

Catalysis Science & Technology

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

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IN THIS ISSUE

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Cover

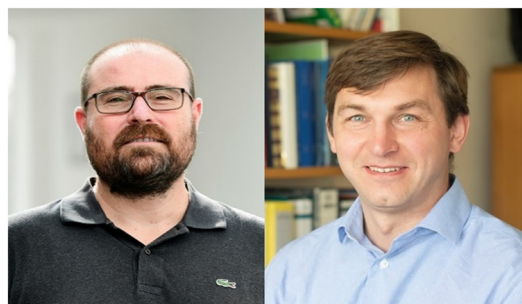
See Ruud Kortlever et al., pp. 555–561.
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EDITORIAL

512

Catalysis on the move

Asier Unciti-Broceta* and Evgeny Rebrov*

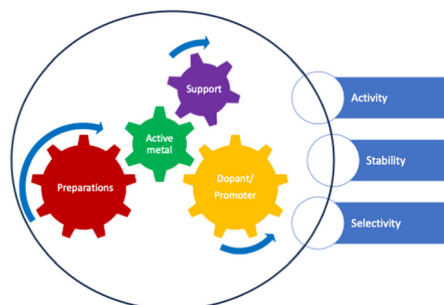


REVIEWS

515

The design and optimization of heterogeneous catalysts using computational methods

Shambhawi, Ojus Mohan, Tej S. Choksi and Alexei A. Lapkin*



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Elemental answers



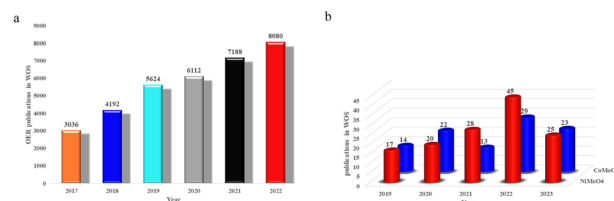
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REVIEWS

533

Application progress of NiMoO₄ electrocatalyst in basic oxygen evolution reaction

Haibin Wang, Zhaobo Wang, Zihang Feng, Jiangyuan Qiu, Xuefei Lei,* Biao Wang and Rui Guo*

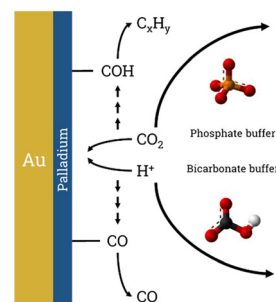


COMMUNICATIONS

555

The effect of surface conditions on the electrochemical CO₂ reduction performance of bimetallic AuPd electrocatalysts

Daniël van den Berg, Boaz Izelaar, Shilong Fu and Ruud Kortlever*



562

Integration of surface polymerization and self-assembly strategies for heterogenization of copper-based catalysts for water oxidation

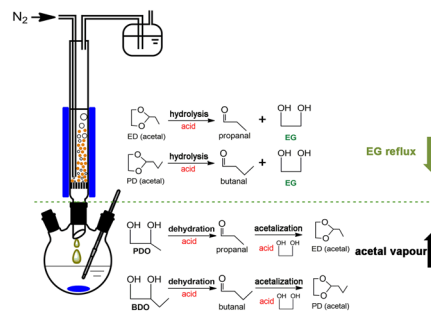
Xin Li, Mengjiao Shao, Xueling Song, Xuesong Jiang, Guisheng Li and Lei Wang*



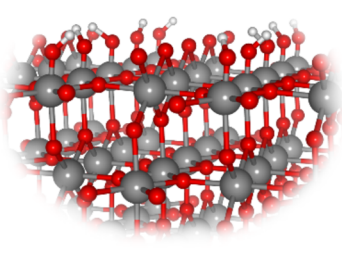
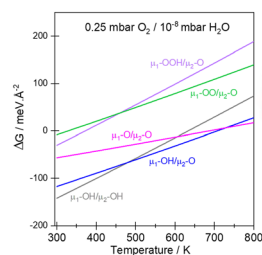
567

Highly selective conversion of diols into aldehydes for the purification of ethylene glycol with a self-adjusting coupling reactor

Jianwei Ji, Shuo Ai,* Wanguo Yu, Linghui Liu and Chengdu Huang



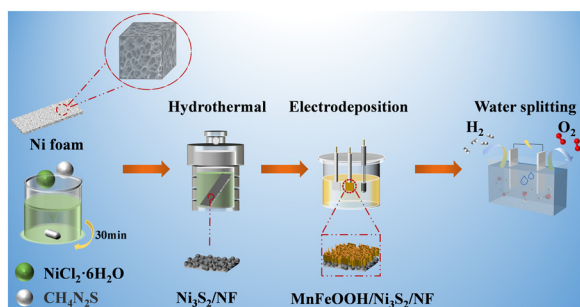
572



Thermal synthesis of electron deficient oxygen species on crystalline IrO₂

E. A. Carbonio,* F. Sulzmann, D. Teschner, J. J. Velasco-Vélez, M. Hävecker, A. Knop Gericke, R. Schlögl and T. Jones*

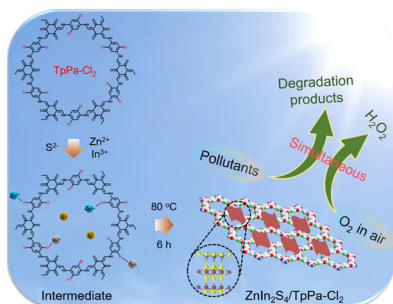
581



Electronic structure modification of ultrathin MnFeOOH and integration with Ni₃S₂ as bifunctional electrocatalysts for improved alkaline water splitting

Fu-Min Wang and Si-Fu Tang*

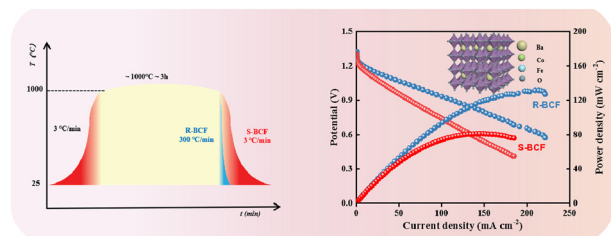
590



Photocatalytic production of H₂O₂ from wastewater under visible light by chlorine and ZnIn₂S₄ co-decorated TpPa-1

Guanglu Xia, Jianhao Qiu,* Dingliang Dai, Yong Tang, Zhonghao Wu and Jianfeng Yao*

598



Compositional engineering of perovskite oxide BaCo_{0.5}Fe_{0.5}O_{3-δ} as an efficient bifunctional electrocatalyst for rechargeable zinc-air batteries

Anqi Xu, Jian Zhou, Tong Liu,* Jing Wang, Yao Wang, Dong Zhang, Dexuan Huang, Yilin Liu and Xuelei Hu*

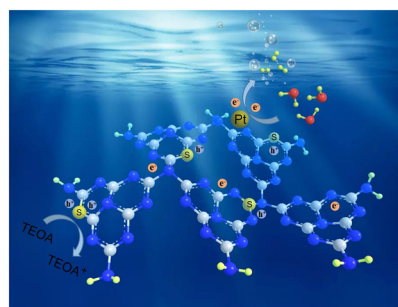


PAPERS

606

Sulfur-doped g-C₃N₄ photocatalyst for significantly steered visible light photocatalytic H₂ evolution from water splitting

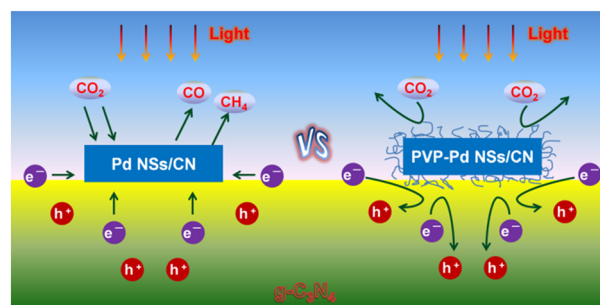
Xiao-Jie Lu, Li Xu, Ikram Ullah, Hong-Bao Li* and An-Wu Xu*



615

Surfactant-free 2D/2D Pd/g-C₃N₄ for enhanced photocatalytic CO₂ reduction

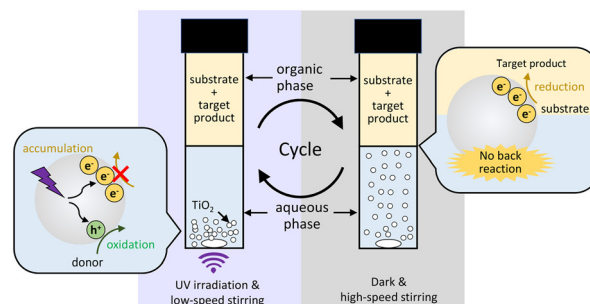
Zhijun Huang,* Jie Wu, Chunliang Yang, Fengwen Yan* and Guoqing Yuan



624

Cyclic time-separated redox reaction using accumulated electrons in titanium(IV) oxide in a two-phase system

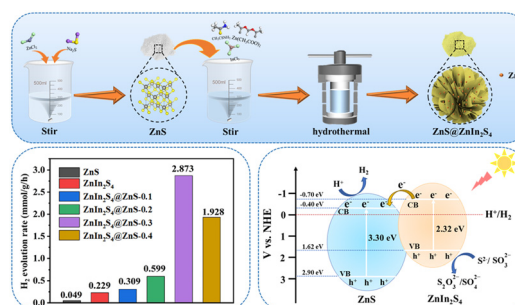
Masato Suenaga and Naoya Murakami*



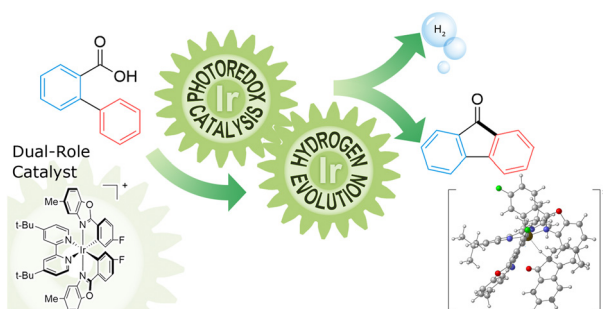
630

Facile synthesis of ZnIn₂S₄@ZnS composites for efficient photocatalytic hydrogen precipitation

Xixi Yuan, Peng Li,* Siyu Wang, Puyu Liu, Jianwei Zhao,* Tao Wang and Kun Chang*



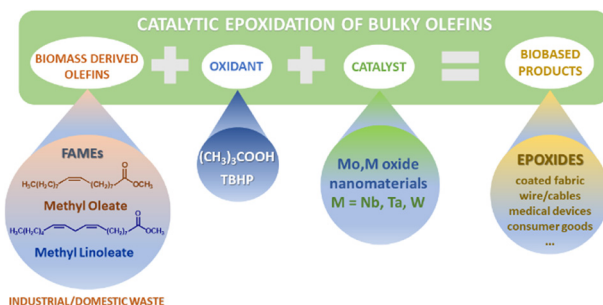
638



Dual-role catalysis of iridium in photo-irradiation synthesis of 9-fluorenone through intramolecular cyclization *via* hydrogen evolution

Xi Hong, Yi-Wen Zhang, Bing Zhan, Xue-Juan Chen, De-Jun Hu, Zhi-Ming Li* and Xiu-Feng Hou*

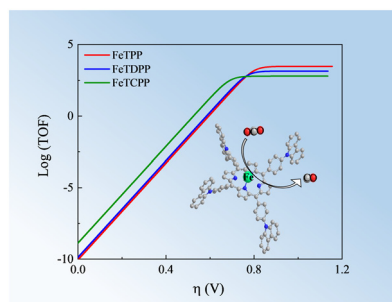
646



Bulky olefin epoxidation under mild conditions over Mo-based oxide catalysts

Diana M. Gomes, Xingyu Yao, Patrícia Neves,* Nicola Pinna, Patrícia A. Russo and Anabela A. Valente*

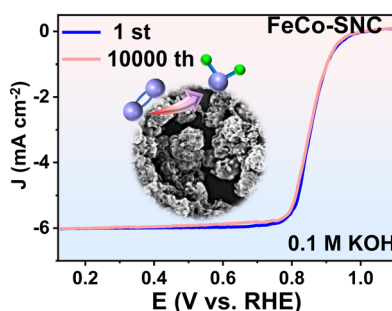
660



Electrocatalytic reduction of CO₂ to CO by Fe(III) carbazole-porphyrins in homogeneous molecular systems

Hai Sun, Jiahui Wu, Fengkun Tian, Guodong Zhang, Zixiang Xia, Jiaxin Rong, Jun-Sheng Qin* and Heng Rao*

667



Co, Fe decorated N, S co-doped porous carbon enables high stability for the oxygen reduction reaction

Qiulan Huang, Ruiqin Ren, Jia Li, Muhammad Waqas, Pan Chen, Xiaotian Liu, Dujuan Huang, Zhongyun Yang, Xinglan Peng, Du-Hong Chen,* Youjun Fan* and Wei Chen*

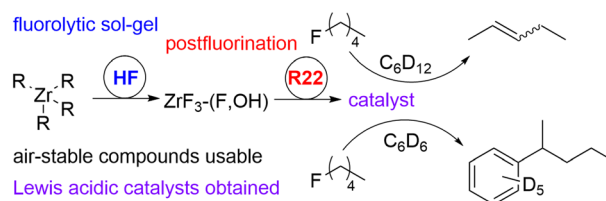


PAPERS

673

A fluorolytic sol-gel route to access an amorphous Zr fluoride catalyst: a useful tool for C–F bond activation

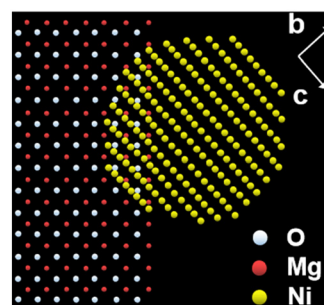
Christian Heinekamp, Sönke Kneiske, Ana Guilherme Buzanich, Mike Ahrens, Thomas Braun* and Franziska Emmerling*



681

Stable Ni nanocrystals on porous single-crystalline MgO particles for enhanced dry reforming activity and durability of CH₄/CO₂

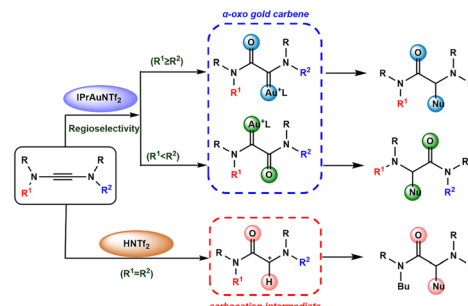
Suning Zhang, Fangyuan Cheng* and Kui Xie*



689

Oxidative functionalization of yndiamides catalyzed by gold(i) or Brønsted acid systems: computational study of mechanism, selectivity patterns, and effects of substituents

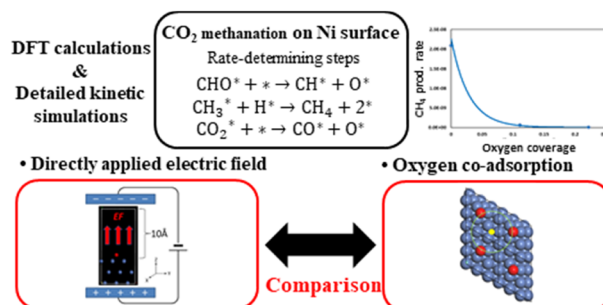
Guowei Yan, Ji Ma, Simeng Qi, Alexander M. Kirillov, Lizi Yang and Ran Fang*



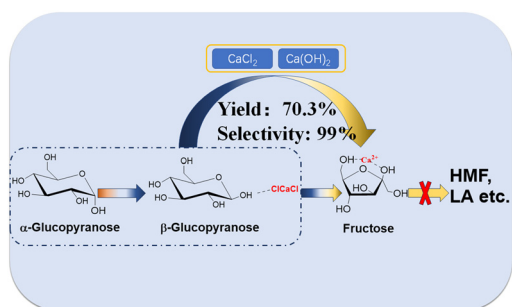
704

Theoretical study of catalytic activity modifications in CO₂ methanation induced by an electric field in solid-oxide cells

Katsuhiro Wakamatsu,* Takaaki Yasuda, Masato Aratani and Teppei Ogura*



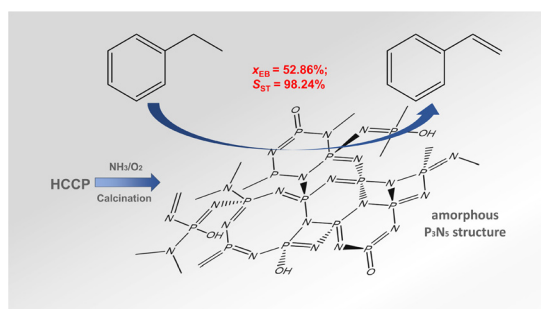
718



Insight into the alkaline earth metal salt promotion for alkali-catalyzed glucose isomerization

Changqu Lin, Yunlin Shi, Lulu Xu, Zhengyue Wang, Lili Zhao, Hongli Wu,* Fei Cao and Ping Wei

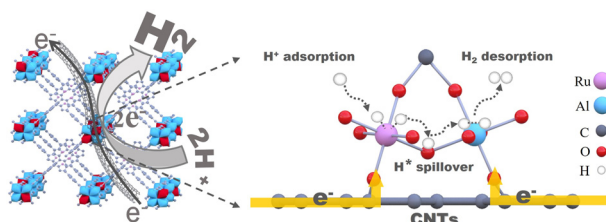
728



Amorphous phosphorus oxynitride as a robust catalyst for steam-free direct dehydrogenation of ethylbenzene to styrene: effect of calcination temperature

Lukai Luo, Yuan Ma, Yuwei Liu, Baining Lin, Chaojun Guo, Jun Gong, Yating Xie and Yonghua Zhou*

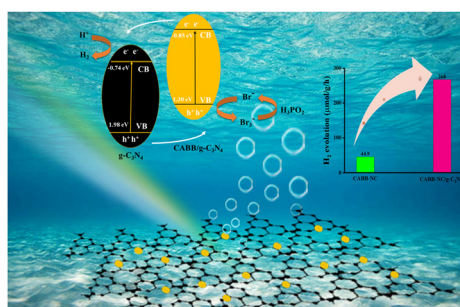
735



Steering the electronic communication between Al/Ru bimetallic clusters in metal-organic framework composites for accelerating hydrogen evolution kinetics

Xueting Song, Haifeng Yang, Chenghua Zhang,* Guizhi Zhang, Hong Wu, Youzhou He, Min Fu, Xingyan Liu,* Siqi Li and Siping Wei*

746



Enhanced photocatalytic hydrogen evolution through suppressed electron-hole recombination in Cs₂AgBiBr₆-NC/g-C₃N₄ nanocomposites

C. Vidhya, B. Meera, Revathy B. Nair and Sajith Kurian*

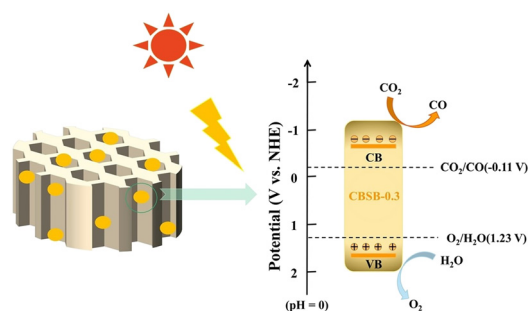


PAPERS

758

Synthesis of small size lead-free $\text{Cs}_3\text{Bi}_{2x}\text{Sb}_{2-2x}\text{Br}_9$ solid-solutions using a spatially confined growth method for efficient photocatalytic CO_2 reduction

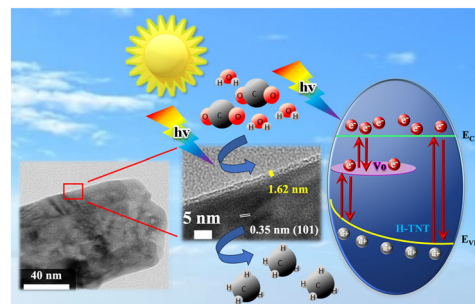
Miaomiao Gao, Xiaolei Liu,* Liwen Yin, Jinghang Chen, Zeyan Wang, Zhaoke Zheng, Yuanyuan Liu, Hefeng Cheng, Ying Dai, Baibiao Huang, Zehui Zhang* and Peng Wang*



767

Engineered CO_2 conversion performance of nanostructured TiO_2 photocatalysts via electrochemical hydrogenation

Jacky Chen-Chin Lee, Hossam A. E. Omr, Po-Wei Lai and Hyeonseok Lee*



CORRECTION

775

Correction: Adipic acid formation from cyclohexanediol using platinum and vanadium catalysts: elucidating the role of homogeneous vanadium species

Owen Rogers, Samuel Pattisson, Rebecca V. Engel, Robert L. Jenkins, Keith Whiston, Stuart H. Taylor and Graham J. Hutchings*

