

## عنوان مقاله:

Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub>@Polyionene/Arsenic acid core-shell-shell magnetic nanoparticles as a novel drug nanoparticle and its antibacterial effects

## محل انتشار:

سومین کنفرانس بین المللی دستاوردهای نوین پژوهشی در شیمی و مهندسی شیمی (سال: 1395)

تعداد صفحات اصل مقاله: 19

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## خلاصه مقاله:

new Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub>@Polyionene/Arsenic acid core-shell-shell magnetite nanoparticle was prepared with co-precipitation method and was used against gram positive and gram negative pathogen. The ionene was easily prepared with reacting DABCO and 1,4-dibromo butane in DMF/Methanol. The polyionene was added to the previous layers and magnetic core-shell nanoparticles (P-MNPs) were functionalized. All resulting nanoparticles were characterized by transmission electron microscopy (TEM), scanning electron microscopy (SEM), infrared spectroscopy (FTIR), and vibrating sample magnetometer (VSM). The catalyst was readily recovered by simple magnetic decantation and can be recycled several times with no significant loss of catalytic activity.

## کلمات کلیدی:

Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub>@Polyionene/arsenic acid, Magnetic core, Magnetic separation, Ionene, antibacterial

## لینک ثابت مقاله در پایگاه سیویلیکا:

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