

Research Profile



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SUMMARY OF MY RELEVANT RESEARCH AREAS:

Organic polymeric nanoparticles for drug loading and delivery; fluorescent nanoparticles for imaging and theranostics; porous polymers for biomedical applications.

用于药物负载和递送的有机高分子纳米材料；用于成像和诊断治疗的荧光纳米颗粒；多孔聚合物在生物学上的应用。

Primary Research interests:

Nanomedicine: • synthesis of polymeric nanomedicines via self-assembly • organic nanoparticles from drug conjugates • prodrug from paclitaxel • cisplatin-based nanodrug • Polymeric micelles and polymeric drug conjugates

Fluorescent nanoparticles: • Organic fluorescent nanoparticles • carbon dots • BODIPY • cyanines • grapheme quantum dots

Porous polymers: metal-organic frameworks • covalent organic frameworks • cross-linked polymers • cages • organic crystals

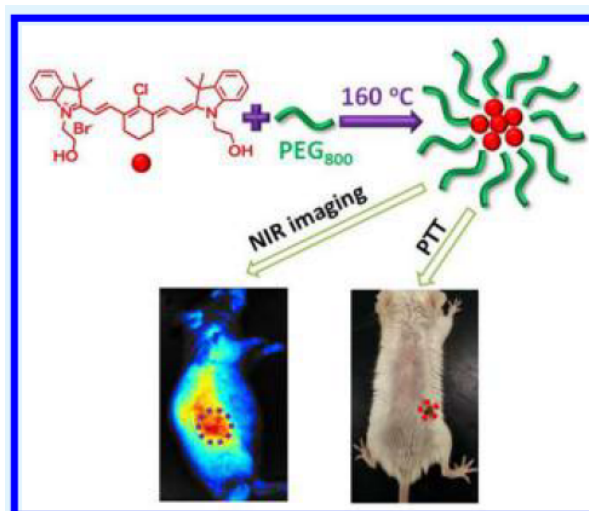
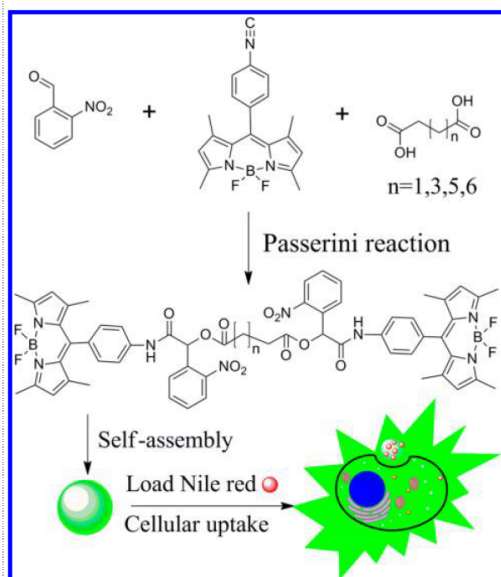
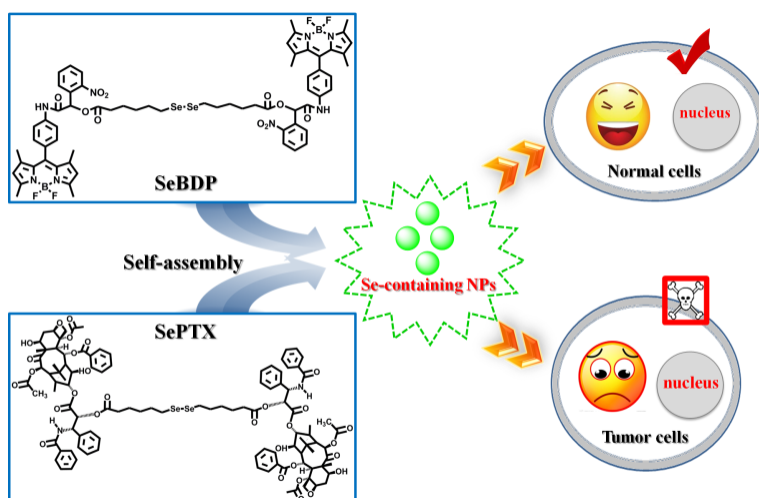
Topics in which you would like to develop collaborative research:

Fluorescent bioimaging agents selectively for tumor cells in vitro and in vivo.
Nanomedicines for translation.

Relevant existing collaborations (academic/clinical/commercial) inside or outside China.

None yet.

Relevant graphics, figures, pictures:



Publications and other outputs relevant to your interest in this programme (up to 5)

- [1] Wang W, Wang L, Li Y, Liu S, Xie Z, Jing X. Nanoscale Polymer Metal-Organic Framework Hybrids for Effective Photothermal Therapy of Colon Cancers. *Advanced Materials*. 2016; in press.
- [2] Zhang W, Lin W, Pei Q, Hu X, Xie Z, Jing X. Redox-Hypersensitive Organic Nanoparticles for Selective Treatment of Cancer Cells. *Chemistry of Materials*. 2016;28:4440-6.
- [3] Zheng M, Ruan S, Liu S, Sun T, Qu D, Zhao H, et al. Self-Targeting Fluorescent Carbon Dots for Diagnosis of Brain Cancer Cells. *ACS Nano*. 2015;9:11455-61.
- [4] Zheng M, Liu S, Li J, Qu D, Zhao H, Guan X, et al. Integrating oxaliplatin with highly luminescent carbon dots: an unprecedented theranostic agent for personalized medicine. *Advanced Materials*. 2014;26:3554-60.
- [5] Lin W, Sun T, Xie Z, Gu J, Jing X. A dual-responsive nanocapsule via disulfide-induced self-assembly for therapeutic agent delivery. *Chemical Science*. 2016;7:1846-52.