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

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See Tatsuo Kimura *et al.*, pp. 2927–2936.
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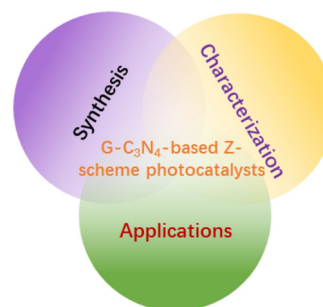
See Peter Deglmann, Alex J. Plajer *et al.*, pp. 2937–2945.
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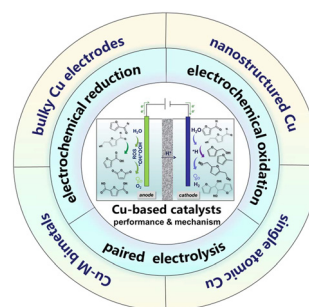
Chunxue Li, Hao Lu,* Guixiang Ding, Qing Li* and Guangfu Liao*



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Jingwen Tan, Mei Jiang, Kun Yu, Yuyang Song, Wenbiao Zhang and Qingsheng Gao*



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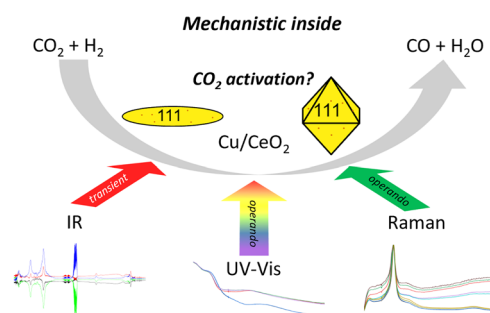


COMMUNICATION

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Unravelling the mechanism of CO₂ activation over low-loaded Cu/CeO₂(111) catalysts using *operando* and transient spectroscopies

Marc Ziemba and Christian Hess*

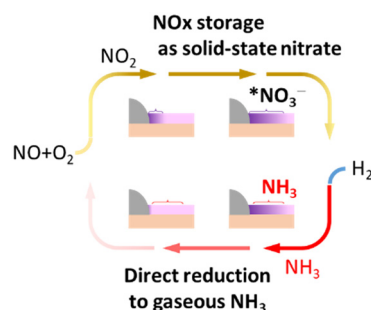


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Catalytic conversion to ammonia through solid-state nitrate as a proposal for the emerging usage of nitrogen oxides

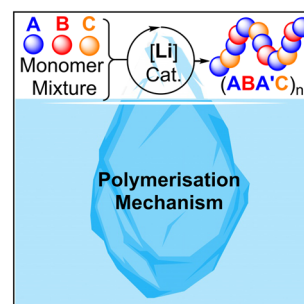
Atsuko Tomita, Ryutaro Wakabayashi and Tatsuo Kimura*



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Lithium catalysed sequence selective ring opening terpolymerisation: a mechanistic study

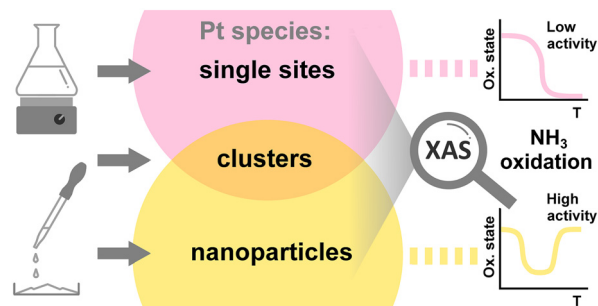
Peter Deglmann,* Sara Machleit, Cesare Gallizioli, Susanne M. Rupf and Alex J. Plajer*



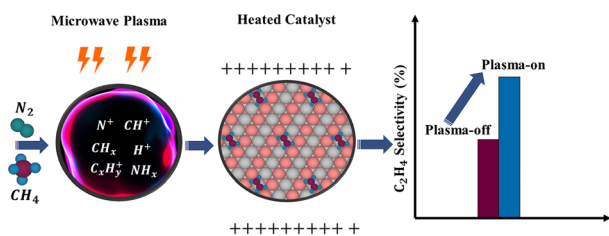
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Structure sensitivity of alumina- and zeolite-supported platinum ammonia slip catalysts

Vasyl Marchuk, Xiaohui Huang, Jan-Dierk Grunwaldt and Dmitry E. Doronkin*



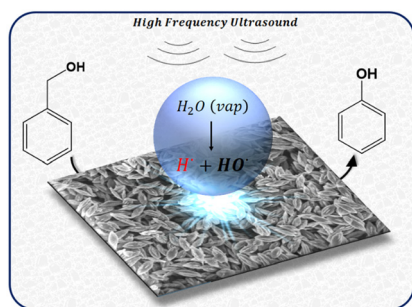
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Post-plasma catalysis: charge effect on product selectivity in conversion of methane and nitrogen plasma to ethylene and ammonia

Sarojini Tiwari, Saleh Ahmat Ibrahim, Brandon Robinson, Siobhan Brown, Qiang Wang, Fanglin Che* and Jianli Hu*

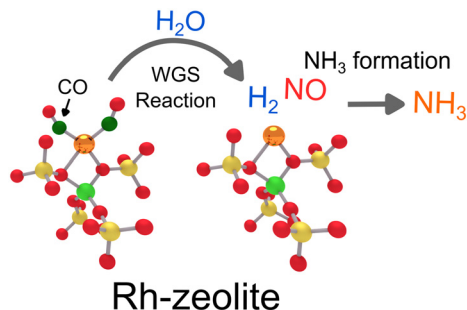
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Water-assisted sonochemically-induced demethylenation of benzyl alcohol to phenol over a structurally stable cupric oxide catalyst

Teseer Bahry, Shang Jiang, Umesh Jonnalagadda, Wen Liu, Benoit Teychene, Francois Jerome, Samir H. Mushrif* and Prince N. Amaniampong*

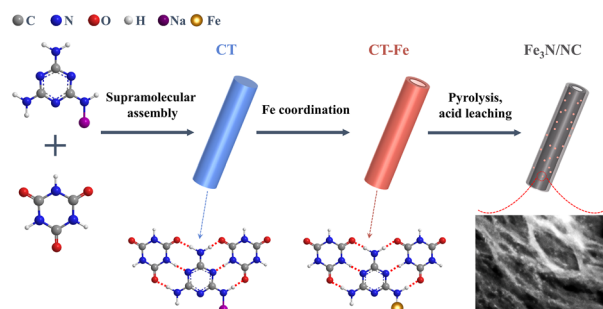
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Multi-functionality of rhodium-loaded MOR zeolite: production of H₂ via the water gas shift reaction and its use in the formation of NH₃

Shunsaku Yasumura, Ken Nagai, Yucheng Qian, Takashi Toyao, Zen Maeno and Ken-ichi Shimizu*

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Supramolecular confinement synthesis of ultrafine iron nitride nanocrystals for the oxygen reduction reaction in Zn-air batteries

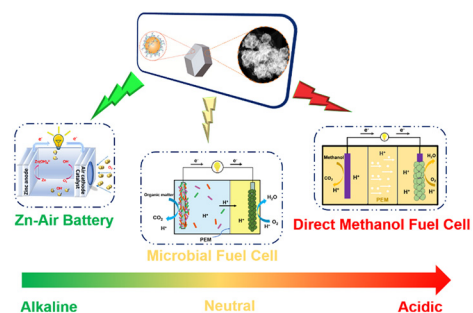
Fanglei Yao, Jiabao Bi, Lei Yu, Liming Dai, Wenkang Xue, Jingyao Deng, Zhihui Yao, Yunyan Wu, Jingwen Sun* and Junwu Zhu



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Metal–organic framework-loaded carbon-encapsulated nano-catalyst as a pH-universal oxygen reduction reaction electrocatalyst for various fuel cell devices

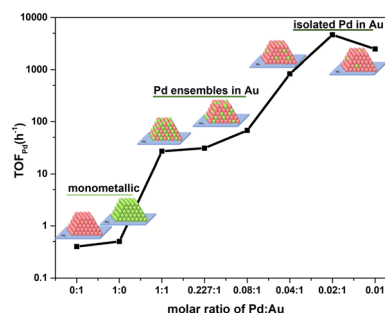
Xintao Zhou, Mingyang Wu, Kai Chen, Suqin Ci* and Zhenhai Wen*



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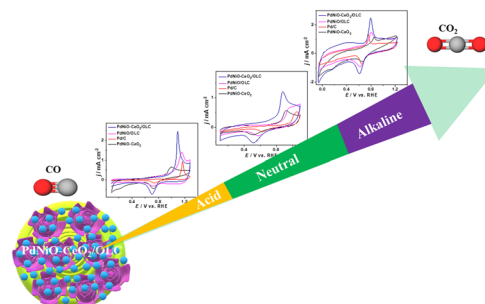
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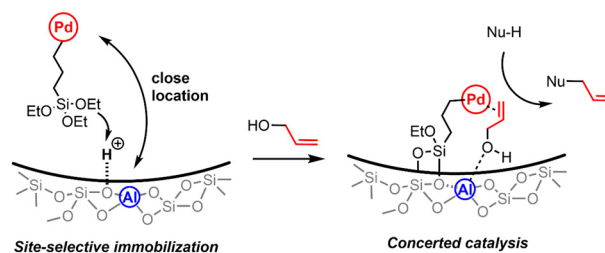
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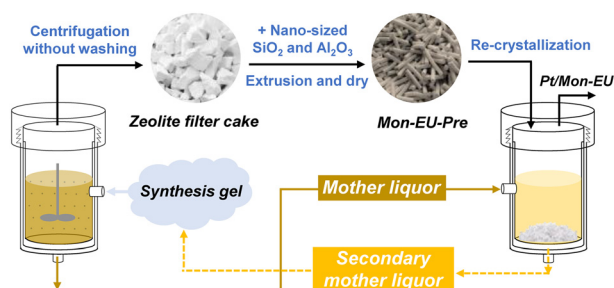
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A heterogeneous Pd complex catalyst for allylation with allylic alcohols enhanced by an aluminum-doped mesoporous silica support

Siming Ding, Yuichi Manaka, Masayuki Nambo, Wang-Jae Chun, Ikuyoshi Tomita and Ken Motokura*



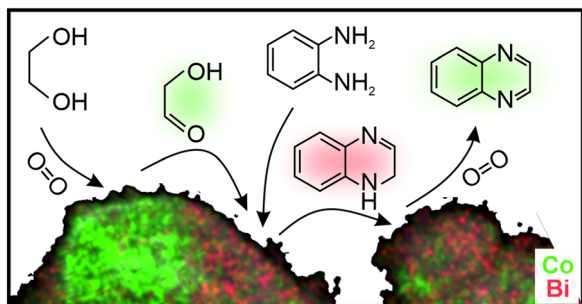
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Full-crystalline monolithic EU-1 zeolite: sustainable synthesis and its applications in the hydroisomerization of ethylbenzene with *meta*-xylene

Guanghua Liang, Jianyi Chen,* Tao Dou, Zhijie Wu, Xiaofeng Li and Yuanshuai Liu*

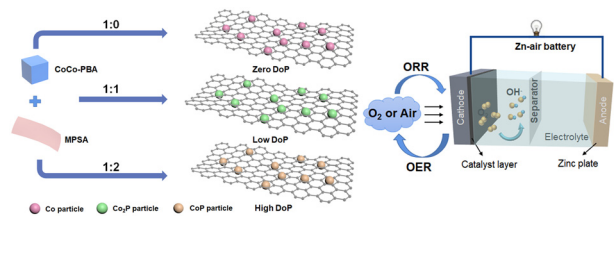
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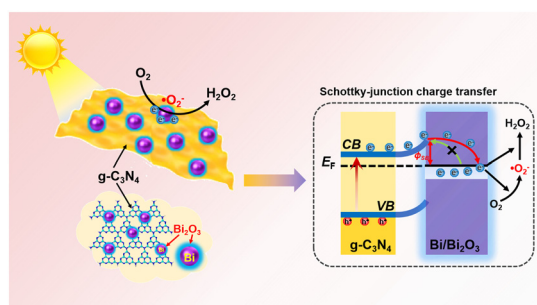
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Tunable phosphorization degree of $\text{Co}_x\text{P}_y@N,P$ -doped carbon as a highly-active bifunctional electrocatalyst for rechargeable zinc–air batteries

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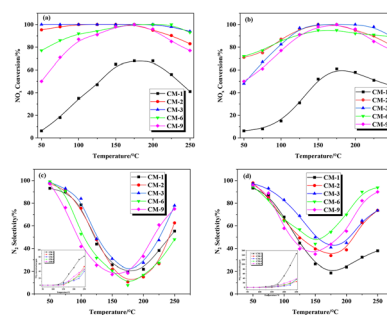
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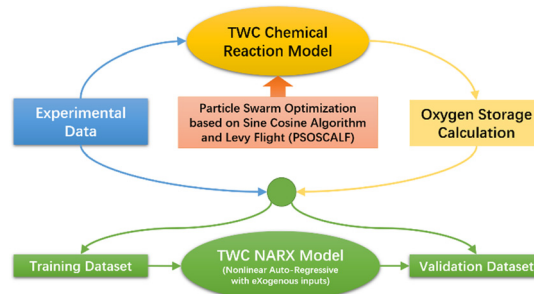
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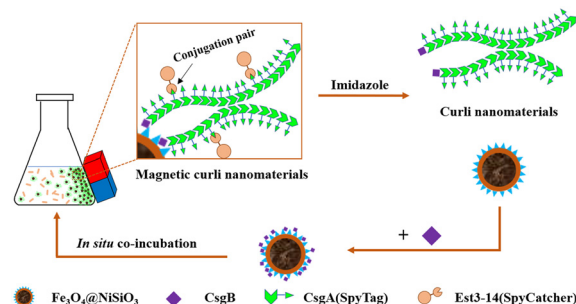
Zhuoxiao Yao, Tao Chen,* Weipeng Lin, Yifang Feng,
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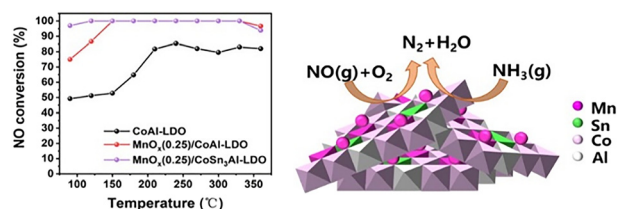
Hao Dong, Wenxue Zhang, Chao Chen* and Ping Wang*



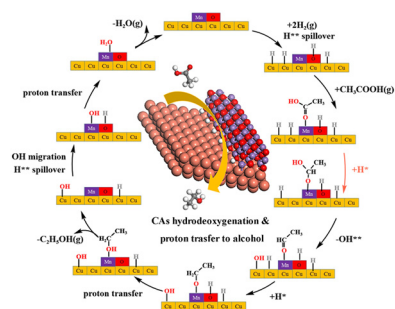
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Mn mixed oxide catalysts supported on Sn-doped CoAl-LDO for low-temperature NH₃-SCR

Hange Wang, Wen Chen, Wei Jin and Yueli Liu*



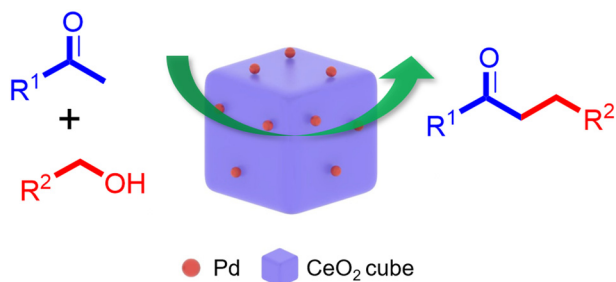
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Jingbo Du, Yifei Chen, Lingtao Wang and Minhua Zhang*

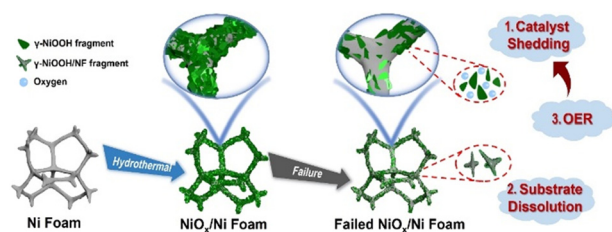
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Palladium single-atom catalyst supported on ceria for α -alkylation of ketones with primary alcohols

Dongyuan Yang, Hongli Wang,* Ce Liu and Chun-Ran Chang*

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Insights into the deactivation mechanism of a self-supported nickel electrode for 5-hydroxymethyl furfural electrooxidation: focus on the stability of the electrode as a whole

Fangbing Liu, Nan Lin,* Deyuan Xin, Xinxin Li, Linchuan Cong, Fuyun Han and Haibo Lin

