Accepted Manuscript

Title: Highly efficient self-esterification of aliphatic alcohols using supported gold nanoparticles under mild conditions

Author: Fan Wang Qi Xiao Pengfei Han Sarina Sarina

Huaiyong Zhu

PII: \$1381-1169(16)30223-0

DOI: http://dx.doi.org/doi:10.1016/j.molcata.2016.06.010

Reference: MOLCAA 9916

To appear in: Journal of Molecular Catalysis A: Chemical

Received date: 6-5-2016 Revised date: 8-6-2016 Accepted date: 9-6-2016

Please cite this article as: Fan Wang, Qi Xiao, Pengfei Han, Sarina Sarina, Huaiyong Zhu, Highly efficient self-esterification of aliphatic alcohols using supported gold nanoparticles under mild conditions, Journal of Molecular Catalysis A: Chemical http://dx.doi.org/10.1016/j.molcata.2016.06.010

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Research highlights

- One-step self-esterification of primary alcohols using molecular oxygen as a green oxidant and supported gold nanoparticles as catalyst.
- Long aliphatic esters were prepared under mild conditions.
- A variety of aliphatic esters were obtained in high yields.
- A tentative mechanism for the reaction was proposed.
- Gold nanoparticles catalyst can be efficiently recycled and reused.

Download English Version:

https://daneshyari.com/en/article/64525

Download Persian Version:

https://daneshyari.com/article/64525

<u>Daneshyari.com</u>