

عنوان مقاله:

A green synthesis of isoquinolines using Ru(II)/peg-400 as homogeneous recyclable catalyst via C-H/N-N bond activation

محل انتشار:

نشریه آسیایی شیمی سبز، دوره 4، شماره 2 (سال: 1399)

تعداد صفحات اصل مقاله: 14

نویسندگان:

Shrinivas L. Nakkalwar - Department of Chemistry, L. B. S. Mahavidyalaya, Dharmabad, Dist. Nanded, MS, India

Hanmant M. Kasralikar - Department of Chemistry, Shri Muktanand Mahavidyalaya, Gangapur, Dist. Aurangabad MS, India

Nitish S. Kaminwar - Department of Chemistry, L. B. S. Mahavidyalaya, Dharmabad, Dist. Nanded, MS, India

Shivaji B. Patwari - Department of Chemistry, L. B. S. Mahavidyalaya, Dharmabad, Dist. Nanded, MS, India

خلاصه مقاله:

A novel and green synthesis of 1-phenyl isoquinoline derivatives has been developed using [Ru(p-cymene)Cl₂]₂, as a homogeneous recyclable catalyst, with Cu(OAc)₂ and AgSbF₆ as oxidant and additive respectively, in PEG-400 biodegradable and green solvent via C-H/N-N functionalization of 1-(diphenylmethylene) hydrazine and aryl substituted acetylene. This protocol gives a simple extraction procedure, biodegradable and green solvent, high atom economy, reusable catalytic system and wide substrate scope with high yield of the product for the synthesis of isoquinoline derivatives.

کلمات کلیدی:

Ru(II)/PEG-400, Green synthesis, Homogeneous catalyst, Biodegradable solvent

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1032141>

