

عنوان مقاله:

Multicomponent reaction for the synthesis of 2,3-dihydroquinazolin-4(1H)-ones using isatoic anhydride, aldehydes and NH₄OAc under Solvent-free conditions

محل انتشار:

فصلنامه ارتباطات شیمی ایران، دوره 7، شماره 3 (سال: 1397)

تعداد صفحات اصل مقاله: 9

نویسنده:

Asadollah Hassankhani - *Department of New Materials, Institute of Science and High Technology and Environmental Sciences, Graduate University of Advanced Technology, PO Box ۷۶۳۱۵-۱۱۷, Kerman, Iran*

خلاصه مقاله:

Quinazolinone derivatives are nowadays well recognized as valuable scaffold in drug discovery. In this manuscript an improved multicomponent process for the chemical synthesis of 2,3-dihydroquinazolin-4(1H)-one derivatives is described. Isatoic anhydride and aromatic aldehydes with ammonium acetate have been subjected to a three-component reaction under solvent-free conditions and catalysis of SnCl₂ dihydrate at 110 °C. All of the products are known and were characterized using melting point, ¹HNMR and infrared spectra (FT-IR), and were compared with trusty references. The present methodology offers several advantages, such as cost efficiency, easy experimental workup procedure, mild reaction conditions, short reaction time, good to high yields and synthesis of wide range of products. Keywords: Isatoic anhydride; 2,3-dihydroquinazolin-4(1H)-one; SnCl₂.2H₂O; Solvent-free conditions

کلمات کلیدی:

Isatoic anhydride, 2,3-dihydroquinazolin-4(1H)-one, SnCl₂.2H₂O, solvent-free conditions

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/896903>

