

## عنوان مقاله:

Green and Facile synthesis of Fe<sub>3</sub>O<sub>4</sub>-MNPs using the Extract of Rhus coriaria and Evaluation of its Antibacterial Activity

## محل انتشار:

اولین کنگره بین المللی شیمی و نانو شیمی از پژوهش تا فناوری (سال: 1397)

تعداد صفحات اصل مقاله: 5

## نویسندگان:

Elham Hosseinian - Department of Chemistry, Ardabil Branch, Islamic Azad University, Ardabil, Iran

Elham Ezzatzadeh - Department of Chemistry, Ardabil Branch, Islamic Azad University, Ardabil, Iran

Ali Sadeghian Maryan - Department of Chemistry, Ardabil Branch, Islamic Azad University, Ardabil, Iran

## خلاصه مقاله:

In this study, iron oxide magnetic nanoparticles (Fe<sub>3</sub>O<sub>4</sub>-MNPs), were synthesized using the Rhus coriaria fruit extract as a reducing and capping agent. The successful formation of iron nanoparticles has been confirmed by UV-Vis spectroscopy, Fourier transform infrared spectroscopy (FTIR), X-ray diffraction and FE-SEM analysis. The images of scanning electron microscopy show Fe<sub>3</sub>O<sub>4</sub>-MNPs production which are 12 nm and spherical. The antibacterial activity of the synthesized Fe<sub>3</sub>O<sub>4</sub>-MNPs were confirmed against Escherchia coli and Staphylococcus aureus

## کلمات کلیدی:

Green synthesis, Rhus coriaria, Fe<sub>3</sub>O<sub>4</sub> -MNPs

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/814412>

