

# 陈丽娟

## 基本情况:

陈丽娟，女，中共党员，讲师，学硕及专硕导师；  
广州市高层次人才——青年后备人才

## 联系方式:

- 手机: 18922110221
- E-mail: gdchenlj@gzhu.edu.cn

## 教育经历:

- 2014/9-2017/7, 华南理工大学, 材料科学与工程学院, 材料学, 博士
- 2007/9-2010/7, 华南理工大学, 材料科学与工程学院, 材料学, 硕士
- 2002/9-2007/7, 华南理工大学, 材料科学与工程学院, 高分子科学与工程+工商管理, 双学士

## 工作经历:

- 2020/1-至今, 广州大学, 化学化工学院, 讲师
- 2017/7-2019/7, 广东工业大学, 材料与能源学院, 博士后
- 2010/7-2014/8, 南海南光化工包装有限公司, 技术研发

## 科研方向:

- 可穿戴柔性汗液传感器件
- 石墨烯基导热复合材料
- 3D 打印光敏树脂
- 高性能橡胶纳米复合材料
- 自修复聚合物电解质膜材料的制备及其在锂离子电池中的应用

## 主持科研项目:

1. 国家自然科学基金青年基金, 30 万, 2023/01-2026/12;
2. 广东省基础与应用基础研究基金省企联合基金(面上项目), 10 万, 2021/11-2024/10;
3. 广东省基础与应用基础研究基金区域联合基金青年基金, 10 万, 2020/10-2023/09;
4. 广州市科技计划项目-市校(院)联合资助项目, 20 万, 2021/04-2023/03;

5. 广东省高性能与功能高分子材料重点实验室开放基金, 5 万, 2020/03-2021/11;
6. 广州大学校内科研项目 (人才类), 10 万, 2020/01-2022/12;
7. 第 63 批博士后基金面上资助项目, 5 万, 2018/05-2019/05;
8. 广东省高性能与功能高分子材料重点实验室开放基金, 4 万, 2017/11-2018/11。

#### 发表论文:

1. Xiaohui Guo, **Lijuan Chen**<sup>\*</sup>, Yingyu Liang, Yuanfang Luo<sup>\*</sup>, Fan Kang, Bo Zhao, Demin Jia. Construction of biomass tea polyphenol-functionalized halloysite nanotubes enabling green and sustained-release antioxidants for highly antiaging elastomers. *ACS Sustainable Chemistry & Engineering*, 2023, DOI: 10.1021/acssuschemeng.2c07242.
2. Bokai Liao<sup>\*</sup>, Zhigang Luo, Shan Wan, **Lijuan Chen**<sup>\*</sup>. Insight into the anti-corrosion performance of Acanthopanax senticosus leaf extract as eco-friendly corrosion inhibitor for carbon steel in acidic medium. *Journal of Industrial and Engineering Chemistry*, 2023, 117, 238–246.
3. Bing Tang, **Lijuan Chen**<sup>\*</sup>, Zhixin Jia<sup>\*</sup>, Fan Kang, Jiayu Wang, Xiaohui Guo, Demin Jia. Construction of renewable biomass cardanol functionalized spherical nanoparticles achieving favorable interfacial interaction and thermostability in styrene butadiene rubber matrix. *Journal of Applied Polymer Science*, 2023, 140, e53729.
4. **Lijuan Chen**, Fan Chen, Gang Liu, Haoliang Lin, Yu Bao, Dongxue Han, Wei Wang<sup>\*</sup>, Yingming Ma, Baohua Zhang, and Li Niu<sup>\*</sup>. Superhydrophobic functionalized Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene-based skin-attachable and wearable electrochemical pH sensor for real-time sweat detection. *Analytical Chemistry*, 2022, 94, 7319–7328.
5. Shufei Ma, Zizhe Xu, Zhixin Jia<sup>\*</sup>, **Lijuan Chen**<sup>\*</sup>, Han Zhu, Yongjun Chen, Xiaohui Guo<sup>\*</sup>, Mingliang Du. Facile fabrication of carbon fiber skeleton structure of MoS<sub>2</sub> supported on 2D MXene composite with highly efficient and stable hydrogen evolution reaction. *Composites Science and Technology*, 2022, 222: 109380.
6. Xiaohui Guo, Yuanfang Luo<sup>\*</sup>, **Lijuan Chen**<sup>\*</sup>, Bowen Zhang, Yongjun Chen, Demin Jia. Biomass antioxidant silica supported tea polyphenols with green and high-efficiency free radical capturing activity for rubber composites. *Composites Science and Technology*, 2022, 220: 109290.
7. **Lijuan Chen**<sup>\*,1</sup>, Fan Chen<sup>1</sup>, Weixin Zhu, Luoyi Chen, Yingyu Liang, Xiaohui Guo<sup>\*</sup>. Construction of photoinitiator functionalized spherical nanoparticles enabling favorable photoinitiating activity and migration resistance for 3D printing. *Polymers*, 2022, 14, 4551.

8. Ping Huang, Xingzi Zou, Zhiyun Xu, Yanting Lan, **Lijuan Chen**<sup>\*</sup>, Baohua Zhang<sup>\*</sup>, Li Niu. Studies on annihilation and coreactant electrochemiluminescence of thermally activated delayed fluorescent molecules in organic medium. *Molecules*, 2022, 27, 7457.
9. **Lijuan Chen**<sup>1</sup>, Xisen Cai<sup>1</sup>, Zhonghui Sun, Baohua Zhang, Yu Bao<sup>\*</sup>, Zhenbang Liu<sup>\*</sup>, Dongxue Han, Li Niu. Self-healing of a covalently cross-linked polymer electrolyte membrane by Diels-Alder cycloaddition and electrolyte embedding for lithium ion batteries. *Polymers*, 2021, 13, 4155.
10. Xiaohui Guo, Yuanfang Luo<sup>\*</sup>, Yongjun Chen, **Lijuan Chen**<sup>\*</sup>, Demin Jia. Novel hybrid biomass anti-aging filler for styrene-butadiene rubber composites with antioxidative and reinforcing properties. *Materials*, 2020, 13(18), 4045.
11. Yongjun Chen<sup>\*</sup>, Yuanfang Luo, Xiaohui Guo, **Lijuan Chen**<sup>\*</sup>, Demin Jia. The synergistic effect of ionic liquid-modified expandable graphite and intumescent flame-retardant on flame-retardant rigid polyurethane foams. *Materials*, 2020, 13, 3095.
12. Xiaowen Li, Zhu Liu, Peng Hong, **Lijuan Chen**<sup>\*</sup>, Xiaoxuan Liu<sup>\*</sup>. Synthesis of organic and inorganic hybrid nanoparticles as multifunctional photoinitiator and its application in UV-curable epoxy acrylate-based coating systems. *Progress in Organic Coatings*, 2020, 141: 105565.
13. Yongjun Chen, Yuanfang Luo, Xiaohui Guo, **Lijuan Chen**<sup>\*</sup>, Tiwen Xu<sup>\*</sup>, Demin Jia. Structure and flame-retardant actions of rigid polyurethane foams with expandable graphite. *Polymers*, 2019, 11: 686.
14. **Lijuan Chen**, Zhixin Jia<sup>\*</sup>, Xiaohui Guo, Bangchao Zhong, Yongjun Chen, Yuanfang Luo, Demin Jia. Functionalized HNTs nanocluster vulcanized natural rubber with high filler-rubber interaction. *Chemical Engineering Journal*, 2018, 336: 748-756.
15. **Lijuan Chen**, Xiaohui Guo, Yuanfang Luo<sup>\*</sup>, Zhixin Jia<sup>\*</sup>, Jie Bai, Yongjun Chen, Demin Jia. Effect of novel supported vulcanizing agent on the interfacial interaction and strain-induced crystallization properties of natural rubber nanocomposites. *Polymer*, 2018, 148: 390-399.
16. **Lijuan Chen**, Xiaohui Guo, Zhixin Jia<sup>\*</sup>, Yuhan Tang, Lianghui Wu, Yuanfang Luo, Demin Jia. High reactive sulphide chemically supported on silica surface to prepare functional nanoparticle. *Applied Surface Science*, 2018, 442: 673-681.
17. **Lijuan Chen**, Xiaohui Guo, Yuanfang Luo<sup>\*</sup>, Zhixin Jia<sup>\*</sup>, Yongjun Chen, Demin Jia. Inorganic and Organic Hybrid Nanoparticles as Multifunctional Crosslinkers for Rubber Vulcanization with High-Filler Rubber Interaction. *Polymers*, 2018, 10: 1138.

18. **Lijuan Chen**, Zhixin Jia\*, Yuhan Tang, Lianghai Wu, Yuanfang Luo, Demin Jia. Novel functional silica nanoparticles for rubber vulcanization and reinforcement. *Composites Science & Technology*, 2017, 144: 11-17.

19. **Lijuan Chen**, Xiaoping Wang\*, Zhixin Jia, Yuanfang Luo, Demin Jia. Use of precipitated silica with silanol groups as an inorganic chain extender in polyurethane. *Materials & Design*, 2015, 87: 324-330.

#### 授权专利:

1. 陈丽娟等. 全固态汗液传感芯片, ZL 202121216073.6.
2. 陈丽娟等. 一种基于多参数电化学可穿戴汗液采集电路及装置, ZL 202221103396.9.
3. 陈丽娟等. 一种改性纳米 SiO<sub>2</sub> 及光固化复合弹性体材料, ZL 201910611245.0.
4. 陈丽娟等. 生物降解封箱胶带, ZL 201910501240.2.
5. 陈丽娟等. 生物降解封箱胶带制备方法及生物降解封箱胶带, ZL 201910502221.1.
6. 陈丽娟等. 一种无机纳米粒子表面接枝型光引发剂及其应用, ZL 201810963047.6.
7. 陈丽娟等. 一种利用稀土作为发泡助剂的聚氨酯及其制备方法, ZL 201510112628.5