

عنوان مقاله:

Three component one-pot synthesis of 4H-benzo-[b]-pyran derivatives using [(diacetoxyiodo)benzene] (DIB) as a hypervalent iodine catalyst

محل انتشار:

فصلنامه ارتباطات شیمی ایران، دوره 3، شماره 4 (سال: 1394)

تعداد صفحات اصل مقاله: 11

نویسندگان:

Amit S.Waghmare - *Post Graduate and Research Centre, Department of Chemistry, Padmashri Vikhe Patil College of Arts, Science and Commerce, Pravaranagar, 413713 Maharashtra, India*

Shivaji S.Pandit - *Post Graduate and Research Centre, Department of Chemistry, Padmashri Vikhe Patil College of Arts, Science and Commerce, Pravaranagar, 413713 Maharashtra, India*

خلاصه مقاله:

The three components one pot synthesis of 2-amino-4H-benzo-[b]-pyran derivatives were obtained in good to excellent yields within short reaction time via the condensation reaction of dimedone, aldehydes and malanonitrile or ethylcyanoacetate using the catalytic amount of [(diacetoxyiodo)benzene] (DIB) as hypervalent iodine in aqueous ethanol under reflux conditions have been discussed. This aqua mediated Knoevenagel-cyclocondensation of various aromatic and hetero-aromatic aldehydes along with the aldehydes like arylsulphonyloxybenzaldehyde, aryl-carbonyloxybenzaldehyde also leads to the product under the same reaction conditions. High yields, short reaction times, one pot condensation, operational simplicity, easy work-up, and purification of products by non-chromatographic methods are some additional features of the present protocol.

کلمات کلیدی:

4H-benzo-[b]-pyran; hypervalent iodine; aldehydes; dimedone; multi-component reaction; aqueous alcohol

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/753183>

