

عنوان مقاله:

A Magnetic Catalyst Based on Silver Nanoparticles Supported on Silica- Coated Ferrite for Oxidant-Free Alcohol Dehydrogenation

محل انتشار:

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خلاصه مقاله:

Silver (0) nanoparticles supported on silica-coated ferrite were synthesized to be used as an efficient and recyclable heterogeneous catalyst for oxidant-free dehydrogenation of alcohols to corresponding carbonyl compounds. The synthesized catalyst can be easily recovered and reused for 8 reaction cycles without considerable loss of activity. The facile recovery of the catalyst is carried out by applying an external magnet device. The catalyst was fully characterized by techniques of TEM, SEM, XRD, EDS, ICP-AES, and VSM.

کلمات کلیدی:

Magnetic nanoparticle, Silver nanoparticles, N-alkylation of amines, Green chemistry, Alcohols

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