



# 武汉大学 | 动力与机械学院

SCHOOL OF POWER AND MECHANICAL ENGINEERING, WUHAN UNIVERSITY

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### 师资队伍

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力工程系 >> 副高级专业技术职称 >> 正文

全部教师

郑怀

兼职人员

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工作经历

2017- 至今, 武汉大学, 动力与机械学  
院, 副教授

2015- 2017, 武汉大学, 动力与机械学院, 讲师

#### 教育经历

2010/09 – 2014/ 华中科技大学, 工程热物理, 博士

2006/09 - 2010/06 华中科技大学, 热能与动力工程, 学士

#### 研究方向

LED封装、电子器件散热、微小尺度复杂流动调控、微纳制造

#### 研究成果

发表SCI论文20篇, 其中第一作者或通讯作者17篇, 授权发明专利10项, 荣获2015年高等学校科学研究优秀成果奖技术发明奖一等奖, 2016年国家技术发明奖二等奖, 2014年-2016年连续三年获得电子封装技术国际会议 (ICEPT) 最佳论文奖。主持国家自然科学基金一项, 重点研发专项 (子课题) 一项, 湖北省自然科学基金一项, 广东省重点实验室开放基金一项。

#### 发表期刊论文 (\*通讯作者)

1. Shangru Zhou, Jie Liu, Qun Hu, Teng Jiang, Jinchu Yang, Sheng Liu and Huai Zheng\* , Dielectric fluid directional spreading under the action of corona discharge, Applied Physics Letters , 2018 , 112 (4) : 041602.

2. Shangru Zhou , Huai Zheng\* , Guoliang Li , Jie Liu , Sheng Liu , Formation of controllable polymer micropatterns through liquid film

electro-dewetting , *Applied Surface Science*, 2018, 436: 839-845.

3. Huai Zheng\* , Xiang Lei , Ting Cheng , Sheng Liu , Xiaoliang Zeng and Rong Sun , Enhancing the thermal dissipation of a light-converting composite for quantum dot-based white light-emitting diodes through electrospinning nanofibers , *Nanotechnology* , 2017, 28 (26) : 265204.

4. Xiang Lei , Huai Zheng\* , Xing Guo , Zefeng Zhang , Jiading Wu , Chunlin Xu , and Sheng Liu , Reduction of die-bonding interface thermal resistance for high-power LEDs through embedding packaging structure , *IEEE Transactions on Power Electronics* , 2017 , 32 (7) : 5520-5526.

5. Jingcao Chu , Xiang Lei , Jiading Wu , Yang Peng , Sheng Liu , Qian Yang , Huai Zheng\* , Enhanced light extraction efficiency of chip-on board light-emitting diodes through micro-lens array fabricated by ion wind , *Optics & Laser Technology* , 2017, 89: 92-96.

6. Jiading Wu , Zefeng Zhang , Huai Zheng\* , and Sheng Liu , Realization of conformal phosphor coating by ionic wind patterning for phosphor-converted white LEDs , *IEEE*

Photonics Technology Letters ,  
2017, 29 (3): 299-301.

7. Jiading Wu, Jingcao Chu, Zefeng Zhang, Jiahui Huang, Huai Zheng\* and Sheng Liu, Optical performance enhancement of chip-on-board light-emitting diodes through ionic wind patterning , Applied optics , 2017, 56 (12): 3397-3401.

8. Zefeng Zhang , Huai Zheng\* and Sheng Liu, Realization of High Color Uniformity for Phosphor-Converted White Light-Emitting Diodes Through a Stamp-Printed Phosphor Coating , IEEE Electron Device Letters, 2017, 38 (2): 221-224.

9. Xiang Lei , Huai Zheng\* , Xing Guo, Jingcao Chu, Sheng Liu, and Peizhao Liu , Optical Performance Enhancement of Quantum Dot-Based Light-Emitting Diodes Through an Optimized Remote Structure , IEEE Transactions on Electron Devices, 2016, 63 (2) : 691-697.

10. Xing Guo , Huai Zheng\* , Xiang Lei , Jingcao Chu , and Sheng Liu, Fabrication of Adjustable-Morphology Lens Based on Electrohydrodynamic for High-Power Light-Emitting Diodes , Journal of Micromechanics and Microengineering, 2015, 25 (9) .

11. Xing Guo , Xiang Lei , Huai Zheng\* , Jingcao Chu , and Sheng Liu, Fabrication of Lens With Large View Angle Through Droplet Evaporation for High-Power Light-Emitting Diodes , Journal of Display Technology , 2016 , 12 ( 3 ) : 288-293.

12. Huai Zheng , Lan Li , Xiang Lei , Xingjian Yu , Sheng Liu , and Xiaobing Luo, Optical Performance Enhancement for Chip-on-Board Packaging LEDs by Adding TiO<sub>2</sub>/Silicone Encapsulation Layer , IEEE Electron Device Letters , 2014 , 35 ( 10 ) : 1046-1048.

13. Huai Zheng , Yiman Wang , Lan Li , Xing Fu , Yong Zou , and Xiaobing Luo, Dip-transfer phosphor coating on designed substrate structure for high angular color uniformity of white light emitting diodes with conventional chips , Optics Express , 2013 , 21 ( S6 ) : 933-941.

14. Huai Zheng , , Sheng Liu , and Xiaobing Luo, Enhancing Angular color uniformity of phosphor-converted white light-emitting diodes by Phosphor dip-transfer coating , IEEE Journal of Lightwave Technology , 2013 , 31 ( 12 ) : 1987-1993.

15. Huai Zheng, , Jinlong Ma, and Xiaobing Luo, Conformal Phosphor Distribution for White Lighting Emitting Diode Packaging by Conventional Dispensing Coating Method with Structure Control, IEEE Transactions on Components, Packaging and Manufacturing Technology, 2013, 3 (3) : 417-421.

16. Huai Zheng and Xiaobing Luo, Correlated Color Temperature Consistency Enhancement of White Light-emitting Diodes through Substrate Structure Design, IEEE Photonics Technology Letters, 2013, 25 (5) : 484-487.

17. Huai Zheng, Xiaobing Luo, Run Hu, Bin Cao, Xing Fu, and Yiman Wang, Conformal phosphor coating using capillary microchannel for controlling color deviation of phosphor-converted white light-emitting diodes, Optics Express, 2012, 20 (5) : 5092-5098.

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