



Department: School of Chemical Engineering
Professional field: Chemical Engineering and Technology
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Profile

Education

2012: PhD, Chemistry, University of Massachusetts Amherst, USA.
2008: MA, Chemistry, University of Arizona, USA.
2005: MS, Applied Chemistry, East China University of Science and Technology, China.
2001: BS, Applied Chemistry, East China University of Science and Technology, China.

Academic Experience

2018.8-present: Professor, School of Chemical Engineering, East China University of Science and Technology, China
09.2013-2018.7: Associate Professor, School of Chemical Engineering, East China University of Science and Technology, China
06.2012-09.2013: Postdoctoral Research, Materials Science and Engineering, Cornell University, USA.

Research Field

Mainly engaged in the process-enhanced preparation based on nano-materials and its application in the fields of functional materials loading and biosorption. Through the design of the functionalization of polyelectrolyte materials, the new mechanism and method of optimizing the structure of polymer modified materials in the process of assembly strengthening were studied.

Research results and selected published papers

1. X. Wang, S. Zhang, Y. Xu*, X. Zhao, X. Guo*, Ionic strength responsive binding between nanoparticles and proteins, *Langmuir*, 2018, accepted.
2. Q. Wu, J. Chen,* X. Guo, Y. Xu*, Copper(I)-Catalyzed Four-Component Coupling Using Renewable Building Blocks of CO₂ and Biomass-Based Aldehydes, *Eur. J. Org. Chem.*, 2018, In Press.
3. A. Li, Y. Jia, S. Sun*, Y. Xu*, B. B. Minsky, M. A. Cohen Stuart, H. Cölfen, R. Klitzing, X. Guo* Mineral Hydrogel as Oyster-Inspired Organic-Inorganic Hybrid Adhesive, *ACS Appl. Mater. Interface*, 2018, 10, 10471-10479
4. M. Wang, Y. Xu,* Y. Liu, W. Fu, J. Tan, P. Shi, D. Yang, Z. Guo,* W. Zhu, X. Guo*, and M. A. Cohen Stuart, Morphology Tuning of AIE Probe by Flash Nanoprecipitation: Shape and Size Effects on Real-time In Vivo Imaging, *ACS Appl. Mater. Interface*, 2018, accepted.
5. M. Li, Y. Xu*, J. Sun, M. Wang, D. Yang, X. Guo, H. Song, S. Cao*, Y. Yan*, Fabrication of Charge-Conversion Nanoparticles for Cancer Imaging by Flash Nanoprecipitation, *ACS Appl. Mater. Interface*, 2018, 10, 10752-10760.
6. M. Liu, W. Tang, Z. Xie, H. Yu, H. Yin, Y. Xu*, S. Zhao*, S. Zhou*, Design of Highly Efficient Pt-SnO₂ Hydrogenation Nanocatalysts Using Pt@Sn Core-shell Nanoparticles. *ACS Catal.* 2017, 7, 1583
7. Y. Xu*, M. Liu, M. Faisal, Y. Si, Y. Guo*, Selective protein complexation and coacervation by polyelectrolytes. *Adv. Coll. Interface Sci.* 2017, 239, 158. Invited Review
8. W. Wang, Y. Xu*, H. Han, S. Micciulla, S. Backes, A. Li, J. Xu, W. Shen, R. Klitzing,* X. Guo*, Odd-Even Effect during Layer-by-Layer Assembly of Polyelectrolytes Inspired by Marine Mussel, *J. Poly. Sci. B Poly. Phys.* 2017, 55, 245
9. X. Gao, M. Shao*, Y. Xu*, Y. Luo, K. Zhang, F. Ouyang, J. Li*, Non-selective Capturing of Bacterial Mixture with Magnetic Nanoparticles (Fe₃O₄) Facilitated by Varying Surface Charge, *Front. Microbiol.* 2016, 7, 1981.
10. X. Liu, D. Hu, Z. Jiang, J. Zhuang, Y. Xu*, X. Guo*, S. Thayumanavan*, Multi-Stimuli Responsive Amphiphilic Assemblies through Simple Post Polymerization Modification, *Macromolecules*, 2016, 49, 6186.