


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Sulfonic acid-functionalized silica: a remarkably efficient heterogeneous reusable catalyst for the one-pot synthesis of 1,4-dihydropyridines

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Abstract: An efficient one-pot method for the synthesis of 1,4-dihydropyridines from β -dicarbonyl compounds, aldehyde, and ammonium acetate is reported using sulfonic acid-functionalized silica at 90 °C under solvent-free conditions with good to excellent yields. The catalyst is easily prepared, stable (up to 300 °C), reusable, and efficiently used under reaction conditions.

Key Words: 1,4-Dihydropyridine, β -dicarbonyl compounds, solid acid, $\text{SiO}_2\text{-R-SO}_3\text{H}$, heterogeneous catalyst

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