

عنوان مقاله:

Silver functionalized on hydroxyapatite-core-shell magnetic $\gamma\text{-Fe}_2\text{O}_3$: An environmentally and readily recyclable nanocatalyst for the one-pot synthesis of 14H-dibenzo[a,j]xanthenes derivatives

محل انتشار:

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خلاصه مقاله:

An efficient and simple procedure for the preparation of silver functionalized on hydroxyapatite-core-shell magnetic $\gamma\text{-Fe}_2\text{O}_3$ nanoparticles ($\gamma\text{-Fe}_2\text{O}_3\text{@HAp-Ag}$) as an environmentally efficient magnetically recoverable and reusable catalyst is described, and it is used for the one-pot synthesis of 14-aryl-14H-dibenzo[a,j]xanthenes via a cost-effective and atom-economical procedure from substituted benzaldehydes and β -naphthol under solvent-free conditions at 60 °C. The attractiveness of this protocol lies in its green approach in that the catalyst is easily recoverable using an external magnet, which makes the process economical.

کلمات کلیدی:

$\gamma\text{-Fe}_2\text{O}_3\text{@HAp-Ag}$ Lewis acidic catalyst 14-aryl-14Hdibenzo[a, j]xanthenes Reusable of catalyst

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