

## عنوان مقاله:

One-pot multicomponent reaction for the synthesis of 2-amino-4- chromenes promoted by 1-methyl imidazoliumiodide [mim]Cl ionic- liquid catalyst under solvent-free conditions

## محل انتشار:

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## خلاصه مقاله:

A simple, clean, and environmentally benign three-component process for the synthesis of 2- amino-4Hchromenes using [mim]Cl, as an efficient catalyst under solvent-free conditions are described. A wide range of aromatic aldehydes would easily undergo condensations with 1- naphthol and malononitrile under solvent-free conditions in order to afford the desired products of good purity in excellent yields. Taking into account the environmental and economical considerations, the protocol presented here has the merits of environmentally benign, simple operation, convenient work-up and good yields. Furthermore, the catalyst can be easily recovered and reused for at least five .cycles without losing its activities

## کلمات کلیدی:

Chromene, multicomponent reactions, 1-methyl imidazoliumiodide [mim]Cl, solvent-free conditions

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/362053>

