

عنوان مقاله:

Characterization of Catalyst: Comparison of Brønsted and Lewis Acidic Power in Boron Sulfonic Acid as a Heterogeneous Catalyst in Green Synthesis of Quinoxaline Derivatives

محل انتشار:

نشریه متدهای شیمیایی، دوره 3، شماره 3 (سال: 1398)

تعداد صفحات اصل مقاله: 11

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خلاصه مقاله:

A simple, highly efficient and green procedure for the condensation of aryl and alkyl 1,2-diamines with α -diketones in the presence of catalytic amount of boron sulfonic acid (BSA) and silica trimethyl borate (STMB) and silica triisopropyl borate (STIPB), as two novel heterogeneous Lewis acid catalysts at room temperature, is described. In this method, we proved that the Brønsted acidic power of boron sulfonic acid (BSA) is more important than its Lewis acidity. Using this method, quinoxaline derivatives as biologically interesting compounds are produced in high to excellent yields.

کلمات کلیدی:

Quinoxaline, Boron Sulfonic Acid, Trimethyl borate, Triisopropyl borate, SBSA, STMB, STIPB

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