

Accepted Manuscript

Title: A single source method to generate Ru-Ni-MgO catalysts for methane dry reforming and the kinetic effect of Ru on carbon deposition and gasification

Authors: Haibin Zhou, Tingting Zhang, Zhijun Sui, Yi-An Zhu, Chen Han, Kake Zhu, Xinggui Zhou



PII: S0926-3373(18)30310-2
DOI: <https://doi.org/10.1016/j.apcatb.2018.03.103>
Reference: APCATB 16561

To appear in: *Applied Catalysis B: Environmental*

Received date: 31-1-2018
Revised date: 26-3-2018
Accepted date: 28-3-2018

Please cite this article as: Zhou H, Zhang T, Sui Z, Zhu Y-An, Han C, Zhu K, Zhou X, A single source method to generate Ru-Ni-MgO catalysts for methane dry reforming and the kinetic effect of Ru on carbon deposition and gasification, *Applied Catalysis B: Environmental* (2018), <https://doi.org/10.1016/j.apcatb.2018.03.103>

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.

A single source method to generate Ru-Ni-MgO catalysts for methane dry reforming and the kinetic effect of Ru on carbon deposition and gasification

Haibin Zhou, Tingting Zhang, Zhijun Sui, Yi-An Zhu, Chen Han, Kake Zhu*, Xinggui Zhou

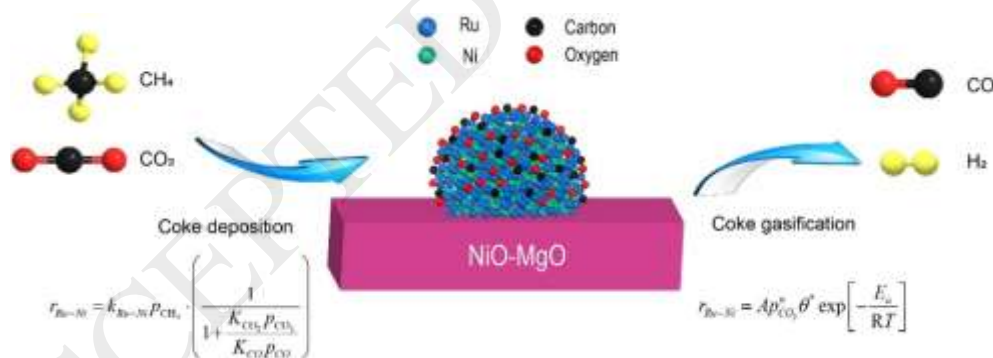
UNILAB, State Key Lab of Chemical Engineering, School of Chemical Engineering, East China University of

Science and Technology, 130 Meilong Road, Shanghai 200237, P. R. China

*Corresponding author. Tel: +86 21 64253509, Fax: +86 21 64253528.

E-mail address: kakezhu@ecust.edu.cn (Kake Zhu).

Graphical Abstract



Highlights

- A single source precursor to generate Ru-Ni-MgO catalyst is presented
- Ni rich Ru-Ni alloy is identified as carbon resistant catalyst in CH_4 - CO_2 reforming
- Ru slows down carbon deposition rate via elevating methane dissociation barrier

Download English Version:

<https://daneshyari.com/en/article/6498334>

Download Persian Version:

<https://daneshyari.com/article/6498334>

[Daneshyari.com](https://daneshyari.com)