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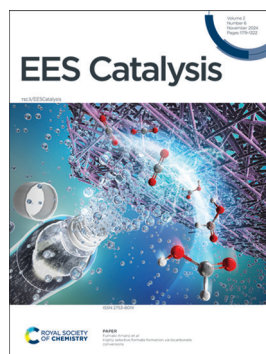
IN THIS ISSUE

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Cover

See Javier Pérez-Ramírez *et al.*, pp. 1263–1276. Image reproduced by permission of Javier Pérez-Ramírez from *EES Catal.*, 2024, 2, 1263.



Inside cover

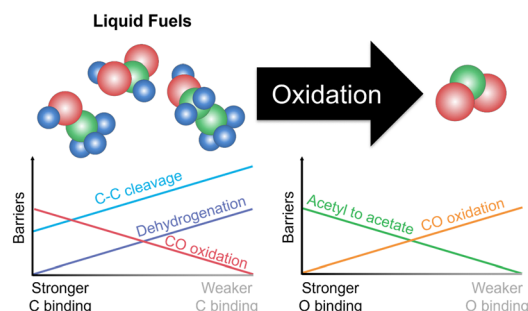
See Fumiaki Amano *et al.*, pp. 1277–1284. Image reproduced by permission of Fumiaki Amano from *EES Catal.*, 2024, 2, 1277.

REVIEWS

1186

Uniting activity design principles of anode catalysts for direct liquid fuel cells

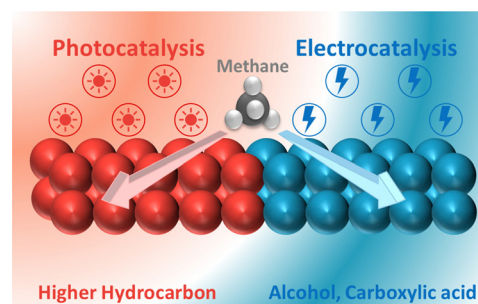
Daniel J. Zheng, Jiayu Peng,* Kaylee McCormack, Hongbin Xu, Jin Soo Kang, Zhenshu Wang, Zhichu Ren, Ju Li, Yuriy Román-Leshkov* and Yang Shao-Horn*



1210

Green energy driven methane conversion under mild conditions

Jiakang You, Yifan Bao, Yanzhao Zhang, Muxina Konarova, Zhiliang Wang* and Lianzhou Wang*



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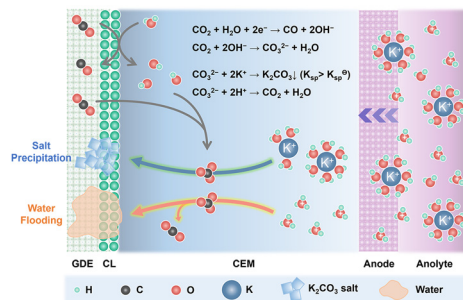
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MINIREVIEWS

1228

Salt precipitation and water flooding intrinsic to electrocatalytic CO₂ reduction in acidic membrane electrode assemblies: fundamentals and remedies

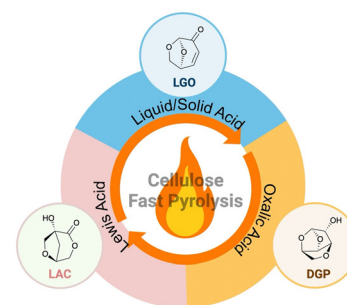
Qianqian Bai, Likun Xiong, Yongjia Zhang, Mutian Ma, Zhenyang Jiao, Fenglei Lyu,* Zhao Deng and Yang Peng*



1238

Catalytic fast pyrolysis of cellulose to oxygenates: roles of homogeneous and heterogeneous catalysts

Yingchuan Zhang,* Zijing Li, Tao Zhou and Guangri Jia*

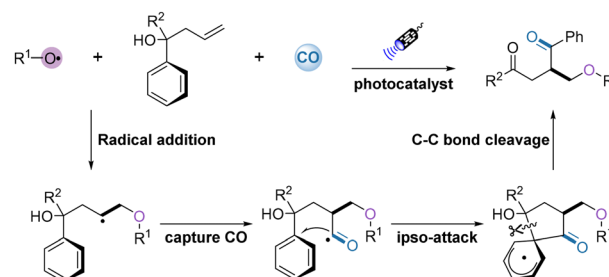


COMMUNICATIONS

1247

Visible light-promoted oxycarbonylation of unactivated alkenes

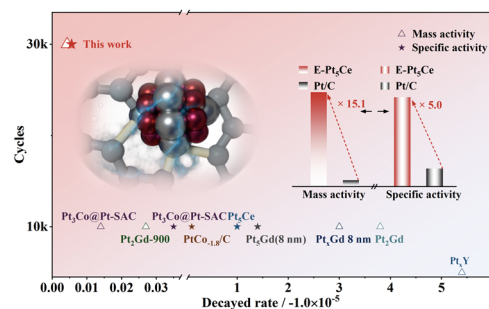
Hefei Yang, Yuanrui Wang, Le-Cheng Wang and Xiao-Feng Wu*



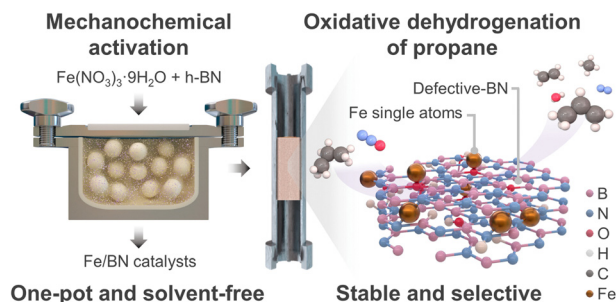
1253

Embedding the intermetallic Pt₅Ce alloy in mesopores through Pt–C coordination layer interactions as a stable electrocatalyst for the oxygen reduction reaction

Nannan Jiang, Hao Wang, Huihui Jin, Xuwei Liu and Lunhui Guan*



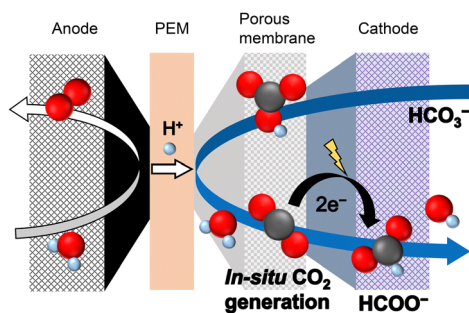
1263



Mechanochemically-derived iron atoms on defective boron nitride for stable propylene production

Gian Marco Beshara, Ivan Surin, Mikhail Agrachev, Henrik Eliasson, Tatiana Otroshchenko, Frank Krumeich, Rolf Erni, Evgenii V. Kondratenko and Javier Pérez-Ramírez*

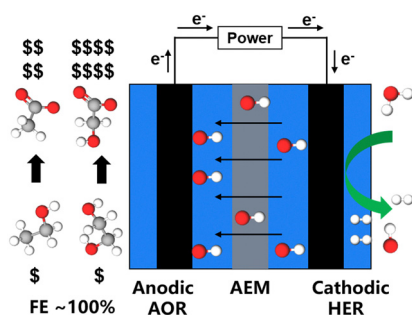
1277



Highly selective formate formation via bicarbonate conversions

Kohta Nomoto, Takuya Okazaki, Kosuke Beppu, Tetsuya Shishido and Fumiaki Amano*

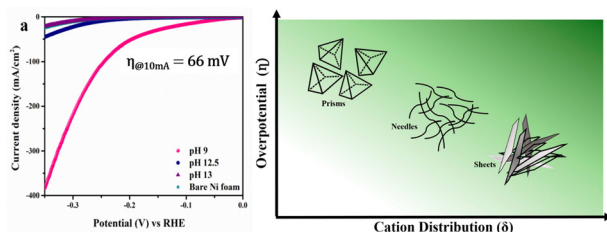
1285



Medium entropy alloy wavy nanowires as highly effective and selective alcohol oxidation reaction catalysts for energy-saving hydrogen production and alcohol upgrade

Xiaoyang Fu, Chengzhang Wan, Huaixun Huyan, Sibowang, Ao Zhang, Jingxuan Zhou, Hongtu Zhang, Xun Zhao, Jun Chen, Xiaoqing Pan, Yu Huang* and Xiangfeng Duan*

1293



Cation distribution: a descriptor for hydrogen evolution electrocatalysis on transition-metal spinels

Aya K. Gomaa, Maram G. Zonkol, Ghada E. Khedr and Nageh K. Allam*

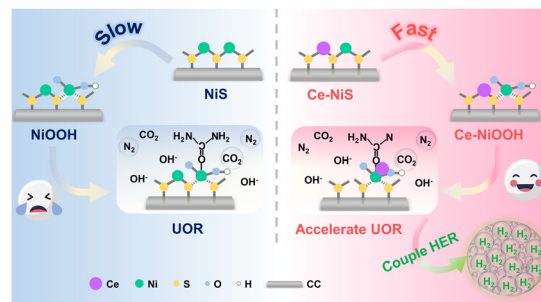


PAPERS

1306

Ce-induced NiS bifunctional catalyst transformation: enhancing urea oxidation coupled with hydrogen electrolysis

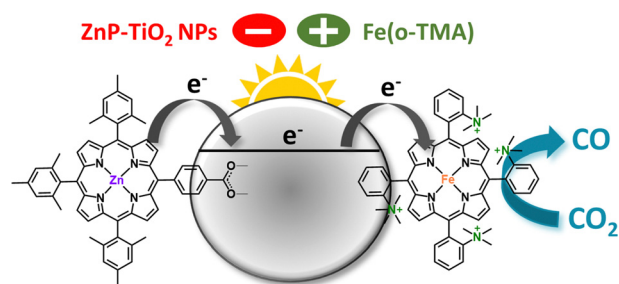
Yingzhen Zhang, Wei Zhang, Jianying Huang,*
Weilong Cai* and Yuekun Lai*



1314

Efficient CO₂-to-CO conversion in dye-sensitized photocatalytic systems enabled by electrostatically-driven catalyst binding

Vasilis Nikolaou,* Palas Baran Pati, H el ene Terrisse,*
Marc Robert* and Fabrice Odobel*



CORRECTION

1320

Correction: High photocatalytic yield in the non-oxidative coupling of methane using a Pd-TiO₂ nanomembrane gas flow-through reactor

Victor Longo, Luana De Pasquale, Francesco Tavella, Mariam Barawi, Miguel Gomez-Mendoza,
V ctor de la Pe a O'Shea, Claudio Ampelli, Siglinda Perathoner, Gabriele Centi and Chiara Genovese*

