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Graphene oxide: an efficient recyclable solid acid for the synthesis of bis(indolyl)methanes from aldehydes and indoles in water

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Abstract An efficient synthesis of bis(indolyl)methanes from aldehydes with indoles through graphene oxide -catalyzed Friedel-Crafts alkylation is developed. The reaction proceeds in water by using graphene oxide as the single catalyst to provide the desired products in good to excellent yields. Also, this methodology has a broad substrate scope, and is environment friendly and cost economic.

Key words graphene oxide, Bis(indolyl)methanes, Friedel-Crafts reaction, recyclable, water

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