

### عنوان مقاله:

Green synthesis of 1, 3-oxazole derivatives using Fe<sub>3</sub>O<sub>4</sub>-MNPs as efficient nanocatalyst

### محل انتشار:

دومین کنگره ملی شیمی و نانو شیمی از پژوهش تا فناوری (سال: 1398)

تعداد صفحات اصل مقاله: 7

### نویسنده:

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### خلاصه مقاله:

In this work 1,3-oxazoles were generated using multicomponent reaction of  $\alpha$ -bromo ketones, alkyl (aryl) isothiocyanates, sodium hydride and catalytic amount of Fe<sub>3</sub>O<sub>4</sub> MNPs in aquause media at ambient temperature in good yields. Also, Fe<sub>3</sub>O<sub>4</sub>-MNPs were generated using Orange peel water extract as green procedure that reduce the ferric chloride solution. The nanoparticles that is generated via biosynthesis method have potentially valuable in different purposes such as organic synthesis. Also, the antimicrobial activity of some synthesized compounds was studied employing the disk diffusion test on Gram-positive bacteria and Gram-negative bacteria. The results of disk diffusion test showed that compound 4a, 4b, 4d and 4f prevented the bacterial growth

### کلمات کلیدی:

oxazole, Orange peel extract, Fe<sub>3</sub>O<sub>4</sub>-MNPs, Alkyl (aryl) isothiocyanates, Alkyl bromides-1,3

### لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/969385>

