Category

Polymer-Supported Synthesis

Key words

triazoles

hydroamination

gold nanoparticles

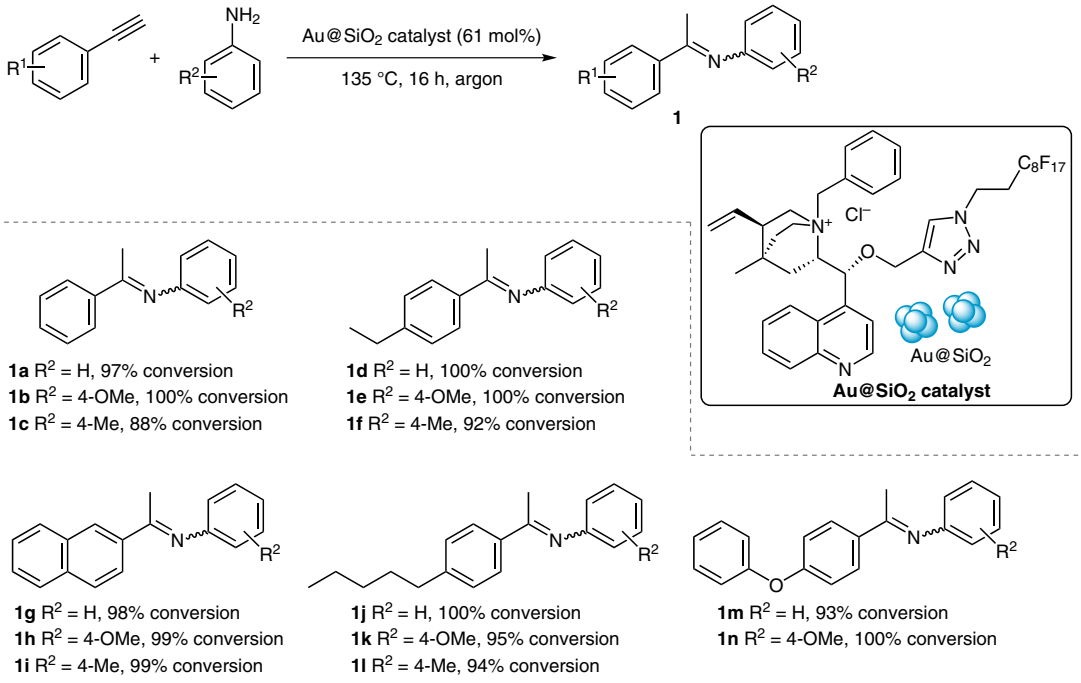
heterogeneous catalysis

V. A. SOLOVYEVA, K. B. VU, Z. MERICAN, R. SOUGRAT, V. O. RODIONOV* (KING ABDULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, THUWAL, KINGDOM OF SAUDI ARABIA)

One-Pot Synthesis of Au@SiO_2 Catalysts: A Click Chemistry Approach

ACS Comb. Sci. **2014**, *16*, 513–517.

Hydroamination of Alkynes Using Amphiphiles-Based Au@SiO_2



Significance: The porous Au@SiO_2 catalyst was prepared from a gold precursor and a TEOS solution in the presence of cinchonidine-based triazole amphiphiles. The hydroamination of alkynes was carried out with Au@SiO_2 to give the corresponding imine products **1a**–**n** in up to 99% conversion.

Comment: The turnover number of Au@SiO_2 was 1604 for the formation of **1b**. The catalyst was characterized by cryo-TEM, XPS, UV/Vis, zeta potential, and ICP-OES analyses.

SYNFACTS Contributors: Yasuhiro Uozumi, Yoichi M. A. Yamada, Heeyoel Baek
Synfacts 2015, 11(1), 0104 Published online: 15.12.2014
DOI: 10.1055/s-0034-1379718; **Reg-No.:** Y14814SF