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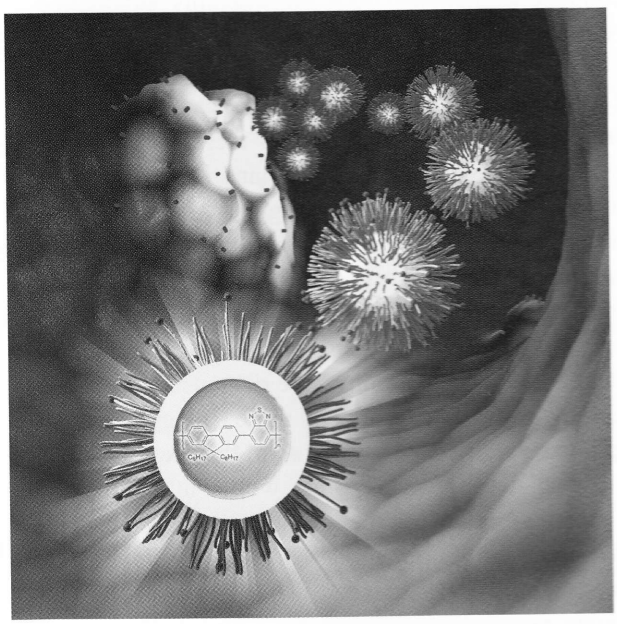
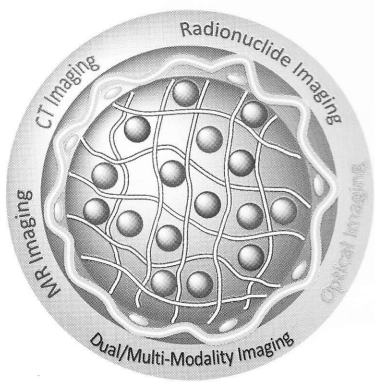
COVER PICTURE

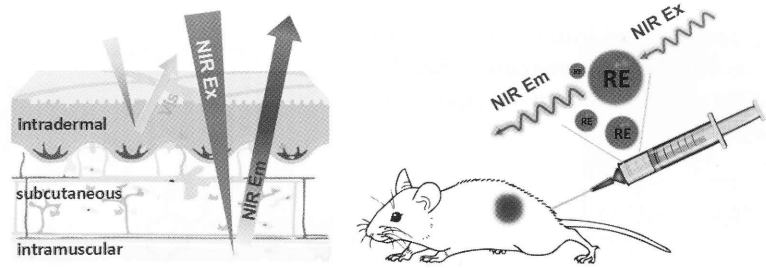


The cover picture shows folic acid functionalized fluorescent PFBT polymer dots for imaging tumor *in vivo*. We synthesized a homemade heptylamine modified folate (C_7-FA) as a target ligand for the folate receptor, and developed an economical, simple, and effective method to prepare C_7-FA functionalized PFBT fluorescent polymer dots, and demonstrated successful imaging of H1299 tumor in living mice by using these polymer dots. More details are discussed in the article by Xiong *et al*. on page 570—575.

REVIEWS

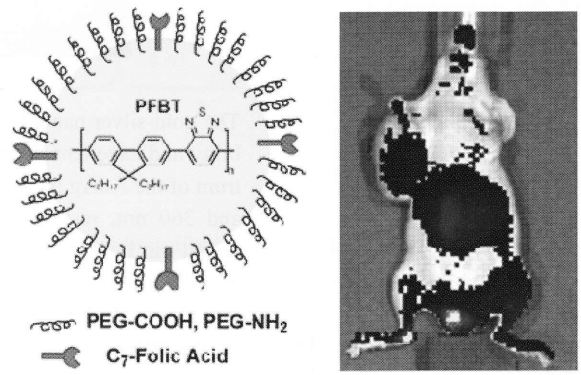


This review summarizes the synthesis routes and applications of nanogels as contrast agents for molecular imaging applications including magnetic resonance, computed tomography, radionuclide, optical, and dual/multi-modality imaging.



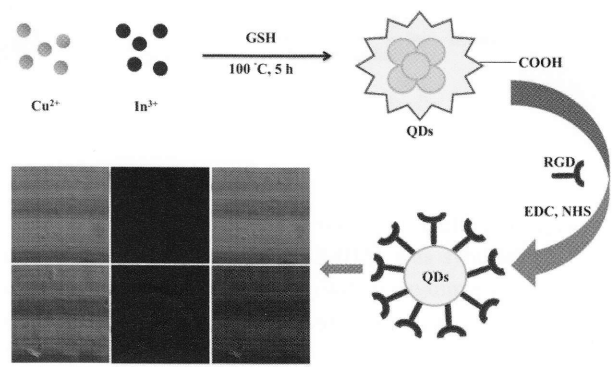
The past few years have witnessed the extensive utilization of fluorophores with either near infrared (NIR) excitation or NIR emission for biomedical imaging because NIR light possesses much deeper tissue penetration than visible light. Lanthanide-doped nanomaterials are among the most prominent NIR contrast agents due to their abundant 4f-4f intra-configurational transitions. Up till now, many kinds of lanthanide-doped nanoparticles with NIR-to-NIR luminescence have been rationally designed, and their applications in bioimaging have been systematically investigated with encouraging achievements made. In this review, we summarize the most recent development of bioimaging based on NIR-to-NIR lanthanide-doped nanoparticles. The NIR-to-NIR luminescence mechanisms, the methods for enhancement of NIR-to-NIR luminescence, the instrumentation, the imaging modes and the challenges in NIR-to-NIR bioimaging are all discussed in this review.

COMMUNICATION



Folic acid functionalized PFBT polymer dots were prepared using a nanoprecipitation method and their applications for *in vivo* tumor imaging were demonstrated.

FULL PAPERS



A facile one-pot method was developed for preparing hydrophilic NIR $CuInS_2$ QDs, which were further bioconjugated with RGD for target cell imaging.

CONTENT

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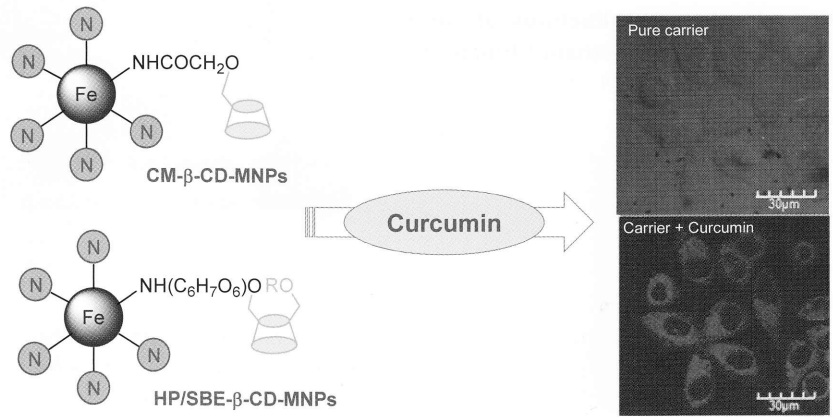
β-Cyclodextrin and Its Derivatives Functionalized Magnetic Nanoparticles for Targeting Delivery of Curcumin and Cell Imaging



Yehong Zhou, Congli Wang, Fei Wang, Chenzhong Li, Chuan Dong, Shaomin Shuang*

The experiments revealed derivative β-CD-MNPs possessing the loading and release capacity. Cellular imaging suggested that curcumin was able to be successfully delivered into the cell by derivative β-CD-MNPs nanocarrier. The as-prepared magnetic composites were expected to have their potential applications in biomedical field.

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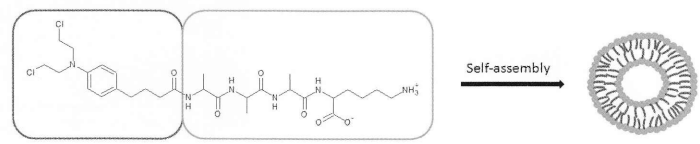
Improvement of Stability and Anticancer Activity of Chlorambucil-Tetrapeptide Conjugate Vesicles



Wei Zhang, Wenjun Zhu, Ruiyu He, Shuo Fang, Yemin Zhang, Chen Yao, Muhammad Ismail, Xinsong Li*

Formation of vesicles by self-assembly of chlorambucil-tetrapeptide conjugate.

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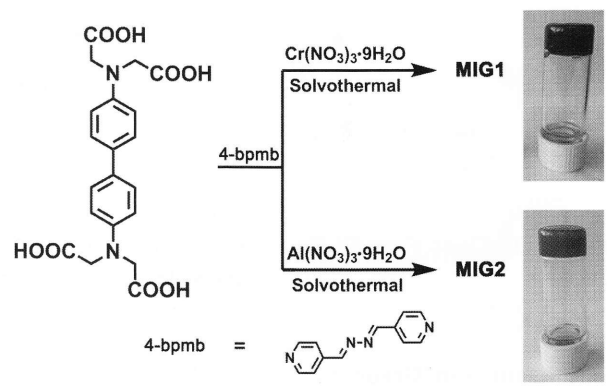
Synthesis of Highly Stable Porous Metal-Iminodiacetic Acid Gels from a Novel IDA Compound



Wenjing Chen, Yanhong Jiang, Xuesong Ding,* Chaoguo Yan,* Baohang Han*

A novel and simple flexible aromatic multi-carboxylate compound *N*,*N*′-(4,4'-biphenylyl) iminodiacetic acid (BP-IDA) was synthesized, with which two new stable metal-IDA gels (MIG1 and MIG2) with three-dimensional network structures have been prepared successfully by employing Cr^{3+} and Al^{3+} as the metal ions, respectively. Owing to easy preparation, good stability, and three-dimensional network structure, the as-prepared metal-organic gels will possess potential applications in separation, catalysis, and drug delivery.

CONTENT

