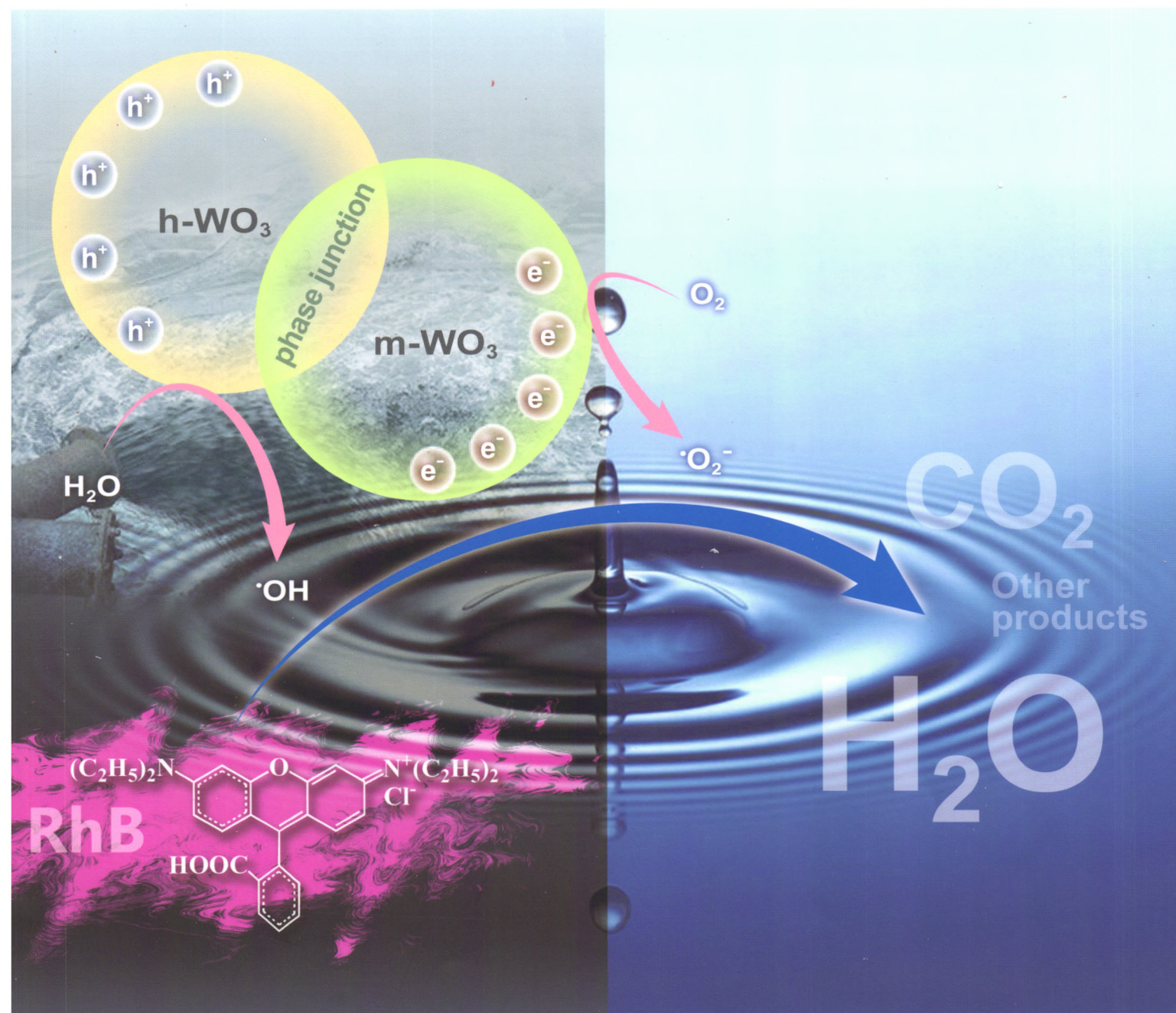




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万方数据



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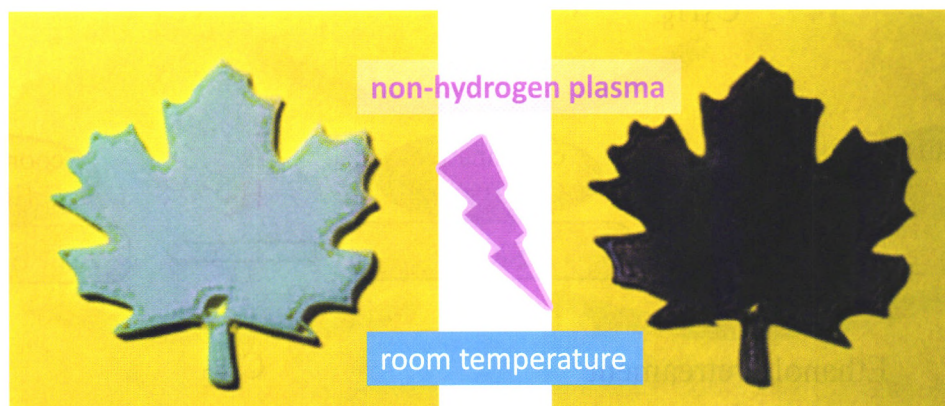
Chin. J. Catal., 2016, 37: 325–339 doi: 10.1016/S1872-2067(15)61031-2**Methanol-to-propylene process: Perspective of the most important catalysts and their behavior**

M. Khanmohammadi*, Sh. Amani, A. Bagheri Garmarudi, A. Niaei
Imam Khomeini International University, Iran;
University of Tabriz, Iran

Various acidic catalysts, mostly zeolites, have been evaluated for methanol conversion to propylene. Zeolites-microporous crystalline aluminosilicates and their ZSM-5 forms are widely used in methanol-to-propylene (MTP) process because of their strong acid sites within uniform micropores as size and shape selective catalysts.

*Chin. J. Catal.*, 2016, 37: 340–348 doi: 10.1016/S1872-2067(15)61020-8**Plasma methods for preparing green catalysts: Current status and perspective**

Changjun Liu*, Minyue Li, Jiaqi Wang, Xintong Zhou, Qiuting Guo, Jinmao Yan, Yingzhi Li
Tianjin University



What will happen if you put a catalyst precursor in a neon tube? You will get a nice catalyst with the use of fewer chemicals and less energy.

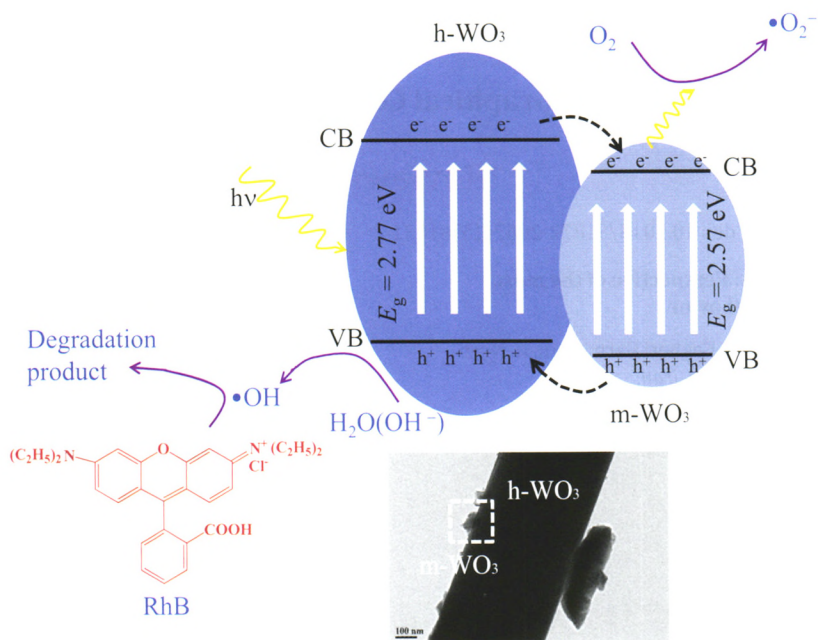
Articles

Chin. J. Catal., 2016, 37: 349–358 doi: 10.1016/S1872-2067(15)61023-3

Fabrication of a monoclinic/hexagonal junction in WO_3 and its enhanced photocatalytic degradation of rhodamine B

Yuanyuan Lu, Guo Liu, Jing Zhang*, Zhaochi Feng, Can Li, Zhi Li

Liaoning Shihua University; Dalian Institute of Chemical Physics, Chinese Academy of Sciences; Technical Institute of Physics and Chemistry, Chinese Academy of Sciences



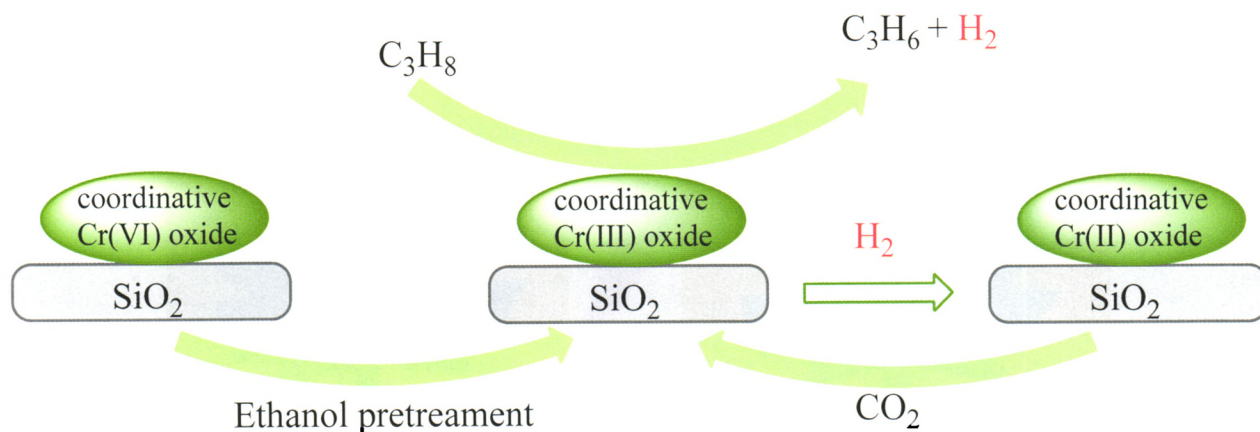
A monoclinic phase (m-WO_3)/hexagonal phase (h-WO_3) composite has been fabricated by tuning the calcination temperature and time in the thermal decomposition method. The $\text{m-WO}_3/\text{h-WO}_3$ phase junction demonstrates enhanced photocatalytic activity for RhB degradation.

Chin. J. Catal., 2016, 37: 359–366 doi: 10.1016/S1872-2067(15)61042-7

The effect of ethanol on the performance of $\text{CrO}_x/\text{SiO}_2$ catalysts during propane dehydrogenation

Lina Li, Wenliang Zhu, Lei Shi, Yong Liu, Hongchao Liu, Youming Ni, Shiping Liu, Hui Zhou, Zhongmin Liu*

Dalian Institute of Chemical Physics, Chinese Academy of Sciences; University of Chinese Academy of Sciences

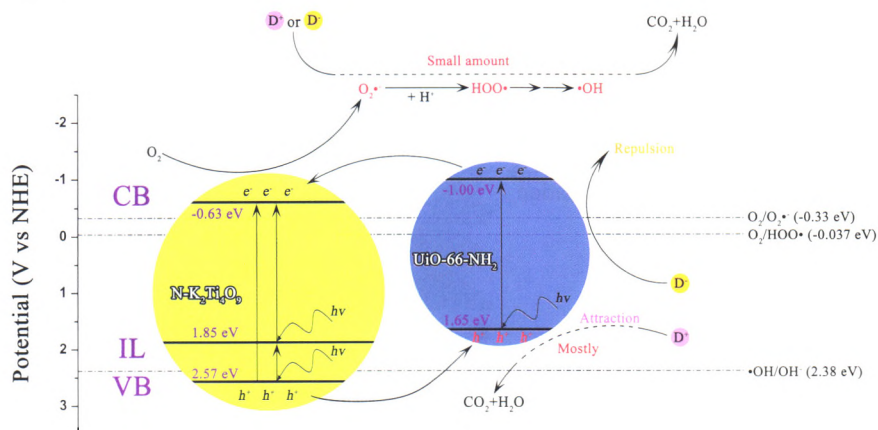


The coordinated Cr^{6+} was reduced to lower oxidation state of Cr by the ethanol vapor pretreatment, Cr^{3+} and Cr^{2+} of CrH-Et was easily regenerated to Cr^{6+} by CO_2 comparing with CrH , indicating that higher concentration of Cr^{6+} existed on CrH during the dehydrogenation reaction.

Chin. J. Catal., 2016, 37: 367–377 doi: 10.1016/S1872-2067(15)61033-6

Synergistic effects in N-K₂Ti₄O₉/UiO-66-NH₂ composites and their photocatalysis degradation of cationic dyes

Sunfeng Li, Xing Wang, Qinqin He, Qi Chen, Yanli Xu, Hanbiao Yang, Mengmeng Lü, Fengyu Wei*, Xueting Liu*
Hefei University of Technology



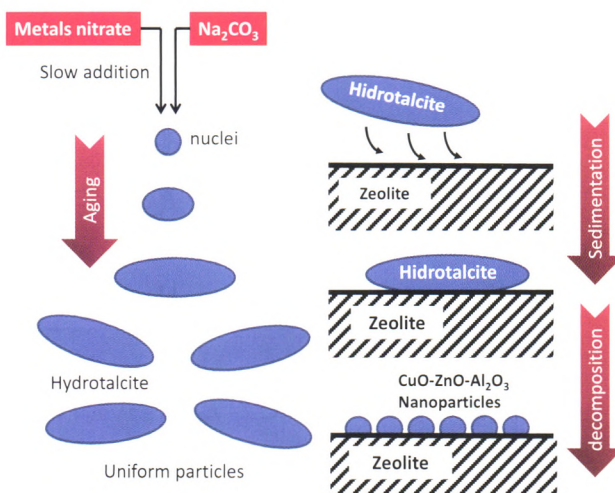
N-K₂Ti₄O₉/UiO-66-NH₂ composites exhibit a hierarchical core-shell structure. The composites show synergistically enhanced visible-light photocatalytic activity. The composites can photodegrade cationic dyes more effectively than anionic dyes.

Chin. J. Catal., 2016, 37: 378–388 doi: 10.1016/S1872-2067(15)61032-4

Effect of Cu-ZnO-Al₂O₃ supported on H-ferrierite on hydrocarbons formation from CO hydrogenation

J. H. Flores, M. E. H. Maia da Costa, M. I. Pais da Silva*
Pontifícia Universidade Católica, Brazil

Catalysts consisting of Cu/Zn/Al supported on H-ferrierite zeolite prepared by coprecipitation under low supersaturation conditions exhibit a greater degree of Cu species dispersion, well-dispersed particles and reduced blockage of the zeolite acid sites.

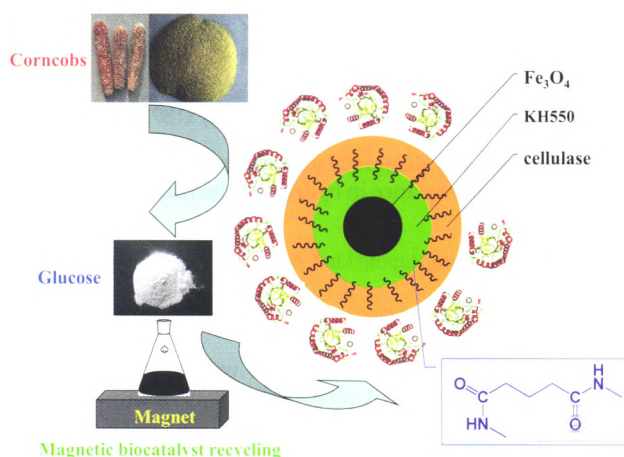


Chin. J. Catal., 2016, 37: 389–397 doi: 10.1016/S1872-2067(15)61028-2

Immobilized cellulase on Fe₃O₄ nanoparticles as a magnetically recoverable biocatalyst for the decomposition of corncob

Qikun Zhang*, Junqing Kang, Bing Yang, Leizhen Zhao, Zhaosheng Hou, Bo Tang
Shandong Normal University

A biocatalyst was successfully prepared through the immobilization of cellulase onto Fe₃O₄ nanoparticles and employed as a magnetically recoverable catalyst for the decomposition of corncob.

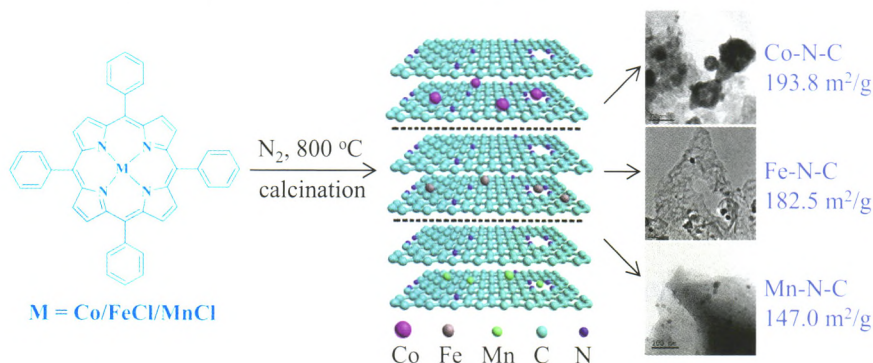


Chin. J. Catal., 2016, 37: 398–404 doi: 10.1016/S1872-2067(15)61029-4

Influence of the metal sites of M-N-C (M = Co, Fe, Mn) catalysts derived from metalloporphyrins in ethylbenzene oxidation

Lingling Fu, Yijuan Lu, Zhigang Liu*, Runliang Zhu

Hunan University; Guangzhou Institute of Geochemistry, Chinese Academy of Sciences



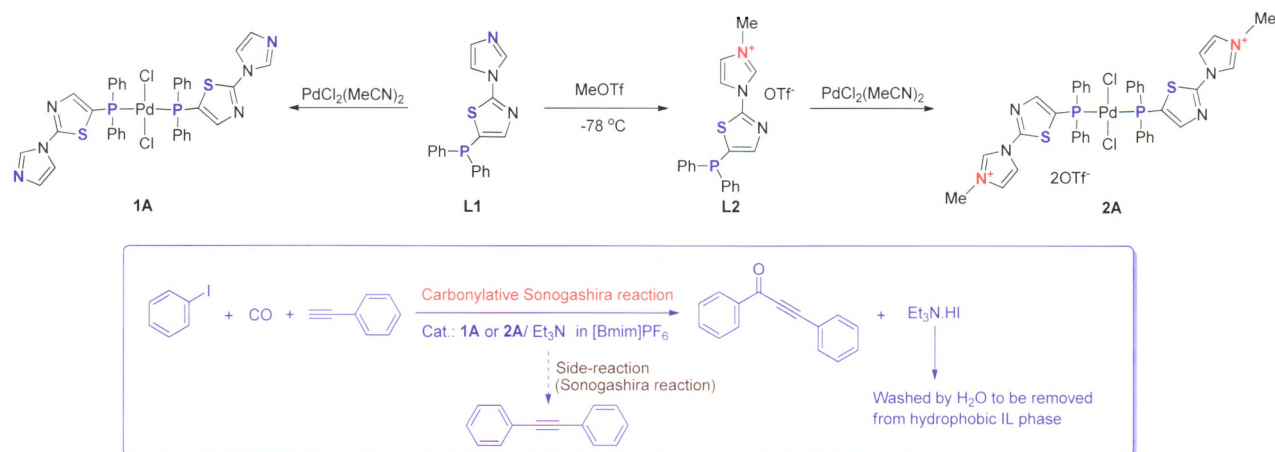
M-N-C (M = Co, Fe, Mn) catalysts synthesized by heating *meso*-tetraphenyl porphyrins (*i.e.* CoTPP, FeTPPCL, and MnTPPCL) have different calcination degree which was caused by the different catalytic activity of the metal sites during the heating of the metalloporphyrins.

Chin. J. Catal., 2016, 37: 405–411 doi: 10.1016/S1872-2067(15)61022-1

Ionic palladium complex as an efficient and recyclable catalyst for the carbonylative Sonogashira reaction

Da Yang, Dongliang Wang, Huan Liu, Xiaoli Zhao, Yong Lu, Shijun Lai*, Ye Liu*

East China Normal University



An ionic palladium complex was prepared through complexation of bis(acetonitrile)palladium(II) chloride with an ionic phosphine as an efficient and recyclable catalyst for the carbonylative Sonogashira reaction.

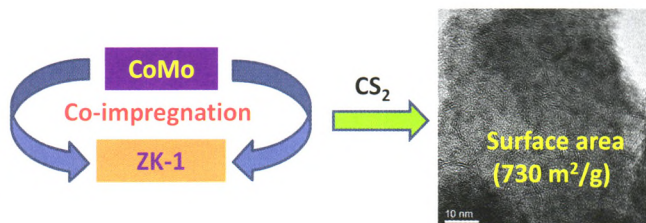
Chin. J. Catal., 2016, 37: 412–419 doi: 10.1016/S1872-2067(15)61017-8

Preparation of highly dispersed desulfurization catalysts and their catalytic performance in hydrodesulfurization of dibenzothiophene

Liang Hao, Guang Xiong, Liping Liu*, Huayun Long, Fengying Jin, Xiangsheng Wang

Dalian University of Technology

Micro-mesoporous ZK-1 molecular sieves were used as supports for HDS catalysts. CoMo/ZK-1 catalysts had high surface area and hierarchical porous structure. CoMo/ZK-1 had the highest catalytic activity in HDS of DBT.

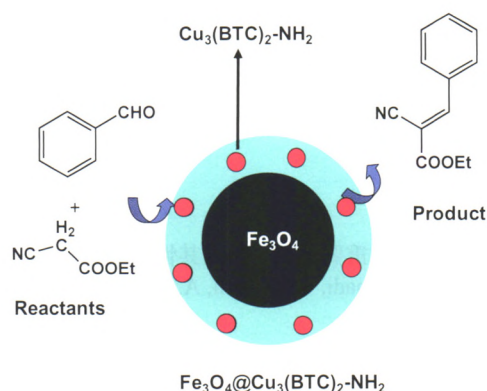


Chin. J. Catal., 2016, 37: 420–427 doi: 10.1016/S1872-2067(15)61013-0

Fabrication of amino-functionalized $\text{Fe}_3\text{O}_4@\text{Cu}_3(\text{BTC})_2$ for heterogeneous Knoevenagel condensation

Yanmei Zhang*, Jing Zhang*, Miaomiao Tian, Gang Chu, Chunshan Quan
Dalian Nationalities University;
Liaoning Shihua University

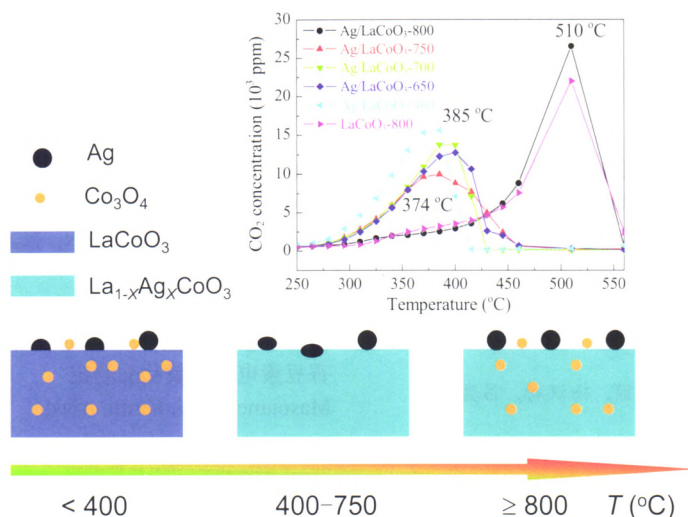
Amino-functionalized magnetic metal organic frameworks ($\text{Fe}_3\text{O}_4@\text{Cu}_3(\text{BTC})_2\text{-NH}_2$) were fabricated through a stepwise assembly method and used as an effective heterogeneous base catalyst in Knoevenagel condensation.



Chin. J. Catal., 2016, 37: 428–435 doi: 10.1016/S1872-2067(15)60516-0

Catalytic oxidation of diesel soot particulates over Ag/LaCoO_3 perovskite oxides in air and NO_x

Qi Fan, Shuai Zhang, Liying Sun, Xue Dong, Lancui Zhang, Wenjuan Shan*, Zaiming Zhu*
Liaoning Normal University

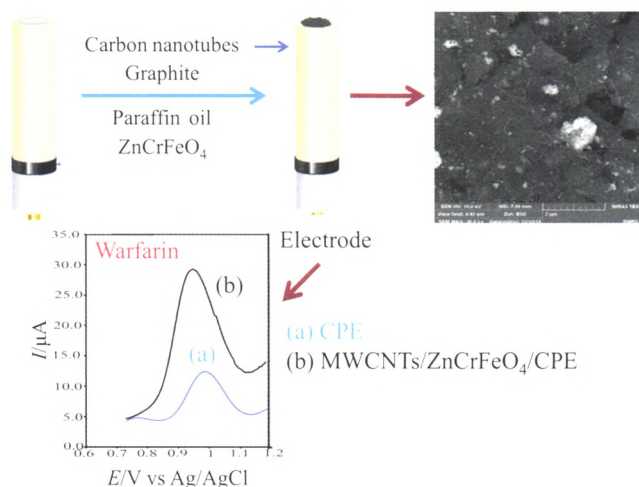


Ag migrated into lattice of LaCoO_3 perovskite to increase oxygen vacancy in the thermal treatment process. Ag/LaCoO_3 catalysts showed high catalytic activity for soot combustion in air and in NO_x .

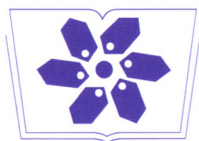
Chin. J. Catal., 2016, 37: 436–445 doi: 10.1016/S1872-2067(15)61039-7

New modified multiwalled carbon nanotubes paste electrode for electrocatalytic oxidation and determination of warfarin in biological and pharmaceutical samples

Masoumeh Taei*, Fardin Abedi
Payame Noor University, Iran



The modification of a carbon paste electrode with ZnCrFeO_4 nanoparticles and multiwalled carbon nanotubes was studied for electrocatalytic determination of warfarin in pharmaceutical and biological samples.



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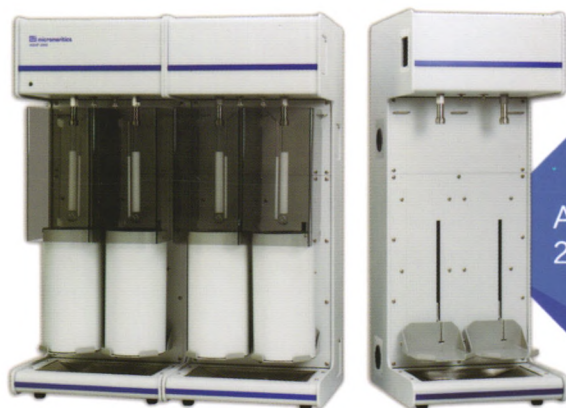
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