Catalysis Science & Technology

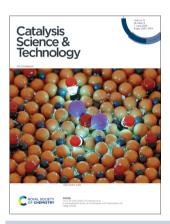
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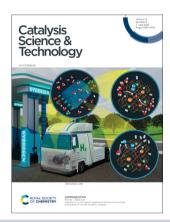
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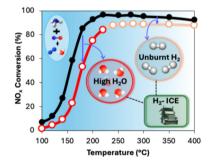
Inside cover See Dhruba J. Deka et al., pp. 3256-3261. Image reproduced by permission of Battelle Memorial Institute from Catal. Sci. Technol., 2025, 15, 3256.

COMMUNICATION

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Influence of H₂-ICE specific exhaust conditions on the activity and stability of Cu-SSZ-13 deNO_x catalysts

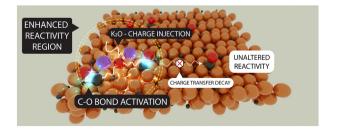
Dhruba J. Deka,* Garam Lee, Kenneth G. Rappé, Eric Walter, Janos Szanyi and Yong Wang



PAPERS

A computational study of K promotion of CO dissociation on Hägg carbide

Xianxuan Ren, Rozemarijn D. E. Krösschell, Zhuowu Men, Peng Wang, Ivo A. W. Filot* and Emiel J. M. Hensen*





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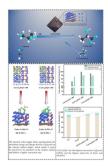
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Fabrication of nano Cu/Cu₂O@C for the conversion of glycerol to lactic acid

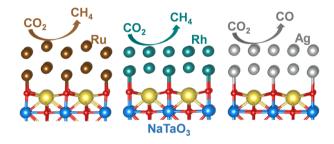
Hanqu Fu, Shuangming Li,* Xinshu Xie, Yiwen Wang, Jili Zhang and Sansan Yu*



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Theoretical investigation on the reaction mechanism of photocatalytic CO2 reduction over NaTaO₃ modified with metal cocatalysts (Ru, Rh, and Ag)

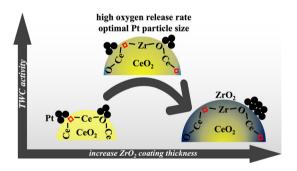
Chunyu Jin, Linlin Wang, Hao Dong* and Xin Zhou*



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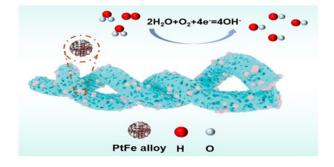
Enhancing the low-temperature performance of Ptbased three-way catalysts using CeO₂(core) @ZrO2(shell) supports

Chih-Han Liu, Junjie Chen,* Patrick R. Raffaelle, Michael J. Lance, Jacob Concolino, Prateek Khatri, Tala Mon, Todd J. Toops, Alexander A. Shestopalov and Eleni A. Kyriakidou*

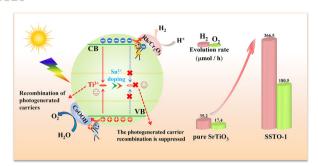


Highly active PtFe alloy encapsulated in porous carbon fibers as an air-cathode catalyst for zinc-air batteries

Zhen An, Zizai Ma,* Zihao Wan, Hongfei Xu, Jinping Li and Xiaoguang Wang*



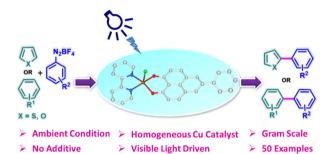
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Efficient photocatalytic water splitting using Sndoped SrTiO₃ perovskite with Sn at Sr sites

Yongshuai Chen, Mengdie Cai,* Yimeng Cao, Suhaib Shuaib Adam Shuaib, Jia-qi Bai,* Fang Chen, Jiawei Xue, Yuxue Wei and Song Sun

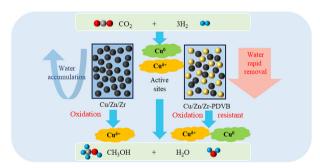
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Highly efficient phenalenyl-copper bifunctional photoredox catalyst for direct C-H bond arylation of arenes and heteroarenes

Krishnendu Paramanik, Nilaj Bandopadhyay, Suraj Kumar Agrawalla, Chandra Shekhar Purohit, Bhaskar Biswas* and Hari Sankar Das*

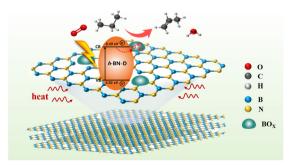
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Enhancement of CO₂ hydrogenation to methanol over Cu-based catalysts mixed with hydrophobic additives

Lei Huang, Lingrui Cui, Cao Liu, Xingguo Wei, Yechunzi Liu and Fahai Cao*

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Light-assisted free radical initiation for efficient thermocatalytic propane oxidative dehydrogenation on defect-rich hexagonal boron nitride

Ruiqi Lv, Haini Zhuang, Zitao Duan, Kunlin Li, Zhaoxia Zhang, Shaolong Wan, Shuai Wang and Jingdong Lin*

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Tuning formate surface coverage with cosolvents for liquid-phase catalytic transfer hydrogenation

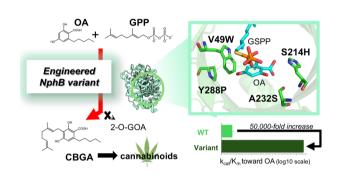
Ezra A. Baghdady, J. Will Medlin* and Daniel K. Schwartz*

Tuning formate surface coverage with cosolvents for catalytic transfer hydrogenation alcohol-water cosolvent alcohol-water cosolvent Formate Coverage Reaction Activity water solvent water solvent Formate Concentration Formate Concentration

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A highly active and regioselective cannabigerolic acid synthase engineered from a promiscuous prenyltransferase NphB

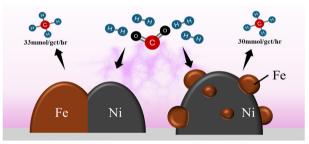
Ye Seop Park,* Minju Kim, Chae Yeong Na, Hyeon Woo Ham, Jun-Young Cho, Boyoung Park, Cheulhee Jung, Daechan Park and Tae Hyeon Yoo*



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The impact bimetallic Ni-Fe deposit configuration has on accessing synergy during plasma-catalytic CO₂ methanation

Ahmad Z. Md Azmi, Rachelle Tay, Jiajia Zhao, Christopher D. Easton, Aaron Seeber, Yunxia Yang, Anthony B. Murphy, Emma Lovell* and Jason Scott*

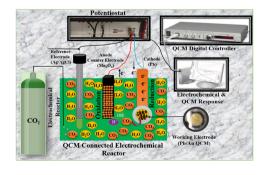


Segregated Ni-Fe Phases

Fe decorating Ni

Synthesis of various Pb catalysts and their examination in the study of electrochemical CO₂ reduction (ECR) using a quartz crystal microbalance with a Mn₃O₄ anode

V. S. K. Yadav,* Mohammed A. H. S. Saad, Mohammed J. Al-Marri and Anand Kumar*

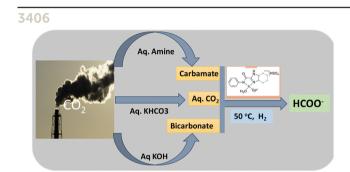


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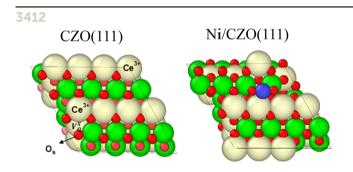
Boosting the hydroformylation activity of polyoxometalate-anchored Rh single atom catalysts in toluene-water media

Ning An, Yongjun Jiang, Huiying Liao, Ji Ding, Xinjia Wei, Haijing Wang,* Sheng Dai and Zhenshan Hou*



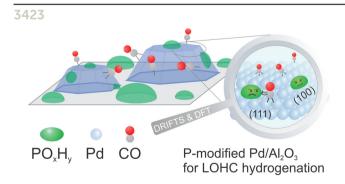
Hydrogenation of CO₂ into formate using an iridium catalyst containing proton-responsive imidazoline-amide ligands

Supriyo Majumder,* Raj Kumar Das, Chanchal Samanta, Chiranjeevi Thota and Bharat L. Newalkar



Vacancy formation, stability, and electronic properties of nickel on equimolar ceria-zirconia mixed oxide (111) catalyst

Sanjana Srinivas, George Yan, Stavros Caratzoulas and Dionisios G. Vlachos*



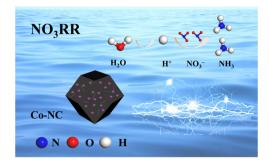
Site blocking effects on P-modified Pd/Al₂O₃ catalysts for LOHC hydrogenation: an in situ DRIFTS study

Yaoci Sheng, Adrian Seitz, Thobani Gambu, Kailun Zhang, Patrick Schühle and Tanja Retzer*

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Metal-organic framework derived Co-NC for electrocatalytic reduction of nitrate to ammonia

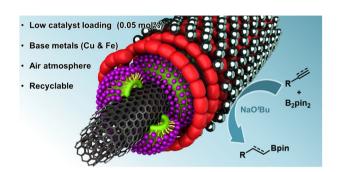
Zhuofan Wu, Haiding Zhu, Zi Wang, Yiming Sun, Meibing Jia, Xiaoxin Meng, Yushan Li, Lifen Liu, Anmin Liu and Xuefeng Ren*



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A swift and efficient approach to boronfunctionalized scaffolds: borylation of alkenes and alkynes using a carbon nanotube-copper ferrite catalyst

Mateus P. Nunes, Luana A. Machado, Hállen D. R. Calado, Guilherme A. M. Jardim, Joel A. Tchuiteng Kouatchou, Valérie Geertsen, Youzhu Yuan, Eric Doris,* Eufrânio N. da Silva Júnior* and Edmond Gravel*



RETRACTION

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Retraction: Investigation of the effect of thermal annealing of Ni-cobaltite nanoparticles on their structure, electronic properties and performance as catalysts for the total oxidation of dimethyl ether

Daniel Onana Mevoa, Stephane Kenmoe,* Muhammad Waqas, Dick Hartmann Douma, Daniel Manhouli Daawe, Katia Nchimi Nono, Ralph Gebauer and Patrick Mountapmbeme Kouotou*