Catalysis Science & Technology

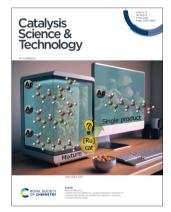
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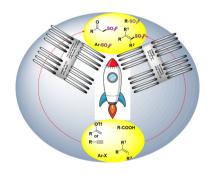
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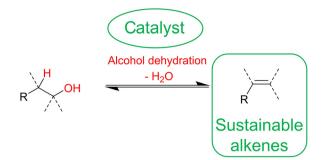


MINI REVIEWS

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Sustainable routes to alkenes: applications of homogeneous catalysis to the dehydration of alcohols to alkenes

Daniel J. Ward, Daniel J. Saccomando, Gary Walker and Stephen M. Mansell*

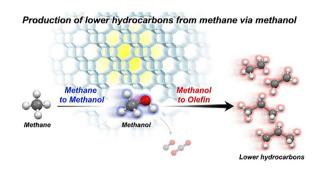


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Impacts of framework Al distribution and acidic properties of Cu-exchanged CHA-type zeolite on catalytic conversion of methane into methanol followed by lower hydrocarbons

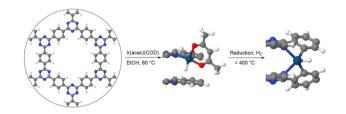
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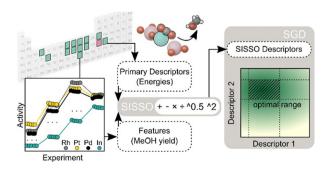
Understanding the structure of isolated iridium sites anchored on a covalent triazine framework

Nina M. Sackers, Andree lemhoff, Philippe Sautet and Regina Palkovits*

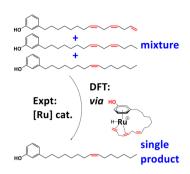


A data-driven high-throughput workflow applied to promoted In-oxide catalysts for CO₂ hydrogenation to methanol

Mohammad Khatamirad,* Edvin Fako, Chiara Boscagli, Matthias Müller, Fabian Ebert, Raoul Naumann d'Alnoncourt,* Ansgar Schaefer, Stephan Andreas Schunk, Ivana Jevtovikj, Frank Rosowski and Sandip De*



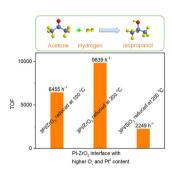
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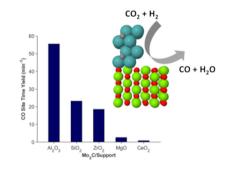
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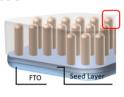
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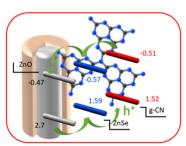


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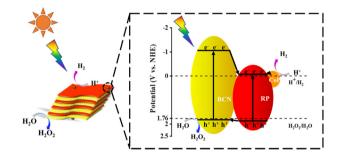
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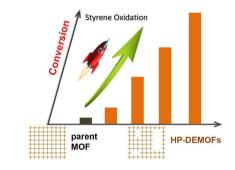
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Significantly boosted activity for styrene oxidation through simultaneous regulation of porosity and copper sites in microporous metal-organic framework Cu-BTC

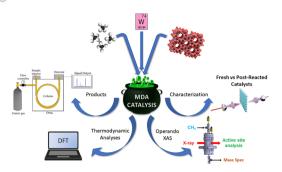
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Rhodium-catalyzed double hydroboration of pyridine: the origin of the chemo- and regioselectivities

Hyoju Choi, Ruibin Wang, Suyeon Kim, Dongwook Kim, Mu-Hyun Baik* and Sehoon Park*

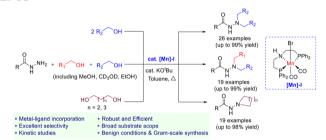
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Understanding W/H-ZSM-5 catalysts for the dehydroaromatization of methane

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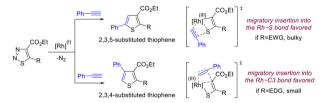


Expedient tandem dehydrogenative alkylation and cyclization reactions under Mn(ı)-catalysis

Reshma Babu, Subarna S. Padhy, Ganesan Sivakumar and Ekambaram Balaraman*

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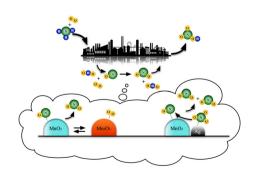
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Marina A. Tokareva, Indrek Pernik, Barbara A. Messerle, Tatiana V. Glukhareva and Sinead T. Keaveney*

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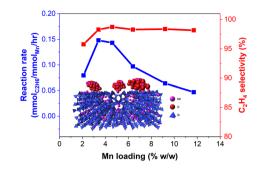
Catalytic oxidation of NO to NO₂ for industrial nitric acid production using Ag-promoted MnO₂/ZrO₂ catalysts

Jithin Gopakumar, Sunniva Vold, Bjørn Christian Enger, David Waller, Per Erik Vullum and Magnus Rønning*

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Ethane dehydrogenation over manganese oxides supported on ZSM-5 zeolites

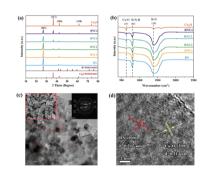
Jian Pan and Raul F. Lobo*



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2D boron nitride supported Cu₂O promotes photocatalytic nitrogen fixation at normal temperature and pressure

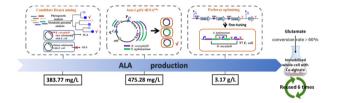
Liangchen Chen, Min Liu,* Yutong Chen, Shouxin Zhu, Can Sun, Xuewei Tu and Hui Zheng*



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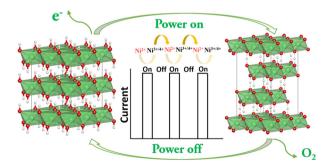
Efficient biosynthesis of 5-aminolevulinic acid from glutamate via whole-cell biocatalyst in immobilized engineered Escherichia coli

Ying Luo, Liang Liu, Jinshui Yang, Anping Su, Qijun Yu, Entao Wang and Hongli Yuan*

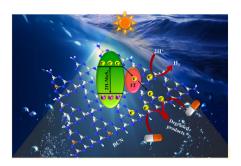


Reversion of catalyst valence states for highly efficient water oxidation

Xiaolei Huang,* Fenghe Wang, Lipo Ma, Jiawei Wang,* Tianyi Zhang, Xiaoyu Hao, Xiao Chi, Hao Cheng, Ming Yang, Jun Ding and Diing Shenp Ang*



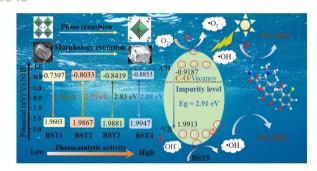
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Photocatalytic activity towards antibiotic degradation and H2 evolution by development of a Z-scheme heterojunction constructed from 1T/2H-MoS₂ nanoflowers embellished on BCN nanosheets

Sarmistha Das, Lopamudra Acharya, Lijarani Biswal, Bhagyashree Priyadarshini Mishra and Kulamani Parida*

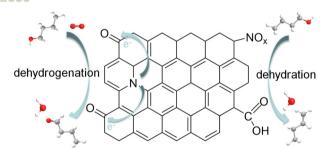
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Strontium-induced phase, energy band and microstructure regulation in Ba_{1-x}Sr_xTiO₃ photocatalysts for boosting visible-light photocatalytic activity

Yan Han, Shifa Wang,* Maoyuan Li, Huajing Gao, Mengjun Han, Hua Yang, Leiming Fang,* Jagadeesha Angadi V., A. F. Abd El-Rehim, Atif Mossad Ali and Dengfeng Li*

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An oxygen-assisted conversion of butanol to valueadded products on nanocarbon catalysts: tuning product selectivity via nitrogen doping

Xueya Dai, Fan Li, Di Wang, Miao Guo, Yunli Bai and Wei Qi*