عنوان مقاله:

Gadolinium-Based Nanoparticles as multimodal imaging in early diagnostic Breast cancer

محل انتشار:

دومین کنفرانس بین المللی فناوری های نوین در علوم (سال: 1397)

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خلاصه مقاله:

Ordered silica nanoparticles are compounds highly organized which have very interesting textural characteristics, such as high thermal stability, well defined pore size, narrow size distribution and high area surface. Spherical morphology, which make it in a promising material for a range of bio applications such as incorporation of radioisotopes. In this study, we used the Gd-based radiolabeled nanoparticles. After intravenous injection into Mouse 4T1 breast tumors model some nanoparticles remained inside the tumor cells for more than 24 hours, indicating that a single administration of nanoparticles might be sufficient for several irradiations. Combining fluorescence and magnetons with radiation increases tumor cell diagnoses, and improves the life spans and the planning of the therapy of animals bearing breast cancer.

کلمات کلیدی:

Gadolinium-Based nanoparticles, high fluorescence quantum yield, molecular imaging

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