

姓名：耿中兴

导师类型：硕士生导师 技术职称：讲师

电子邮箱：gzx@hfu.edu.cn

18214842017@163.com

研究团队/平台：手性超分子化学与发光实验室(34#N501)



主要研究方向

- (1) 手性超分子组装
- (2) 手性有机/高分子光电功能材料
- (3) 圆偏振发光材料及 OLED 器件

个人简介：

安徽省阜阳市阜南县人，博士毕业于南京大学化学-高分子化学与物理专业，2023 年 10 月入职合肥大学能源材料与化工学院，讲师，硕导。入职以来先后主持国家自然科学基金青年基金、安徽省自然科学基金、安徽省高校自然科学基金等纵向项目 4 项，并参与 3 项国家自然科学基金面上项目。研究成果先后发表在 *Advanced Materials*、*Angewandte Chemie International Edition*、*Advanced Functional Materials*、*Nature Communications*、*Macromolecules* 等知名学术期刊。

代表科研成果：

- [1] Yao K, Wang Z, Lin F, Wang S, Huang H, Geng W, Hu L, **Geng Z***, Tunable Circularly Polarized Luminescence Triggered by Orientational Order Parameter of Achiral Dichroic Dyes in Cholesteric Liquid Crystal Medium, *Advanced Functional Materials* **2025**, e00112. (化学科学顶级期刊，一区 top， Nature Index 期刊)
- [2] Yao K, Wang Z, Wang P, Li Y, Hu L, Cheng Y, **Geng Z***, Excitation-Dependent Circularly Polarized Luminescence Inversion Driven by Dichroic Competition of Achiral Dyes in Cholesteric Liquid Crystals, *Angewandte Chemie International Edition* **2025**, 64, e202420290. (化学科学顶级期刊，一区 top， Nature Index 期刊)
- [3] **Geng Z***, Wang Z, Zhu SE, Hu K, Yao K, Chu B, Inverted and Amplified Circularly Polarized Luminescence Behavior Originated from Structure-Activity Regulation of Achiral Pyrene-Based Polymers in Chiral Coassemblies, *Macromolecules* **2024**, 57,

4567-4575. (高分子学科顶级期刊, 一区 top, Nature Index 期刊)

[4] **Geng Z**, Wang Z, Zhu SE, Wang P, Yao K, Cheng Y, Chu B, Tunable circularly polarized luminescence behaviors caused by the structural symmetry of achiral pyrene-based emitters in chiral co-assembled systems, *Journal of Colloid and Interface Science* **2024**, 669, 561-568. (一区 top)

[5] Chu B, Song F, Wang P, Cheng Y, **Geng Z***, Amplified Circularly Polarized Luminescence Behavior in Chiral Co-assembled Liquid Crystal Polymer Films via the Strategic Manipulation of Chiral Inducers, *ACS Applied Materials & Interfaces* **2024**, 16, 26604-26612. (二区 top)

[6] Yao K, Lou A, Geng W, Li L, **Geng Z***, Dynamic circularly polarized luminescence regulated by photosensitive achiral dichroic dyes in cholesteric liquid crystal medium, *Dyes and Pigments* **2024**, 222, 111911. (二区 top)

[7] **Geng Z**, Liu Z, Li H, Zhang Y, Zheng W, Quan Y, Cheng Y, Inverted and Amplified CP-EL Behavior Promoted by AIE-Active Chiral Co-Assembled Helical Nanofibers, *Advanced Materials* **2023**, 35, 2209495. (材料科学顶刊, 一区 top, Nature Index 期刊)

[8] **Geng Z**, Zhang Y, Zhang Y, Quan Y, Cheng Y, Amplified Circularly Polarized Electroluminescence Behavior Triggered by Helical Nanofibers from Chiral Co-assembly Polymers, *Angewandte Chemie International Edition* **2022**, 61, e202202718. (化学科学顶刊, 一区 top, Nature Index 期刊)

[9] Zhang Y, Li H, **Geng Z**, Zheng W, Quan Y, Cheng Y, Dynamically stable and amplified circularly polarized excimer emission regulated by solvation of chiral co-assembly process, *Nature Communications* **2022**, 13, 4905. (Nature 子刊, 一区 top, Nature Index 期刊)

[10] Zhang Y, Li H, **Geng Z**, Zheng WH, Quan Y, Cheng Y, Inverted circularly polarized luminescence behavior induced by helical nanofibers through chiral co-assembly from achiral liquid crystal polymers and chiral inducers, *ACS Nano* **2022**, 16, 3173-3181. (纳米科学顶刊, 一区 top, Nature Index 期刊)

[11] **Geng Z**, Zhang Y, Zhang Y, Li Y, Quan Y, Cheng Y, Circularly polarized electroluminescence from an achiral fluorophore induced by co-assembly with chiral polymers, *Journal of Materials Chemistry C* **2021**, 9, 12141-7. (二区)

[12] Zhang Y, **Geng Z**, Zhang Y, Xu Z, Li H, Cheng Y, Quan Y, Deep blue circularly polarized luminescence response behavior of an achiral pyrene-based emitter regulated by chiral co-assembly helical nanofibers, *The Journal of Physical Chemistry Letters* **2021**, 12, 3767-3772. (二区 top, Nature Index 期刊)

[13] **Geng Z**, Zhen W, Preparation, Performance, and Kinetics of Poly (Lactic-Acid)/Amidated Benzoic Acid Intercalated Layered Double Hydroxides Nanocomposites by Reactive Extrusion Process, *Polymer Composites* **2019**, 40, 2668-2680. (二区)

[14] **Geng Z**, Zhen W, Preparation, **Geng Z**, Zhen W, Preparation, characterization, structure-property relationships, and thermal degradation kinetics of poly (lactic acid)/amidated potassium hydrogen phthalate intercalated layered double hydroxides nanocomposites, *Polymers for Advanced Technologies* **2019**, 30, 504-518. (四区)

[15] **Geng Z**, Bian S, Zhen W, Song Z, Wang X, Preparation, structure-property relationships of zinc oxide pillared organic layered double hydroxides and its effect on the performance of poly (lactic acid), *Polymer-Plastics Technology and Materials* **2019**, 58 641-655. (四区)

[16] **Geng Z**, Zhen W, Song Z, Wang X, Synthesis, characterization of layered double hydroxide - poly (methylmethacrylate) graft copolymers via activators regenerated by electron transfer for atom transfer radical polymerization and its effect on the performance of poly (lactic acid), *Polymers for Advanced Technologies* **2018**, 29, 1765-1778. (四区)

[17] **Geng Z**, Zhen W, Song Z, Wang X, Structure and performance of poly (lactic acid)/amide ethylenediamine tetraacetic acid disodium salt intercalation layered double hydroxides nanocomposites, *Journal of Polymer Research* **2018**, 25, 1-6. (四区)

科研项目：

[1] 2023 年国家自然科学基金青年项目：基于 AIE 活性手性高分子组装诱导的圆偏振电致发光研究,, 主持, 2024.01-2026.12。

[2] 2023 年安徽省自然科学基金青年项目：基于超分子共组装手性 TADF 发光材料的构筑及其圆偏振电致发光研究, 主持, 2023.09-2025.09。

[3] 2024 年安徽省高等学校科学研究项目重点项目：轴手性发光材料的力调控及单分子力谱研究, 主持, 2024.09-2026.09。

[4] 2024 年合肥大学人才科研基金项目：基于手性发光液晶制备的多层次立体信息防伪的圆偏振发光材料性质研究，主持，2024.12-2027.12。

获奖情况：

指导 2023 级研究生获得 2024 年度国家奖学金