dyes and Pigments.** 2019, 166, 307-313.
9. Hua Tan*, Xiangjun Zheng, Jianing Zhu, **Junting Yu***, Weiguo Zhu*. An A-D-D-A-type non-fullerene small-molecule acceptor with strong near-infrared absorption for high performance polymer solar cells. **Journal of Materials Chemistry C**, 2019, 7, 13301-13306.
10. **Junting Yu***, Jiamin Cao, Hua Tan*, Wenhong Peng, Yafei Wang, Weiguo Zhu*. Structure-performance correlation of indacenodithiophene-based narrow band-gap polymers with pendant diketopyrrolopyrrole units. **Dyes and Pigments**, 2017, 141, 21-28.

11. **Junting Yu***, Weiguo Zhu, Hua Tan, Qing Peng. A novel D2-A-D1-A-D2-type donor-acceptor conjugated small molecule based on a benzo[1,2-b:4,5-b']di- thiophene core for solution processed organic photovoltaic cells. **Chemical Physics Letters**, 2017, 667, 254-259.
12. **Junting Yu***, Manjun Xiao, Hua Tan, Weiguo Zhu. The synthesis and properties of the europium(III) complexes using trifluorene-phenanthroline derivative as ligand. **Thin Solid Films**, 2016, 619, 1-9.
13. **Junting Yu***, Hua Tan, Fanyuan Meng, Kun Lv, Weiguo Zhu*, Shijian Su*. Benzotriazole-containing donor-acceptor-acceptor type cyclometalated iridium(III) complex for solution-processed near infrared polymer light emitting diodes. **Dyes and Pigments**, 2016, 131, 231-238.
14. **Junting Yu**, Keqi He, Yanhu Li, Hua Tan, Meixiang Zhu, Yafei Wang, Yu Liu, Weiguo Zhu,* Hongbin Wu*. A novel donor-acceptor-acceptor near- infrared-emitting cyclometalated platinum (II) complex with triphenylamine and benzothiadiazole units. **Dyes and Pigments**, 2014,107, 146-152.
15. **Junting Yu**, Jian Luo, Qing Chen, Keqi He, Fanyuan Meng, Xianping Deng, Yafei Wang*, Hua Tan, Haigang Jiang, Weiguo Zhu*. Synthesis and optoelectronic properties of a novel dinuclear cyclometalated platinum (II) complex containing triphenylamine-substituted indolo [3,2-b] carbazole derivative in the single-emissive-layer WPLEDs. **Tetrahedron**, 2014, 70, 1246-1251.
16. **Junting Yu**, Yafei Wang*, Yu Liu, Xianping Deng, Hua Tan, Zhiyong Zhang, Meixiang Zhu, Weiguo Zhu* Novel iridium complexes containing alkylfluorene picolinic acid ancillary ligand: synthesis, optophysics and electroluminescence properties. **Journal of Organometallic Chemistry**, 2014, 761, 51-55.
17. **Junting Yu**, Xiugang Wu, Hua Tan, Yu Liu *, Yafei Wang, Meixiang Zhu, Weiguo Zhu *. High-efficiency saturated red emission from binuclear cyclo-metalated platinum complex containing 5-(4-octyloxyphenyl)-1,3,4- oxadiazole-2-thiol ancillary ligand in PLEDs. **Science China Chemistry**, 2013, 56, 1137-1142.

授权发明专利:

1. **于俊婷**;李茂秋;谭华;朱卫国.一类 D-A 型芳环共轭树枝状环金属铱配合物及其应用,中国发明专利,ZL 202010439762.7，授权时间：2022-05-20

2. 朱卫国，**于俊婷**，谭华，王亚飞，刘煜，朱美香. 一种 D-A-A 型 C∧N 配体化合物及其 C∧N 环金属铂配合物和应用. 中国发明专利，ZL201310291798.5,授权时间：2015-12-02，

教学工作

- 2014 年参加工作以来，担任 2 届本科班班主任。
- 讲授本科生课程：《材料安全经济与工程伦理》，《材料现代测试方法》，《高分子化学实验》，《普通化学》，《有机化学》，《有机化学实验》；
- 指导研究生情况：指导硕士研究生 3 人。