Accepted Manuscript

Title: Mid-temperature Deep Removal of Hydrogen Sulfide on Rare Earth (RE = Ce, La, Sm, Gd) Doped ZnO Supported on KIT-6: Effect of RE Dopants and Interaction between Active Phase and Support Matrix

Authors: Lu Li, Pin Zhou, Hongbo Zhang, Xianglong Meng,

Juexiu Li, Tonghua Sun

PII: S0169-4332(17)30141-1

DOI: http://dx.doi.org/doi:10.1016/j.apsusc.2017.01.128

Reference: APSUSC 34923

To appear in: APSUSC

Received date: 3-11-2016 Revised date: 28-12-2016 Accepted date: 13-1-2017

Please cite this article as: Lu Li, Pin Zhou, Hongbo Zhang, Xianglong Meng, Juexiu Li, Tonghua Sun, Mid-temperature Deep Removal of Hydrogen Sulfide on Rare Earth (RE=Ce, La, Sm, Gd) Doped ZnO Supported on KIT-6: Effect of RE Dopants and Interaction between Active Phase and Support Matrix, Applied Surface Science http://dx.doi.org/10.1016/j.apsusc.2017.01.128

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

Highlights

- Various rare earth (RE)-doped ZnO/KIT-6 sorbents were prepared via sol-gel method.
- La showed the highest efficiency on promoting ZnO/KIT-6 desulfurization activity.
- The morphology of ZnO on KIT-6 played a crucial role for the reactivity.
- The most initial factor of improving reactivity by RE was surface chemical property.
- Crystallinity, host-guest interaction were also important to ZnO state on support.

Download English Version:

https://daneshyari.com/en/article/5351442

Download Persian Version:

https://daneshyari.com/article/5351442

<u>Daneshyari.com</u>