

个人简介:

姓名: 代昭 出生年月: 1975.2

职称: 教授/博士生导师 专业与学历: 应用化学 博士

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人才称号: 天津市学科领军人才

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工作经历:

2012.12-今 天津工业大学环境与化工学院 教授

2013.6-2016.6 美国 Oklahoma State University 国家公派访问学者

2009.7-2010.2 意大利 都灵大学化学学院 国家公派访问学者

2006.10-2012.12 天津工业大学环境与化工学院 副教授

教育经历:

2004.4- 2006.10 南开大学化学学院高分子化学研究所 博士后

2000.3- 2003.3 天津大学化工学院 应用化学专业 博士

1997.9-2000.3 天津工业大学材料与化工学院 应用化学专业 硕士

1993.9-1997.7 天津工业大学材料与化工学院 轻化工程专业 学士

研究方向:

1. 纳米与生物材料
2. 生物传感
3. 仿生材料与过程

主持科研项目:

1. 2017年, 天津市“学科领军人才培养计划”
2. 2014年, 天津市自然科学基金项目, “ATP在人工细胞体系中的仿生信号传导与传感研究”
3. 2011年, 国家自然科学基金面上项目, “荧光DNA 探针微结构及其荧光共振能量转移研究”
4. 2011年, 天津市自然科学基金重点项目, “纳米荧光DNA探针微结构调控研究”
5. 2009年, 国家自然科学基金青年项目, “利用固相载体合成结构可控的荧光 DNA 探针”
6. 2007年, 天津市高等学校科技发展基金, “基于复杂生物检测体系的新型 DNA 传感器”

代表性学术论文:

- [1] Guo Wenjuan, Wei Yanhong, *Dai Zhao**, Chen Guangping, Chu Yuanyuan, Zhao Yifei. Nanostructure and corresponding quenching efficiency of fluorescent DNA probes, *Materials*, 2018, 11, 272.
- [2] Huang Dandan, *Dai Zhao**, Yang Kun, Chu Yuanyuan. Preparation and characterization of gold-loaded magnetite/silica core-shell composites. *Journal of Nano Research*, 2016, 42, 47-52.
- [3] Meng Chao, *Dai Zhao**, Guo Wenjuan, Chu Yuanyuan, Chen Guangping. Selective

and sensitive fluorescence aptamer biosensors of adenosine triphosphate. *Nanomaterials and Nanotechnology*, 2016, 6, 33I(1-6).

- [4] Yang Kun, **Dai Zhao***, Chu Yuanyuan, Chen Guangping. Preparation of yolk-shell microspheres as temperature switch on/off catalysts. *Micro and Nano Letters*, 2016, 11(3), 129-136.
- [5] 金萍, **代昭***, 郭文娟, 陈广平. 金纳米粒子组装体的连续离散型纳米结构控制. *高等学校化学学报*, 2015, 36(5), 844-849.
- [6] Yang Qiufeng, **Dai Zhao***, Guo Wenjuan, Chu Yuanyuan, Chen Guangping. Preparation and catalytic performance of temperature-responsive cell-like particles, *Pakistan Journal of Pharmaceutical Sciences*, 2014, 27(5S), 1611-1614.
- [7] Song Jiaojiao, **Dai Zhao***, Guo Wenjuan, Li Ying, Wang Wenting, Li Nana, Wei Junfu. Preparation of CdTe/CdS/SiO₂ core/multishell structured composite nanoparticles, *Journal of Nanoscience and Nanotechnology*, 2013, 13(10), 6924-6927.
- [8] Song Jiaojiao, **Dai Zhao***, Guo Wenjuan, Li Ying, Wang Wenting. Fluorescent DNA probe based on CdTe/CdS/SiO₂ core/multishell composite nanoparticles, *Przeglad Elektrotechniczny*, 2013, 89(1b), 48-50
- [9] **Dai Zhao***, Li Ying, Guo Wenjuan, Qi Donglai, Zhang Jimei, Quantum dots and Au nanoparticles conjugated fluorescent DNA probes into uniform microstructure by asymmetrical synthesis, *Micro and Nano Letters*, 2012, 7(2), 142-145.
- [10] **Dai Zhao***, Sun Xiuxue, Zhang Jimei, Li Ping, Xu Shichao, Liu Yang, Yang Yanmin, Zheng Guo, Polymer microspheres with active carboxyl groups: preparation, Structure and Hydrophilicity, *Journal of Nanoscience and Nanotechnology*, 2011, 11(12), 11167-11170.
- [11] **Dai Zhao***, Li Ping, Sun Xiuxue, Zhang Jimei, Xu Shichao, Guo Ning, Wang Xue. Preparation of fluorescent DNA probe by solid-phase organic synthesis. *eXPRESS Polymer Letters*, 2009, 3, 483-491.
- [12] Li Ping, **Dai Zhao***, Zhang Jimei, Zheng Guo, Xu Shichao. Effect of hydrogen bond on preparation of linear poly (acrylic acid) nanoparticles. *Nanotechnology and Precision Engineering*, 2009, 7, 523-527.
- [13] **Dai Zhao**, Zhang Jimei*, Dong quanxi, Guo Ning, Xu Shichao, Sun Bo, Bu Yuehua. Adaption of Au nanoparticles and CdTe Quantum Dots in DNA Detection. *Chinese Journal of Chemical Engineering*. 2007, 15,791-794.
- [14] **Dai Zhao**, Yang Xinlin, Huang Wenqiang*. Preparation of poly(ethyleneglycol-co-acrylic acid) microspheres with divinylbenzene as crosslinker by distillation-precipitation polymerization. *Chinese Journal of Polymer Science*. 2007, 25, 303-309.
- [15] **Dai Zhao**, Yang Xinlin, Huang Wenqiang*. Preparation of narrow-disperse or

monodisperse poly{[poly(ethylene glycol) methyl ether acrylate]-co-(acrylic acid)} microspheres with ethyleneglycol dimethacrylate as crosslinker by distillation precipitation polymerization. *Polymer International*. 2007, 56, 224-230.