

عنوان مقاله:

Preparation of polyhydroquinolines in the presence of nano cerium (IV)oxide/zinc oxide as an efficient catalyst

محل انتشار:

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خلاصه مقاله:

Polyhydroquinolines are crucial compounds with a very wide range of biological functions such as vasodilation, anti-atherosclerosis, liver protection, and anti-diabetic. It is also used in the preparation of drugs such as nifedipine, nicardipine and Lacidipine. The common method of synthesis of polyhydroquinolines is one-step condensation reaction of Dimedone, aldehydes with ethyl acetate and ammonia in the presence of various catalysts such as MCM-۴۱, molecular iodine, bread yeast, etc. Most of these methods have disadvantages such as low gain, high reaction temperature, long time. In this research, cerium oxide / zinc oxide nanoparticles have been reported as a very effective and economical catalyst for the four-component and one-pot reactions of polyhydroquinolines using the .reaction of Dimedone, Aryl halide, ethyl acetoacetate and ammonium acetate

کلمات کلیدی:

Polyhydroquinolines, cerium oxide / zinc oxide, multi component, One-pot

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