



Polycyclic Aromatic Compounds


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Research Article

Research Articles

Microwave-Assisted Chemistry: New Synthetic Application for the Rapid Construction of 1*H*-Pyrazolo[1,2-*b*]Phthalazine-5,10-Dione Derivatives in Diisopropyl Ethyl Ammonium Acetate

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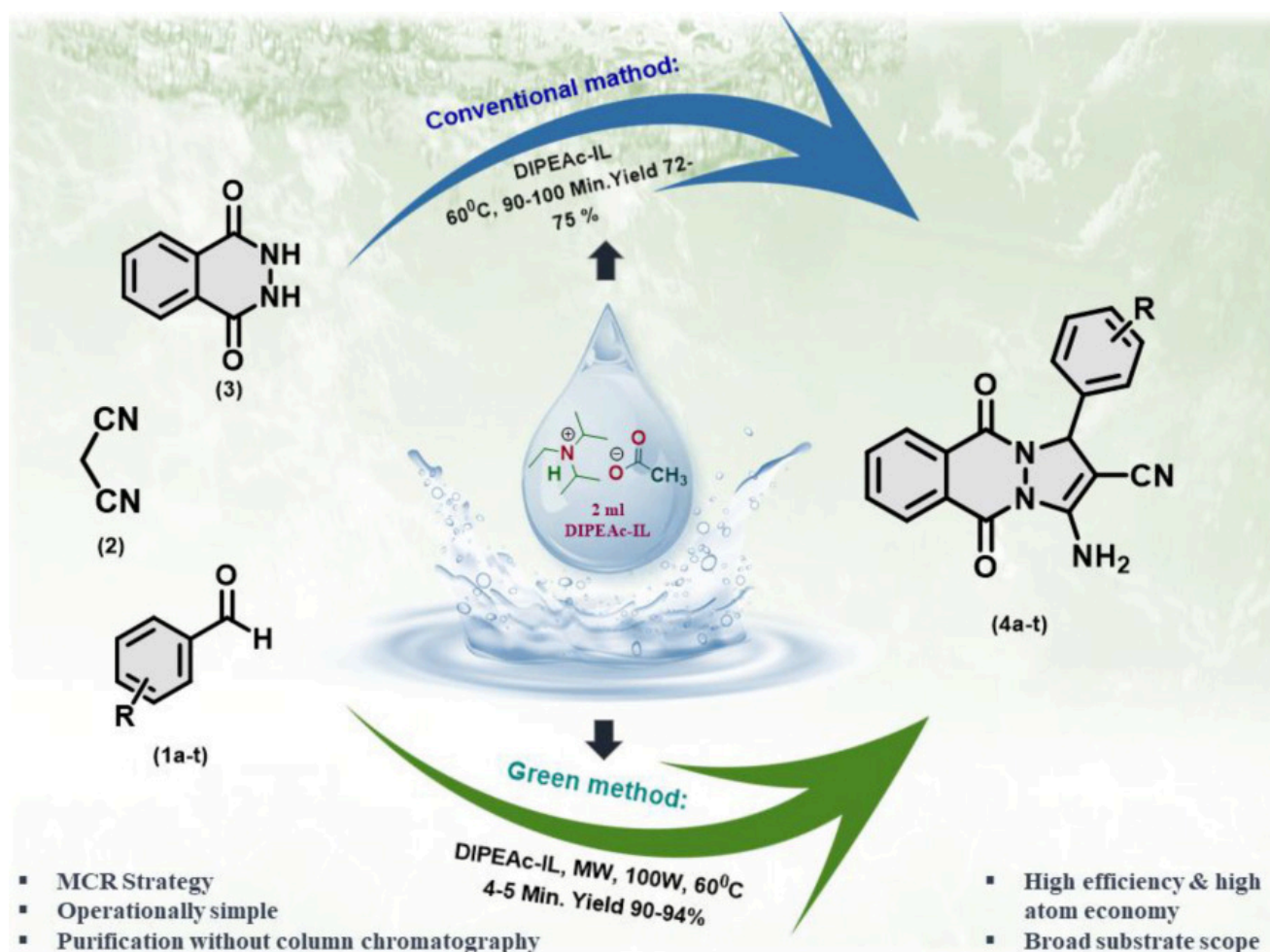
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Abstract

In the frame of research that examines the use of task-specific ionic liquids (ILs) for developing green methodologies toward bioactive substituted 1*H*-pyrazolo[1,2-*b*]phthalazine-5,10-diones derivatives via one-pot condensation of aldehydes, malononitrile and phthalhydrazide presence of Diisopropyl Ethyl Ammonium Acetate (DIPEAc-IL) as catalyst under conventional reflux as well as microwave irradiation condition. providing the desired product in very satisfactory yields (up to 94%) and high purity after simple workup. The task-specific ILs were recycled and reused four times without a noticeable decrease in their catalytic activity. Mild conditions with excellent conversions and simple product isolation procedures are noteworthy advantages of this method. The recyclability of the ionic liquid makes this protocol environmentally benign.

Graphical Abstract



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Keywords

Multicomponent reaction; 1H-Pyrazolo[1,2-b]phthalazine-5,10-diones; DIPEAc; Ionic liquid; Microwave Assisted Synthesis

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