

### عنوان مقاله:

Fabrication of Multilayered Au/Silica/Gadolinium Compound/Silica Core-Shell Particles

## محل انتشار:

اولين كنفرانس بين المللي مواد پيشرفته (سال: 1391)

تعداد صفحات اصل مقاله: 6

## نویسندگان:

Y Kobayashi - Department of Biomolecular Functional Engineering, College of Engineering, Ibaraki University

H. Inose - Department of Biomolecular Functional Engineering, College of Engineering, Ibaraki University

T. Nakagawa - Department of Biomolecular Functional Engineering, College of Engineering, Ibaraki University

K Gonda - Department of Biomolecular Functional Engineering, College of Engineering, Ibaraki University

#### خلاصه مقاله:

The present work proposes a preparation method for multilayered Au nanoparticle/silica/gadolinium compound/silica (Au/Si/Gd/Si) core-shell particles. Si-coated Au (Au/Si) core-shell particles with a size of 47.3 nm were prepared by a sol-gel reaction in the presence of the Au nanoparticles with a size of 16.9 nm prepared through a citrate-reduction method. Multilayered Au/silica/gadolinium compound (Au/Si/Gd) core-shell particles with a size of 55.0 nm were prepared by a homogeneous precipitation reaction in the presence of the Au/Si particles. The Au/Si/Gd/Si particles with a size of submicron meter were fabricated by the sol-gel reaction in the presence of the Au/Si/Gd particles

# کلمات کلیدی:

Multilayer, Core-shell, Particle, Au, Silica, Gadolinium

لینک ثابت مقاله در پایگاه سیوپلیکا:

https://civilica.com/doc/151082

