**导师个人简历**

吕卓璇，女，博士，研究员，海南省拔尖人才，南海名家青年人才，硕士研究生导师。博士毕业于中国科学院成都生物所，并在中科院苏州纳米技术与纳米研究所进行博士后研究工作。现阶段主要从事多功能纳米材料的开发并应用于肿瘤的诊断和治疗方向的研究工作。发表论文多篇，主要包括以第一作者以及通讯作者在SCI期刊ACS Applied Materials & Interfaces, Journal of Controlled Release, Chemical Communication, Nanoscale, Polymer Chemistry 上发表论文；主持国家自然科学基金两项，海南省自然科学基金高层次人才项目一项，海南省重点研发计划社会发展项目一项。授权专利1项。

研究方向：分子诊断

代表性学术论文（第一或通讯作者）：

**Lu Z**, Duan D, Cao R, Zhang L, Zheng K. and Li J\*. A reverse transcription-free real-time PCR assay for rapid miRNAs quantification based on effects of base stacking. Chemical Communications, 47, 26 (2011), 7452-7454.

**Lu Z**, Zhang L\*, Deng Y, Li S. and He N\*. Graphene oxide for rapid microRNA detection. Nanoscale, 4, 19 (2012), 5840-5842.

**Lu Z**＃, Huang Y＃, Zhang L\*, Xia K, Deng Y, He N\*. Preparation of Gold Nanorods Using 1,2,4-Trihydroxybenzene as a Reducing Agent. Journal of Nanoscience and Nanotechnology 2015; 15(8): 6230-5.

Huang Y＃, Xia K＃, He N\*, **Lu Z\***, Zhang L, Deng Y, Nie L. Size-tunable synthesis of gold nanorods using pyrogallol as a reducing agent. Science China Chemistry 2015; 58(11): 1759-65.

**Lu Z**, Huang F-Y, Cao R, Lin Y-Y, Zhou S, Zhao H, Huang Y, Zhang L\*, Tan G-H\*. Synthesis of mPEG-dBSA-Cy5.5 Nanoparticles for Tumor Imaging and Drug Delivery. Nanoscience and Nanotechnology Letters 2017; 9(2): 184-9.

**Lu Z****＃**, Huang F-y＃, Cao R, Zhang L\*, Tan G-h\*, He N\*, Huang J, Wang G, Zhang Z. Long Blood Residence and Large Tumor Uptake of Ruthenium Sulfide Nanoclusters for Highly Efficient Cancer Photothermal Therapy. Scientific Reports 2017; 7: 41571.

Mao L＃, **Lu Z＃**, He N＃, Zhang L＃, Deng Y, Duan D. A new method for improving the accuracy of miRNA detection with NaYF4:Yb,Er upconversion nanoparticles. Science China Chemistry 2017; 60(1): 157-62.

**Lu Z****＃**, Huang F-Y＃, Cao R＃, Tan G-H, Yi G, He N, Xu L, Zhang L\*. Intrinsic, Cancer Cell-Selective Toxicity of Organic Photothermal Nanoagent: A Simple Formulation for Combined Photothermal Chemotherapy of Cancer. ACS Applied Materials & Interfaces 2018; 10(31): 26028-38.

**Lu Z**, Xu L, He N, Huang F, Xu T, Li L, Zhang Y, Zhang L\*. Cy5.5-MSA-G250 nanoparticles (CMGNPs) induce M1 polarity of RAW264. 7 macrophage cells via TLR4-dependent manner. Chinese Chemical Letters 2019; 30(6): 1320-4.

**Lu Z＃**，Zhang Y**＃**, Wang Y, Tan G, Huang F, Cao R, He N\*, Zhang L\*. A biotin-avidin-system-based virus-mimicking nanovaccine for tumor immunotherapy. Journal of Controlled Release. 2021; 332(10) 245-59

Meng X; Song J; Lei Y; Zhang X; Chen Z; **Lu Z\***; Zhang L\*; Wang Z\*; A metformin-based nanoreactor alleviates hypoxia and reduces ATP for cancer synergistic therapy, Biomaterials Science, 2021, 9(22): 7456-7470

Zhang L**＃**, Xu L**＃**, Wang Y, Liu J, Tan G, Huang F, He N\*, **Lu Z\*** A novel therapeutic vaccine based on graphene oxide nanocomposite for tumor immunotherapy. Chinese Chemical Letters.2022; doi.org/10.1016/j.cclet.2022.01.071

授权专利

**吕卓璇**; 张立明; 黄风迎; 谭光宏; 周松林; 赵焕阁; 林映莹, 一种硫化钌纳米

点及其制备方法, 2016.1.29, 中国, 201610063496.6