

# Catalysis Science & Technology

A multidisciplinary journal focussing on all fundamental science and technological aspects of catalysis

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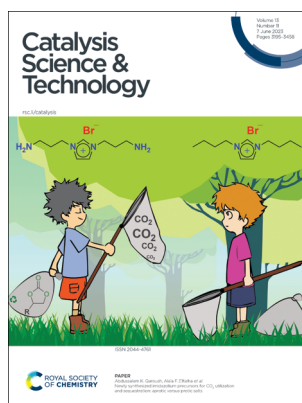
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See Robert A. Dagle *et al.*, pp. 3231–3244.  
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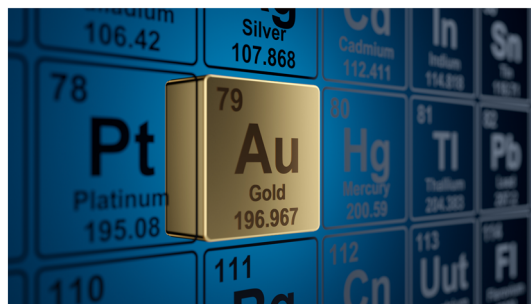
See Abdussalam K. Qaroush, Ala'a F. Eftaiha *et al.*, pp. 3245–3257.  
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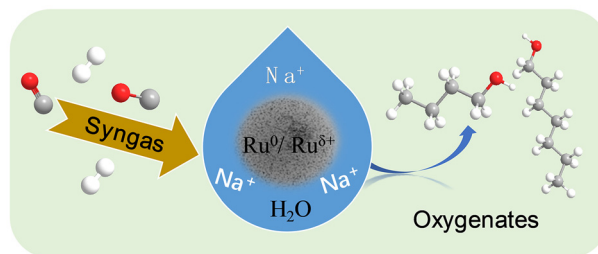


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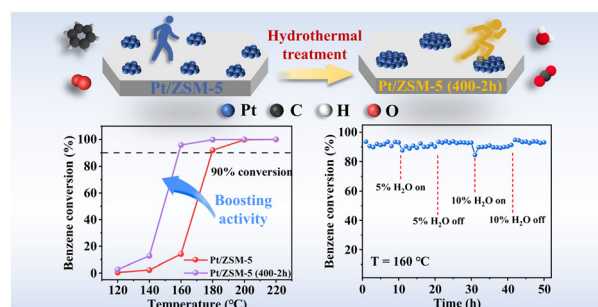


## COMMUNICATIONS

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### Hydrothermal treatment: an effective method to improve the catalytic activity of the Pt/ZSM-5 catalyst for complete benzene oxidation

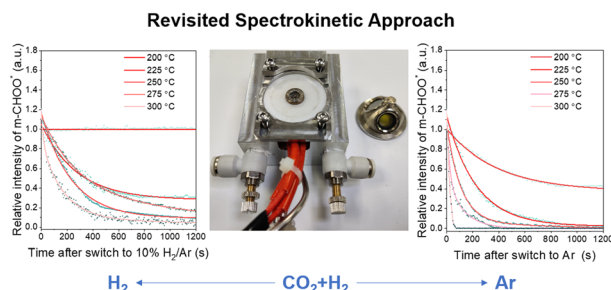
Yunchong Wang, Kaixuan Fu, Haolong Huang, Cangpeng Shan, Yanfei Zheng, Rui Han\* and Qingling Liu\*



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### Revealing the gas sensitive stability of formate species during CO<sub>2</sub> hydrogenation

Didi Li, Shiqing Jin, Zhen Wang, Zhaocong Jiang, Feng Xiong, Jianqiang Wang and Minghui Zhu\*

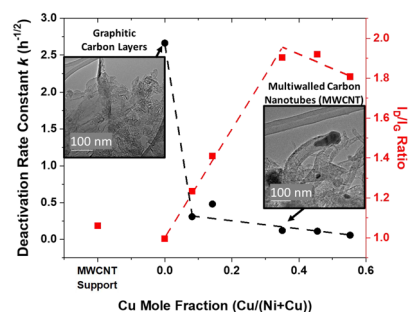


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### Promotional role of NiCu alloy in catalytic performance and carbon properties for CO<sub>2</sub>-free H<sub>2</sub> production from thermocatalytic decomposition of methane

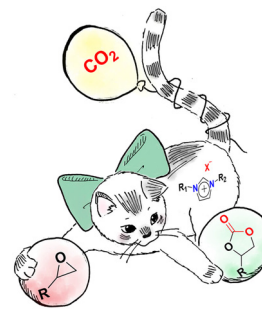
Mengze Xu, Juan A. Lopez-Ruiz, Nickolas W. Riedel, Robert S. Weber, Mark E. Bowden, Libor Kovarik, Changle Jiang, Jianli Hu and Robert A. Dagle\*



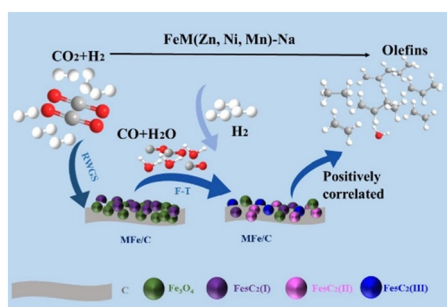
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### Newly synthesized imidazolium precursors for CO<sub>2</sub> utilization and sequestration: aprotic *versus* protic salts

Abdussalam K. Qaroush,\* Ala'a F. Eftaiha,\* Feda'a M. Al-Qaisi, Khaleel I. Assaf, Suhad B. Hammad, Malak H. Al-Anati, Enas S. Radwan and Firas F. Awwadi



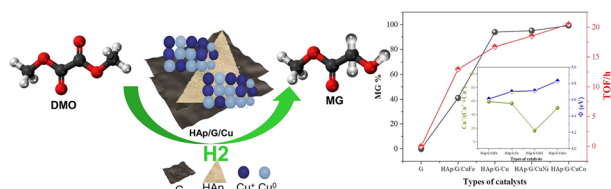
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### Topotactic transformation of metal-organic frameworks to iron-based catalysts for the direct hydrogenation of CO<sub>2</sub> to olefins

Qingqing Yang, Ruifeng Wang, Xiong Zhang, Shifu Wang, Qi Yu,\* Xiong Su,\* Xuning Li\* and Yanqiang Huang

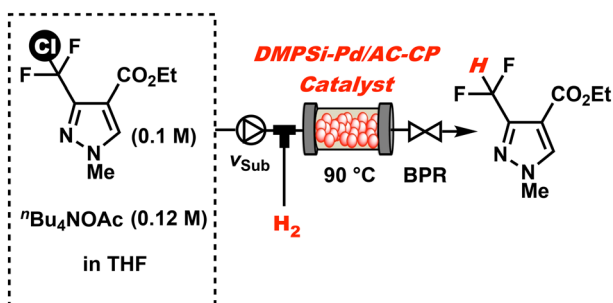
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### Rational design of hydroxyapatite/graphite-supported bimetallic Cu-M (M = Cu, Fe, Co, Ni) catalysts for enhancing the partial hydrogenation of dimethyl oxalate to methyl glycolate

Mohamed Abbas,\* JiaMing Wang, Paweł Stelmachowski, Jiangang Chen\* and Andrzej Kotarba

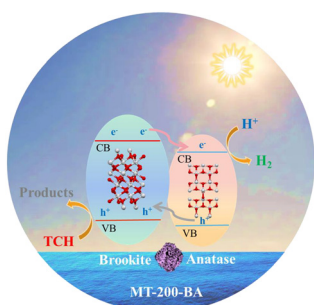
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### Catalytic hydrogenative dechlorination reaction for efficient synthesis of a key intermediate of SDHI fungicides under continuous-flow conditions

Haruro Ishitani,\* Tomoya Kawase, Amrita Das and Shū Kobayashi\*

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Weina Song, Yamin Liu, Yongli Dong,\* Xue Han, Mei Mu, Yan Chen, Wenyan Wang, Pei Wang and Wei Li\*

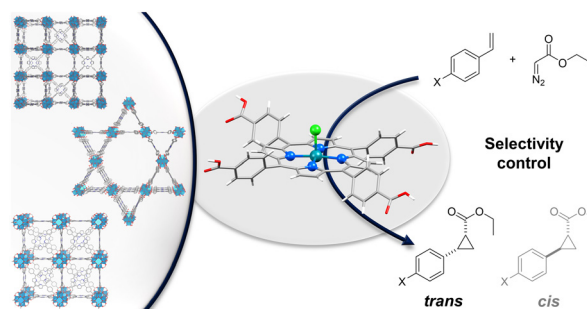


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## Stereo-controlled cyclopropanation catalysis within the confined pores of porphyrin MOFs

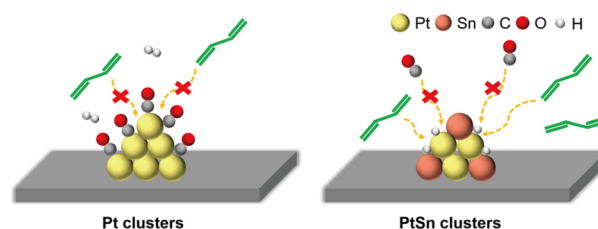
Karina Hemmer, Raphael Bühler, Martin Elsner, Mirza Cokoja\* and Roland A. Fischer\*



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## Insights into the electronic modulation of bimetallic Pt–Sn cluster for the selective hydrogenation of 1,3-butadiene

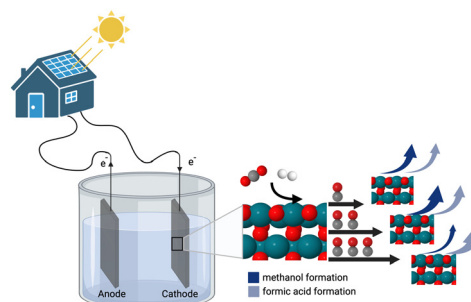
Nengfeng Gong, Huizi He, Hongliu Wan,\* Huaming Hou, Ziyu Zhou, Yibo Yang, Gaolei Qin, Anping Yin, Yuhang Cai, Xiaodong Sun,\* Yongwang Li and Zhi Cao\*



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Electrochemical CO<sub>2</sub> reduction towards formic acid and methanol on transition metal oxide surfaces as a function of CO coverage

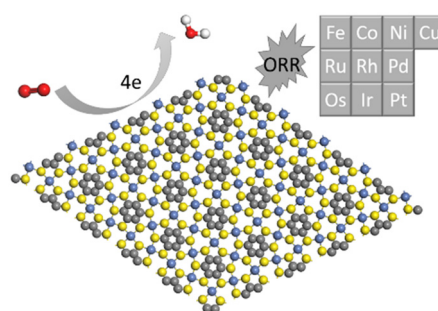
Narges Atrak, Ebrahim Tayyebi and Egill Skúlason\*



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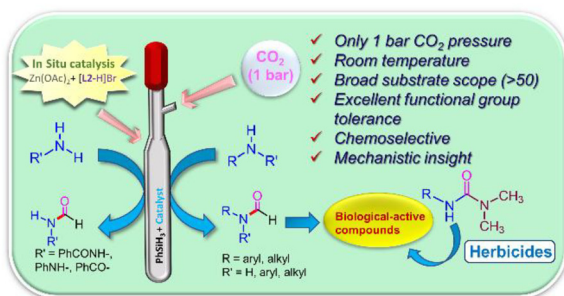
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Shuya Wei, Xiaocheng Zhou,\* Yu Wang and Yafei Li\*





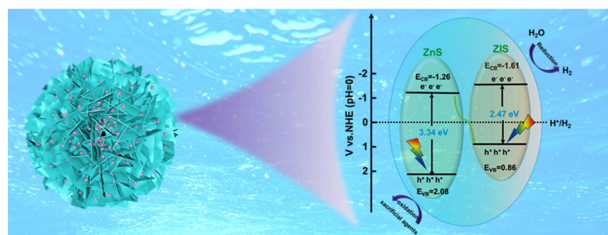
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Sangita Sahoo, Subarna Manna and Arnab Rit\*

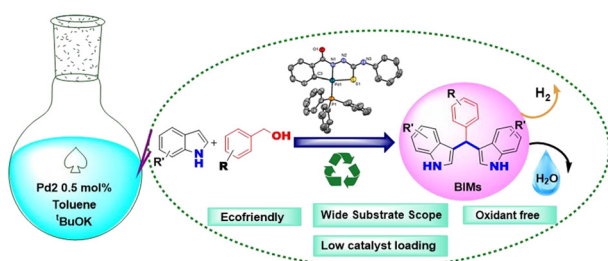
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Shuaishuai Liu, Yuchen Mao, Zhiyuan Su, Fan Fang, Kun Li, Yuhuan Wu, Puyu Liu, Peng Li\* and Kun Chang\*

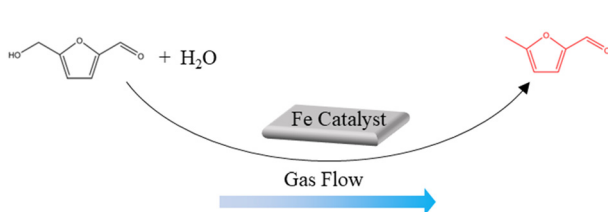
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Savarimuthu Selvan Clinton, Rengan Ramesh\* and Jan Grzegorz Malecki

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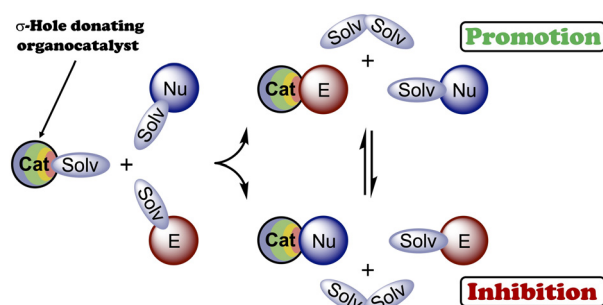
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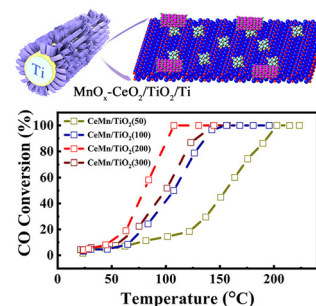
Alexandra A. Sysoeva, Alexander S. Novikov, Mikhail V. Il'in and Dmitrii S. Bolotin\*



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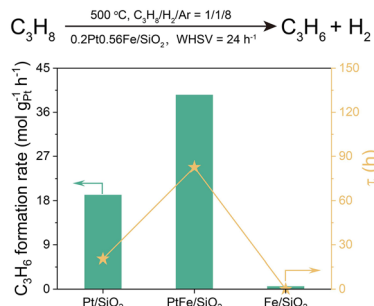
Junchao Wang, Xinyue Tang, Jing Li, Shizhi Dong, Xinglai Zhang and Baodan Liu\*



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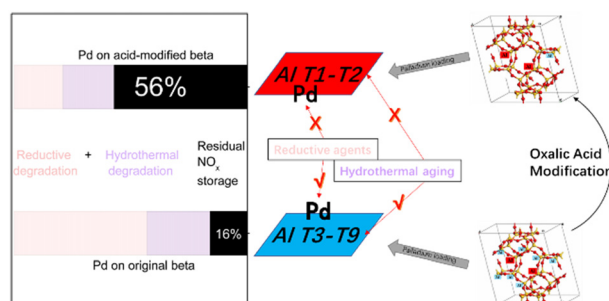
Lei Luo, Zekun Zeng, Tao Zhou, Jun Luo, Xiaoheng Chen, Xu Li,\* Han Yan\* and Jie Zeng



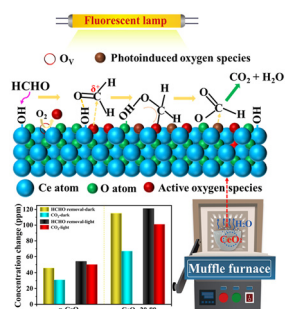
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### Ultra-stable Pd ions at Al T1/T2 sites on a dealuminated Pd/beta passive NO<sub>x</sub> adsorber

Yi Zhu, Jun Wang, Chen Wang, Jianqiang Wang, Gurong Shen\* and Meiqing Shen\*



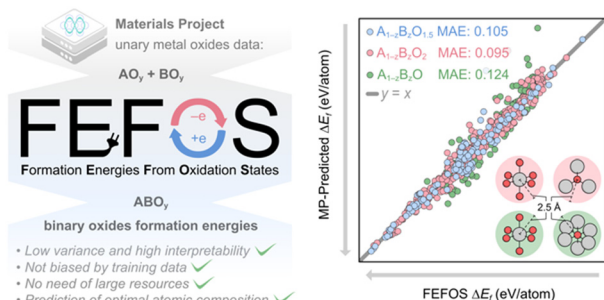
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Meng Zhang, Jiaqi Chen, Zhihua Xu,\* Yingjie Ding, Zhaoxiong Yan,\* Lin Yue and Ling Shi

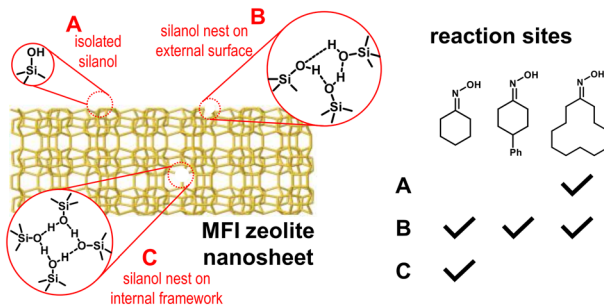
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## FEFOS: a method to derive oxide formation energies from oxidation states

Michael John Craig,\* Felix Kleuker, Michal Bajdich\* and Max García-Melchor\*

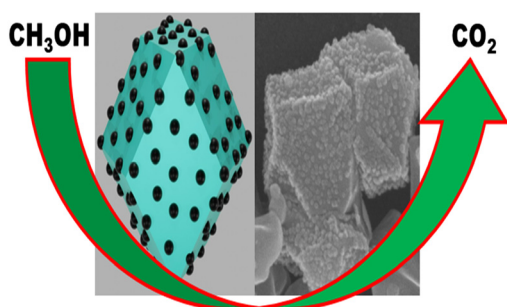
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Hanyoung Park, Jisuk Bang, Hongjun Park, Jaeheon Kim, Jeong-Chul Kim, Jeong Young Park\* and Ryong Ryoo\*

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T. V. M. Sreekanth, K. Prasad, J. Yoo,\* J. Kim\* and K. Yoo\*

