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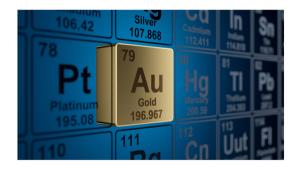
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Design of gold catalysts for activation of H₂ and H-donor molecules: transfer hydrogenation and CO₂ hydrogenation

Jhonatan Luiz Fiorio, Lais Reis Borges, Tomaz Neves-Garcia, Danielle Kimie Kikuchi, Raíza Rosa Garcia Guerra and Liane Marcia Rossi*

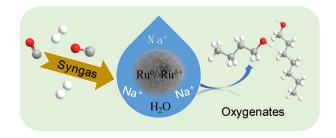


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Aqueous-phase Fischer-Tropsch reaction for the production of oxygenates from syngas over colloidal ruthenium nanoparticles

Junli Zhang, Fei Yu, Yunlei An, Tiejun Lin* and Liangshu Zhong*



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Catalysis Science & Technology electronic: ISSN 2044-4761 is published 24 times a year by the Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, CB4 OWF, UK.

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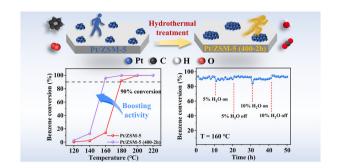


COMMUNICATIONS

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

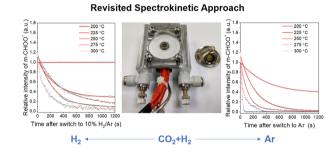
Yunchong Wang, Kaixuan Fu, Haolong Huang, Cangpeng Shan, Yanfei Zheng, Rui Han* and Qingling Liu*



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Revealing the gas sensitive stability of formate species during CO₂ hydrogenation

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

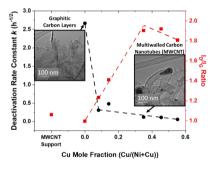


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Promotional role of NiCu alloy in catalytic performance and carbon properties for CO₂-free H₂ production from thermocatalytic decomposition of methane

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*

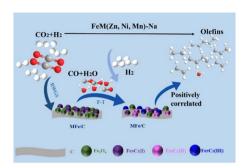


Newly synthesized imidazolium precursors for CO₂ utilization and sequestration: aprotic versus protic salts

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



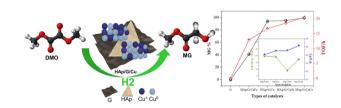
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Topotactic transformation of metal-organic frameworks to iron-based catalysts for the direct hydrogenation of CO₂ to olefins

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

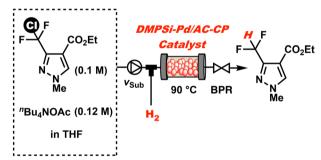
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Rational design of hydroxyapatite/graphitesupported bimetallic Cu-M (M = Cu, Fe, Co, Ni) catalysts for enhancing the partial hydrogenation of dimethyl oxalate to methyl glycolate

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

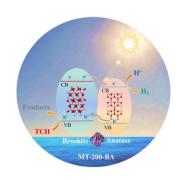
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Catalytic hydrogenative dechlorination reaction for efficient synthesis of a key intermediate of SDHI fungicides under continuous-flow conditions

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

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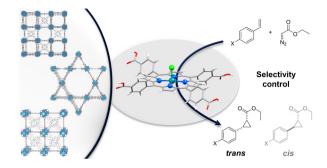
Fabrication of brookite@anatase heterojunction TiO₂ via phase transformation from metal organic frameworks for enhanced photocatalytic hydrogen evolution and TCH degradation

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

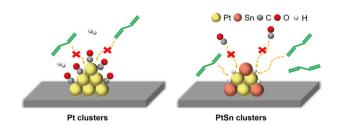
Karina Hemmer, Raphael Bühler, Martin Elsner, Mirza Cokoja* and Roland A. Fischer*



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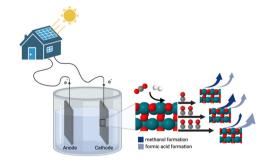
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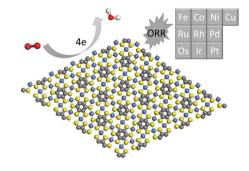
Narges Atrak, Ebrahim Tayyebi and Egill Skúlason*



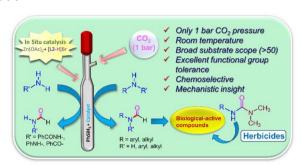
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Computational screening of two-dimensional metal-benzenehexathial for the oxygen reduction reaction

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



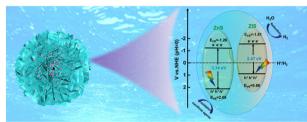
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N-Heterocyclic carbene supported zinc catalysed N-formylation of diverse N-H functionalities with carbon dioxide under ambient conditions

Sangita Sahoo, Subarna Manna and Arnab Rit*

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A Z-scheme ZnIn₂S₄/ZnS heterojunction catalyst: insight into enhanced photocatalytic performance and mechanism

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

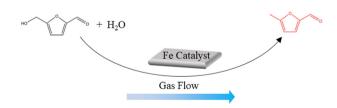
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Orthometallated Pd(II) C^N^S pincer complex catalyzed sustainable synthesis of bis(indolyl) methanes *via* acceptorless dehydrogenative coupling of alcohols

Savarimuthu Selvan Clinton, Rengan Ramesh* and Jan Grzegorz Malecki

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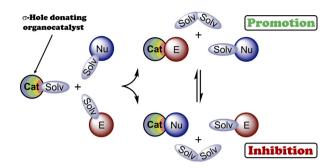
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Xin Li, Peng Rui, Tongqi Ye,* Xin Yao, Rulong Zhou, Dongdong Li, Sheng Wang, James H. Carter* and Graham J. Hutchings

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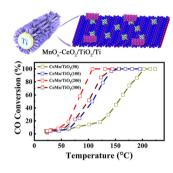
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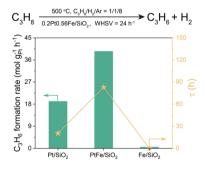
Junchao Wang, Xinyue Tang, Jing Li, Shizhi Dong, Xinglai Zhang and Baodan Liu*



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A promoted PtFe/SiO₂ catalyst with low Pt concentration for propane dehydrogenation

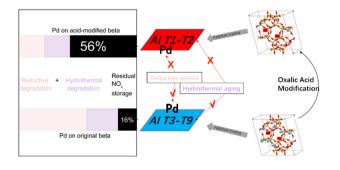
Lei Luo, Zekun Zeng, Tao Zhou, Jun Luo, Xiaoheng Chen, Xu Li,* Han Yan* and Jie Zeng



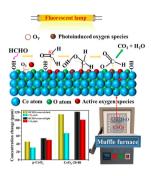
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Ultra-stable Pd ions at Al T1/T2 sites on a dealuminated Pd/beta passive NO_x adsorber

Yi Zhu, Jun Wang, Chen Wang, Jiangiang Wang, Gurong Shen* and Meiging Shen*



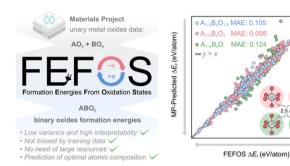
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Water pretreatment promoting the removal of indoor formaldehyde over nano-CeO2 at ambient temperature

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

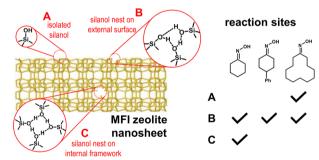
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FEFOS: a method to derive oxide formation energies from oxidation states

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

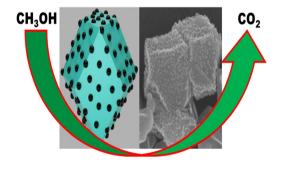
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Surface silanol sites in mesoporous MFI zeolites for catalytic Beckmann rearrangement

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

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ZIF-8@CoFe₂O₄ as a highly efficient bifunctional electrocatalyst for the methanol oxidation and oxygen evolution reactions

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