عنوان مقاله:

A green synthesis of functionalized thiazol-2(3H)-imine via a three-component tandem reaction in ionic liquid media

محل انتشار:

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خلاصه مقاله:

In this research, an efficient synthesis toward 2-(2-((4-Methoxybenzoyl)imino)-4-(4-methoxyphenyl)thiazol-3(2H)-yl)-2-phenylacetic acid via a three-component tandem reaction using aroylisothiocyanate, phenyl glycine, and 4-methoxyphenacyl bromide in an ionic liquid (IL) has been described. 1-Methyl-3-pentylimidazolium bromide (IL) has been employed as a recyclable green solvent. The work-up procedure was fairly simple and the product did not require further purification. The influence of various reaction parameters such as solvent, temperature, and time was examined and among the various solvents such as ethanol, acetonitrile, n-hexane, water, and ionic liquid for synthesis of the final product, the best result was obtained in 1-methyl-3-pentylimidazolium bromide at 50oC for 1 hours.

کلمات کلیدی:

Thiazol-2(3H)-imine, α-bromoketone, ionic liquid, phenyl glycine, tandem reacrion, aroylisothiocyanate