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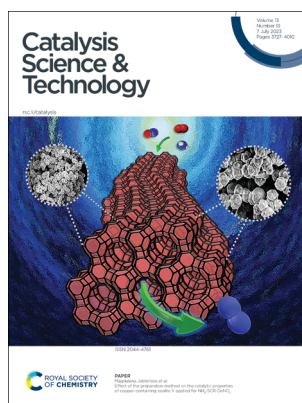
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EDITORIAL

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Introduction to Plastic Conversion

Ina Vollmer,* Haritz Sardon, George W. Huber
and Zhibo Li

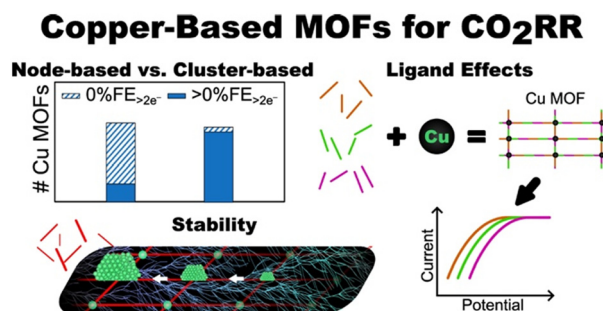


PERSPECTIVE

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Copper-based metal–organic frameworks for CO₂ reduction: selectivity trends, design paradigms, and perspectives

Ugochukwu Nwosu and Samira Siahrostami*



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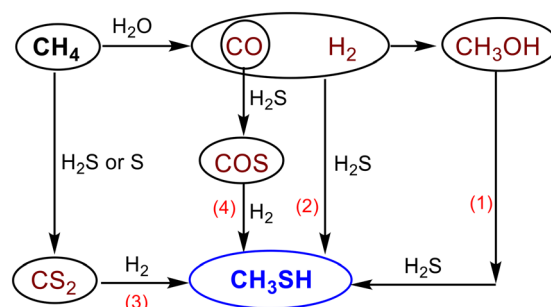


MINI REVIEW

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Methyl mercaptan production – catalysts and processes

Abdelilah Bayout, Claudia Cammarano, Izabel Medeiros Costa, Gleb Veryasov and Vasile Hulea*

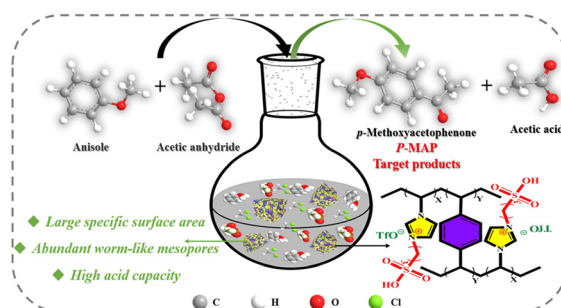


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An efficient porous acidic ionic liquid polymer catalyst for Friedel–Crafts acylation reactions

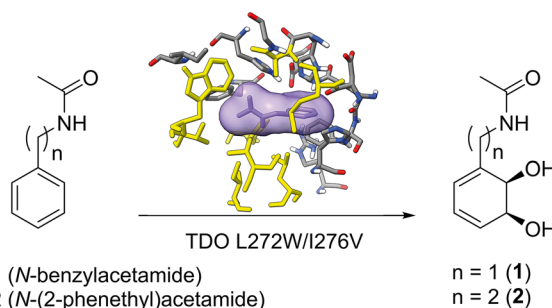
Junhu Zhao, Ming Li, Peng Yang, Xiangyang Jiang, Zhaojin Lv, Pier-Luc Tremblay* and Tian Zhang*



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Production of novel Rieske dioxygenase metabolites enabled by enzyme engineering

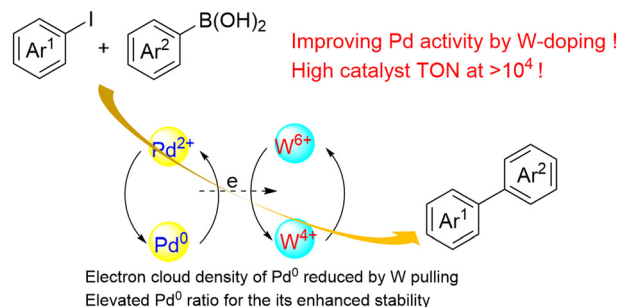
Elizabeth A. Osifalajo, Bailey N. Rutkowski, Louis R. Satterwhite, Phillip C. Betts, Angel K. Nkosi and Jordan T. Froese*



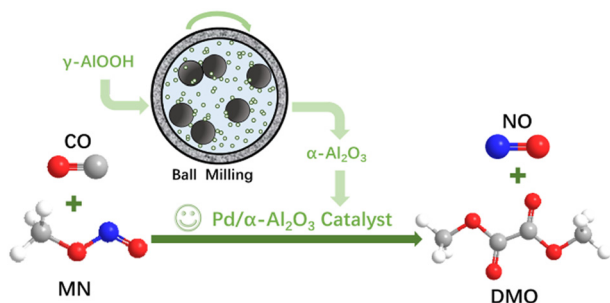
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Tungsten-doping promoted catalytic activity of polyaniline-supported palladium for the Suzuki–Miyaura coupling reaction

Yiyang Zhang,* Hong Sun, Yonghuai Yang, Haofei Li, Yaocheng Shi and Lei Yu*



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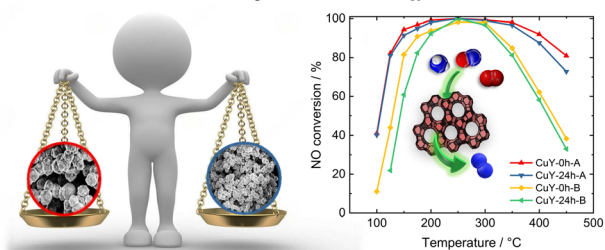


Mechanochemical synthesis of a high-surface-area Pd/ $\alpha\text{-Al}_2\text{O}_3$ catalyst for CO oxidative coupling to dimethyl oxalate reaction

Lin Yang, Zhendong Pan, Donge Wang, Shuaiqi Wang, Xiaoping Wang, Huaijun Ma, Wei Qu and Zhijian Tian*

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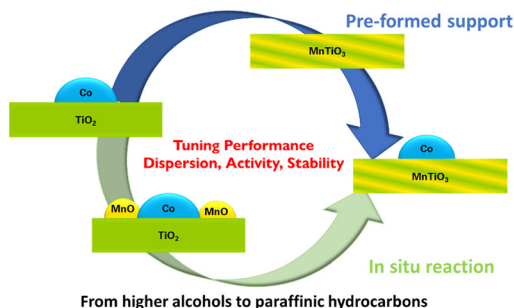
$\text{NH}_3\text{-SCR-DeNO}_x$



Effect of the preparation method on the catalytic properties of copper-containing zeolite Y applied for $\text{NH}_3\text{-SCR-DeNO}_x$

Rujito S. R. Suharbiansah, Muhammad Fernadi Lukman, Chiara Nannuzzi, Anna Wach, Kinga Góra-Marek, Michael Liebau, Ana Palčić, Andreas Pöpl, Gloria Berlier, Silvia Bordiga, Roger Gläser and Magdalena Jabtońska*

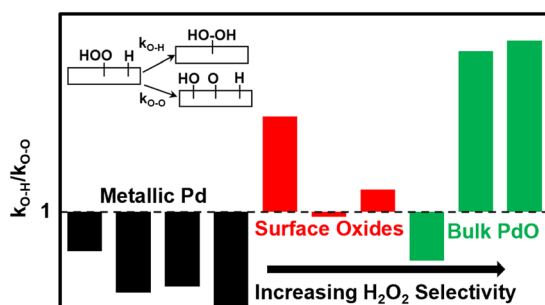
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Controlling cobalt Fischer–Tropsch stability and selectivity through manganese titanate formation

James Paterson,* David Brown, Sarah J. Haigh, Philip Landon, Qizhen Li, Matthew Lindley, Mark Peacock, Hendrik van Rensburg and Zhuoran Xu

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Theoretical assessments of Pd–PdO phase transformation and its impacts on H_2O_2 synthesis and decomposition pathways

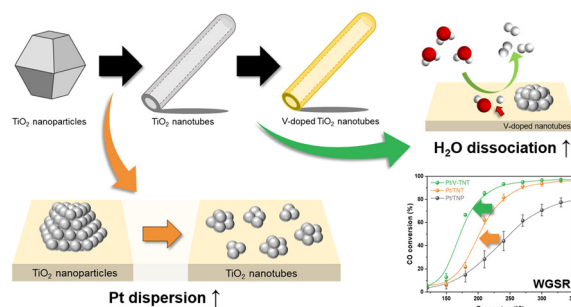
Manasi Vyas, Fernando Fajardo-Rojas, Diego A. Gómez-Gualdrón and Stephanie Kwon*



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Nanotubular Pt-loaded TiO₂ catalysts with vanadium-doping to enhance water–gas shift reaction activity

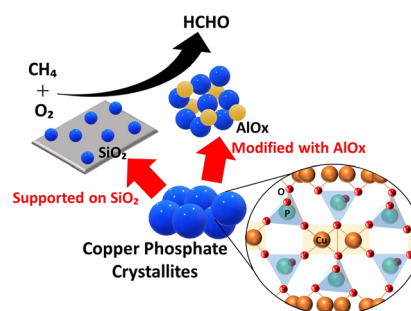
Jihyeon Song, Myeong Gon Jang, Kyung-Jong Noh, Yunkyung Kim and Jeong Woo Han*



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Active and durable copper phosphate catalysts modified with metal oxides for methane oxidation with oxygen into formaldehyde

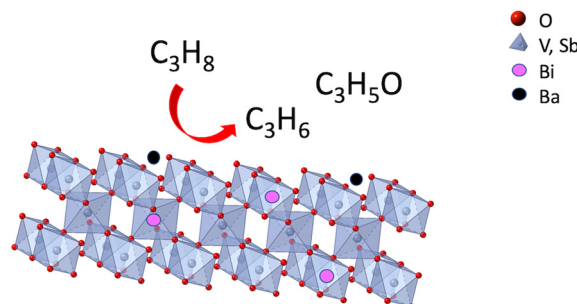
Mana Shimakawa and Sakae Takenaka*



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Dissecting the role of Bi and Ba in the catalytic efficiency of VSbBiBa/Al₂O₃ catalysts in oxidative dehydrogenation and oxidation of propane

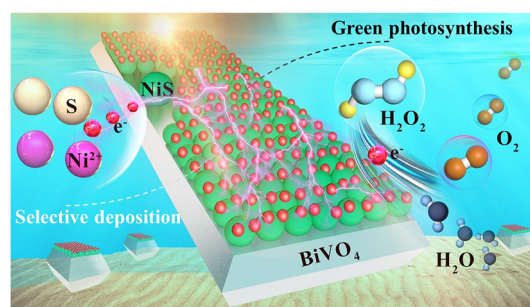
A. Bouzegane, P. P. Bargiela, M. Aouine, R. Checa, I. Popescu, I. C. Marcu, O. Peruch, V. Bellière-Baca and J. M. M. Millet*



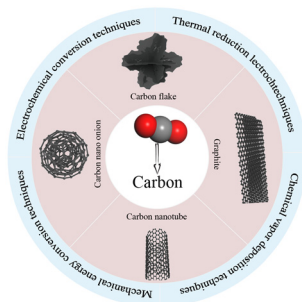
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Accurate modulation of NiS cocatalysts on the photoelectron transfer sites of BiVO₄ for photocatalytic H₂O₂ generation

Haiyang Shi, Shuaikang Li, Min Wang, Xinyu Yin, Junxian Huang, Wenjing Qi, Xuefei Wang,* Ping Wang, Feng Chen and Huogen Yu*



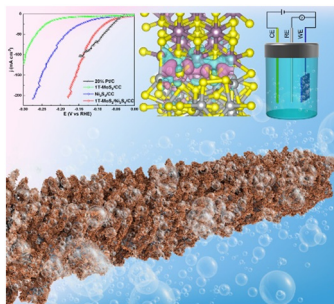
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Conversion of carbon dioxide into solid carbon materials – a mini review

Xinlei Cheng, Minxian Wu,* Jun Li, Wenchang Wang, Naotoshi Mitsuzaki and Zhidong Chen*

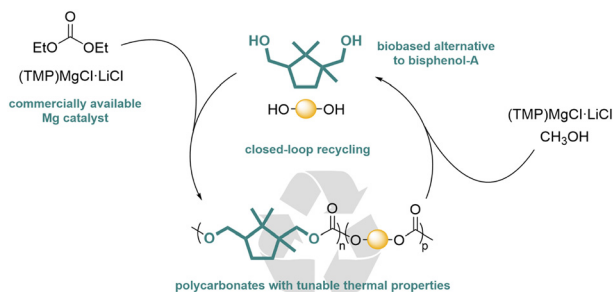
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Constructing a 1T-MoS₂/Ni₃S₄ heterostructure to balance water dissociation and hydroxyl desorption for efficient hydrogen evolution

Lijuan Xiang, Xilin Liu, Shaonan Xu, Kaiwen Wang, Shisheng Yuan and Nan Li*

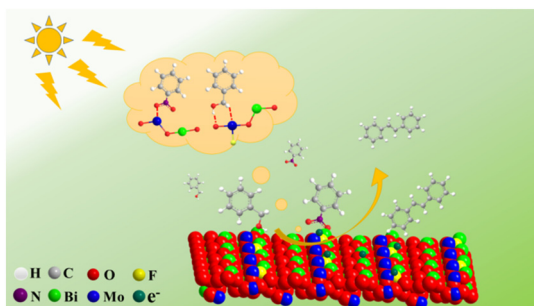
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Efficient synthesis of camphor-based polycarbonates: a direct route to recyclable polymers

Bo Jiang and Christophe M. Thomas*

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Photocatalytic one-pot alkylation of nitrobenzene with benzyl alcohol for the precise synthesis of *N*-benzylideneaniline over F-doped Bi₂MoO₆ nanosheets

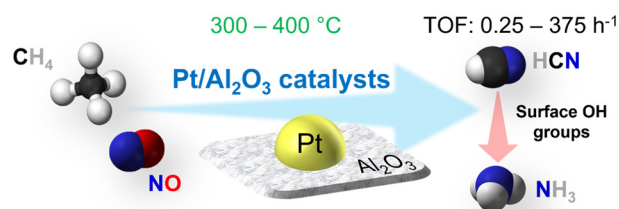
Guangcheng Zou, Rui Cao, Conghui Cui, Yuqiang Luo, Chen Huang, Xinwei Cui, Zhiwen Wang and Yujie Song*



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Methane activation with nitric oxide at low temperatures on supported Pt catalysts: effects of the support

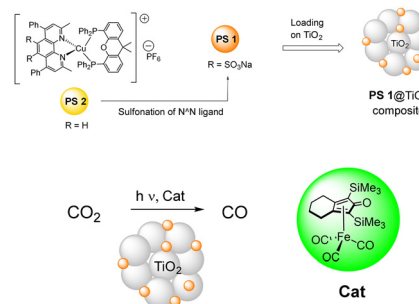
Nobuya Suganuma, I. Tyrone Ghampson, Hiroki Miura, Junichi Murakami, Kyoko K. Bando, Tetsuya Kodaira, Tatsuya Yamasaki, Atsushi Takagaki, Tatsumi Ishihara and Tetsuya Shishido*



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Photocatalytic CO₂ reduction with a TiO₂-supported copper photosensitizer and an iron-based CO₂ reduction catalyst

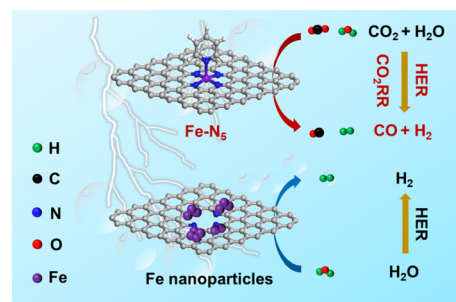
H. D. Huerta-Zerón, N. Rockstroh, M. Lang, A.-E. Surkus, V. Brüser, S. Lochbrunner, H. Junge* and M. Beller*



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Fabricating penta-coordinated Fe single atoms for electrochemical CO₂ reduction to syngas

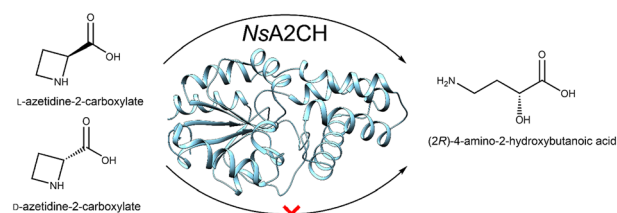
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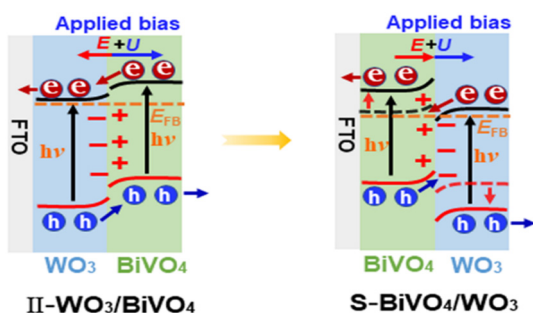
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Enzymatic hydrolysis of L-azetidine-2-carboxylate ring opening

Xuexia Xu,* Qin Yang, Lanteng Wang, Jie Zheng, Yang Gu, Xiwen Xing* and Jiahai Zhou*



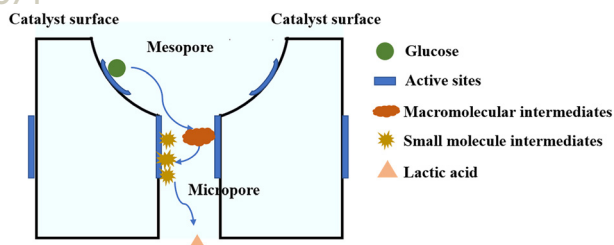
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Interfacial electric field of BiVO₄/WO₃ photoanode-induced S-scheme charge transfer for enhanced photoelectrochemical performance

Jian Zuo, Huili Guo, Shu Chen,* Yong Pei* and Canjun Liu

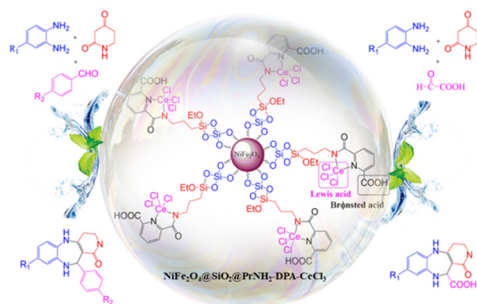
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Synergistic effects of bimetals and hierarchical structures in Mg–Sn–Beta-H zeolites for lactic acid synthesis from biomass-derived carbohydrates

Meng Xia, Zheng Shen,* Shaoze Xiao, Minyan Gu and Yalei Zhang*

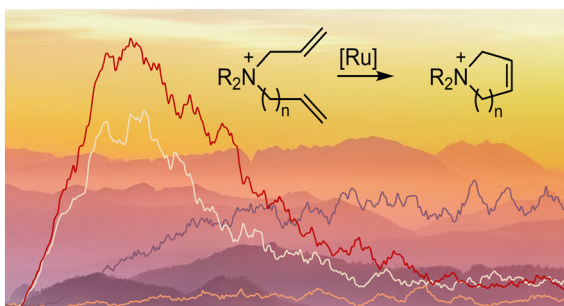
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NiFe₂O₄@SiO₂@PrNH₂-DPA-CeCl₃: a cerium-based magnetic nano dual-acid catalyst with high efficacy and recyclability for domino sequential synthesis of lactam ring-fused 1,5-benzodiazepines

Xiao Zhang, Fan Bai, Miaomiao Li, Huihui Ru and Lanzhi Wang*

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Competitive isomerization and catalyst decomposition during ring-closing metathesis

Charles Killeen, Jie Liu, Harmen S. Zijlstra, Florian Maass, James Piers, Reid Adams, Allen Oliver and J. Scott McIndoe*

