

## عنوان مقاله:

Copper oxide nanoparticles catalyzed synthesis of 3-amido-alkyl-4-hydroxycoumarin derivatives

## محل انتشار:

اولین همایش ملی توسعه دانش بنیان صنایع نفت، گاز و پتروشیمی (سال: 1392)

تعداد صفحات اصل مقاله: 4

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## خلاصه مقاله:

Three-component reaction between 4-hydroxycoumarin, aromatic aldehydes and amides catalyzed by Copper oxide nanoparticles in solvent-free conditions provided a simple and efficient one-pot route for the synthesis of 3-amido-alkyl-4-hydroxycoumarin derivatives in excellent yields.

## کلمات کلیدی:

hydroxycoumarin, aromatic aldehydes, amides, CuO NP, 3-amido-alkyl-4-hydroxycoumarins-4

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/280144>

