



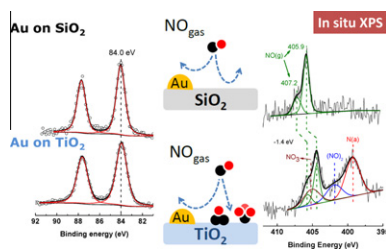
Journal of Catalysis Vol. 283, Issue 2, 2011

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In situ XPS study of the adsorption and reactions of NO and O₂ on gold nanoparticles deposited on TiO₂ and SiO₂

pp 119–123

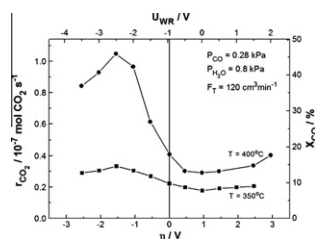
Tirma Herranz, Xingyi Deng, Andreu Cabot, Zhi Liu, Miquel Salmeron*



Electrochemical promotion of the water–gas shift reaction on Pt/YSZ

pp 124–132

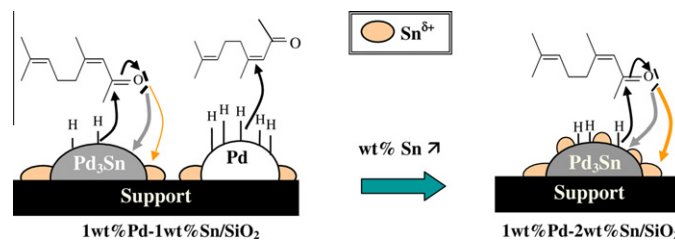
S. Souentie*, L. Lizarraga, A. Kambolis, M. Alves-Fortunato, J.L. Valverde, P. Vernoux



The relationship between the structural properties of bimetallic Pd–Sn/SiO₂ catalysts and their performance for selective citral hydrogenation

pp 133–142

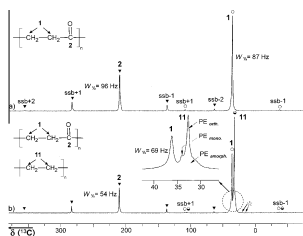
Aurélié Vicente, Gwendoline Lafaye, Catherine Especel*, Patrice Marécot, Christopher T. Williams

Schematic representation of the adsorption modes of citral molecule on Pd–Sn/SiO₂ bimetallic catalysts depending on the Sn content.

Nickel(II) catalysed co-polymerisation of CO and ethene: Formation of polyketone vs. polyethylene – The role of co-catalysts

pp 143–148

Udo Beckmann*, Eva Eichberger, Anna Ruffńska, Rafaël Sablong, Wolfgang Kläui

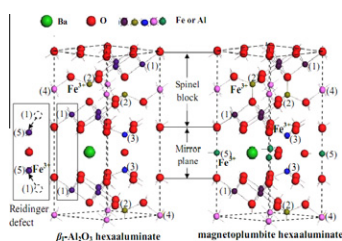


Nickel(II) catalysed co-polymerisation of CO and ethene leads to alternating polyketone or polyketone/polyethylene dependent on the co-catalyst used.

Identification of the chemical state of Fe in barium hexaaluminate using Rietveld refinement and ⁵⁷Fe Mössbauer spectroscopy

pp 149–160

Yanyan Zhu, Xiaodong Wang*, Aiqin Wang, Guotao Wu, Junhu Wang, Tao Zhang*

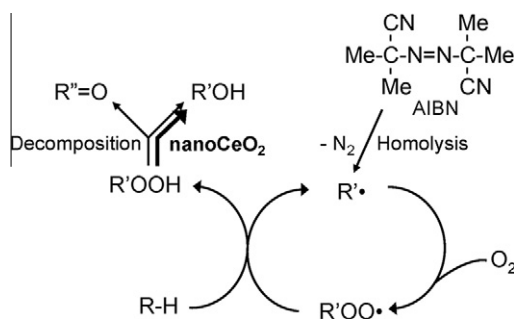


The stabilization of Fe³⁺ ions in iron-substituted β₁-Al₂O₃ and magnetoplumbite type barium hexaaluminates is discussed in relation to their activity in the decomposition of N₂O.

Low-temperature aerobic oxidation of decane using an oxygen-free radical initiator

pp 161–167

Rhys Lloyd, Robert L. Jenkins, Marco Piccinini, Qian He, Christopher J. Kiely, Albert F. Carley, Stanislaw E. Golunski, Donald Bethell, Jonathan K. Bartley, Graham J. Hutchings*

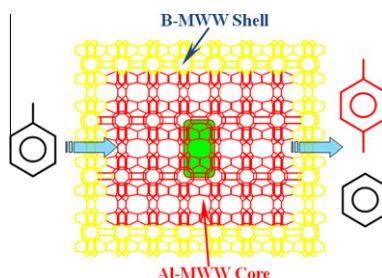


Decane can be selectively oxidised under mild reaction conditions.

Core/shell-structured Al-MWW@B-MWW zeolites for shape-selective toluene disproportionation to *para*-xylene

pp 168–177

Yong-Jun Ji, Bin Zhang, Le Xu, Haihong Wu*, Honggen Peng, Li Chen, Yueming Liu, Peng Wu*

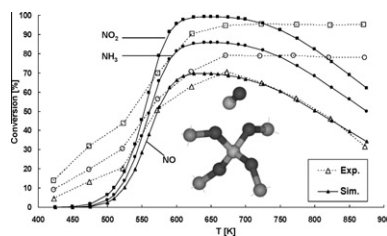


Core/shell-structured MWW-type zeolites prepared by isomorphic overgrowth of borosilicate on premade MCM-22 crystallites are highly shape-selective materials for the disproportionation of toluene as a result of suppressing the isomerization of *para*-xylene on the external surface of crystallites.

Microkinetic modeling of the fast selective catalytic reduction of nitrogen oxide with ammonia on H-ZSM5 based on first principles

pp 178–191

Till C. Brüggemann*, Dionisios G. Vlachos, Frerich J. Keil

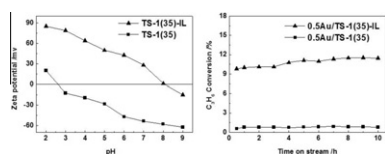


The fast selective catalytic reduction of NO_x with ammonia on H-ZSM5 was investigated using microkinetic modeling based on DFT results. The NO_x conversion proceeds via the formation of nitrosyl on the zeolite framework.

Ionic liquid-enhanced immobilization of biosynthesized Au nanoparticles on TS-1 toward efficient catalysts for propylene epoxidation

pp 192–201

Mingming Du, Guowu Zhan, Xin Yang, Huixuan Wang, Wenshuang Lin, Yao Zhou, Jing Zhu, Ling Lin, Jiale Huang*, Daohua Sun, Lishan Jia, Qingbiao Li*



Biosynthesized gold nanoparticles (GNPs) were immobilized onto TS-1 through 1-butyl-3-methylimidazolium tetrafluoroborate ($[\text{BMIM}][\text{BF}_4]$). $[\text{BMIM}]^+$ specially adsorbed onto the support to increase its isoelectric point, leading to the enhanced immobilization and high activity and stability for propylene epoxidation with H_2/O_2 mixture, probably attributing to enhanced interaction between the GNPs and TS-1 and the role of residual biomolecules in protecting the GNPs thereof.

Corrigendum to 'Nitrogen-doped titanium dioxide visible light photocatalyst: Spectroscopic identification of photoactive centers' [J. Catal. 276 (2010) 201–214]

p 202

Zizhong Zhang, Xuxu Wang, Jinlin Long*, Quan Gu, Zhengxin Ding, Xianzhi Fu*