

## عنوان مقاله:

[BMIm]HSO<sub>4</sub> as a Green and Highly Efficient Catalyst for One-pot Synthesis of ۳-Substituted Indoles under  
Ultrasound Irradiation

## محل انتشار:

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## خلاصه مقاله:

A practical and green synthesis of ۳-substituted indoles is reported via three-component coupling reaction of indoles, aldehydes and N-methylaniline in the presence of the acidic ionic liquid ۱-butyl-۳-methylimidazolium hydrogen sulfate ([BMIm]HSO<sub>4</sub>) under ultrasound irradiation at room temperature. The significant features of this procedure are high yields of the products, simple work-up, operational simplicity and non-toxicity of the catalyst. Moreover, [BMIm]HSO<sub>4</sub> is successfully reused for four cycles without significant loss of activity. Keywords. Indoles, N-methylaniline, Aldehyde, Ionic liquid.

## کلمات کلیدی:

Indoles, N-methylaniline, Aldehyde, Ionic Liquid

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