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Aerobic Oxidative Bromination of Arenes Using an Ionic Liquid as both the Catalyst and the Solvent

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ABSTRACT

A method for the bromination of alkoxy-substituted benzenes and naphthalines was developed by using the residual oxygen in the reaction tube as the oxidant, and [Bmim]NO_3 (1-butyl-3-methylimidazolium nitrate) ionic liquid as both the catalyst and the solvent. No other reagent apart from the ionic liquid and molecular bromine was used in the reactions, and basically all the bromine atoms in the bromine source were transferred to the bromination products, showing that the presented protocol is highly atom economic and practical.

Keywords:

Bromination

Arenes

Ionic liquid

Catalysis.

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