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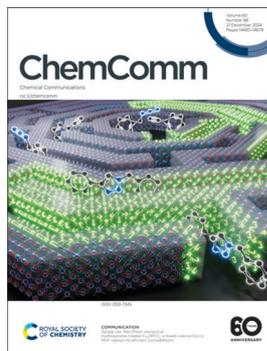
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ISSN 1359-7345 CODEN CHCOFS 60(98) 14485-14678 (2024)



Cover

See Igor V. Alabugin, Dasan M. Thamattoor, David Lee Phillips *et al.*, pp. 14573-14576. Image reproduced by permission of Dasan M. Thamattoor from *Chem. Commun.*, 2024, 60, 14573.



Inside cover

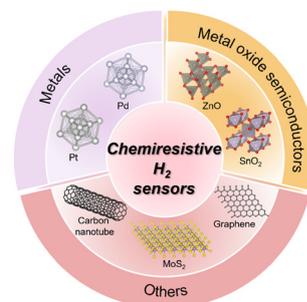
See Sunggi Lee, Nak Cheon Jeong *et al.*, pp. 14577-14580. Image reproduced by permission of Nak Cheon Jeong from *Chem. Commun.*, 2024, 60, 14577.

HIGHLIGHT

14497

Recent advances in nanomaterial-enabled chemiresistive hydrogen sensors

Yao Yang Liu, Zhong Li,* Yi Liang, Tao Tang, Jing Hao Zhuang, Wen Ji Zhang, Bao Yue Zhang and Jian Zhen Ou*

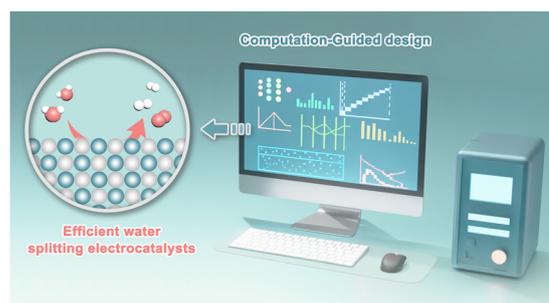


FEATURE ARTICLES

14521

Rational design of water splitting electrocatalysts through computational insights

Mingcheng Zhang, Yuchang Hou, Yuzhu Jiang, Xinyue Ni, Yanfei Wang* and Xiaoxin Zou*



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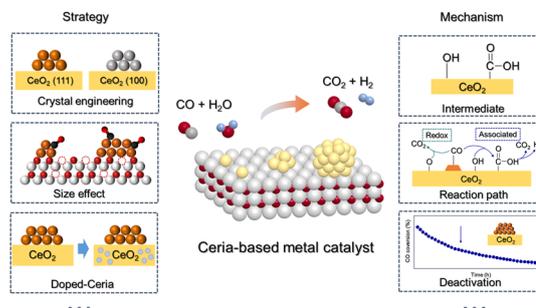
Fundamental questions
Elemental answers

FEATURE ARTICLES

14537

Ceria-based supported metal catalysts for the low-temperature water-gas shift reaction

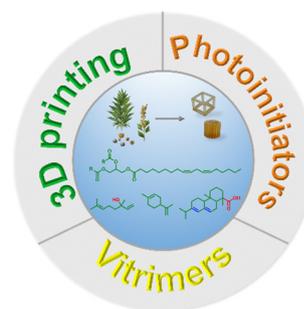
Xin-Pu Fu, Hui Zhao and Chun-Jiang Jia*



14557

Lipidic biomass as a renewable chemical building block for polymeric materials

Rafael Turra Alarcon,* Gabriel Iago dos Santos, Caroline Gaglieri, Aniele de Moura, Éder Tadeu Gomes Cavalheiro and Gilbert Bannach

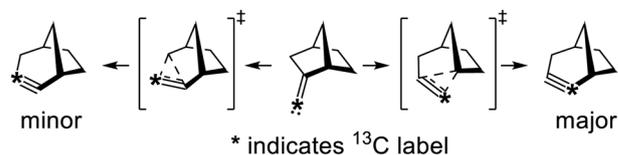


COMMUNICATIONS

14573

Generation and interception of bicyclo[3.2.1]oct-2-yne: an experimental and theoretical mechanistic study

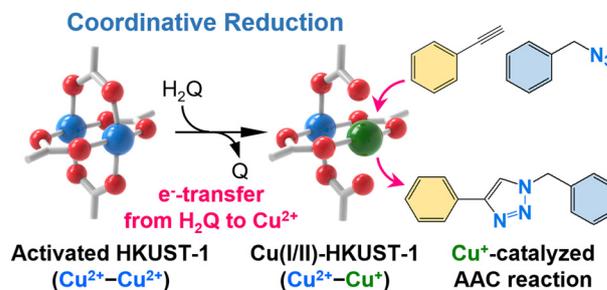
T. E. Anderson, Beauty K. Chabuka, Igor V. Alabugin,* Dasan M. Thamattoor* and David Lee Phillips*



14577

Hydroquinone-treated Cu₃(BTC)₂: a mixed-valence Cu(I/II) MOF catalyst for efficient cycloadditions

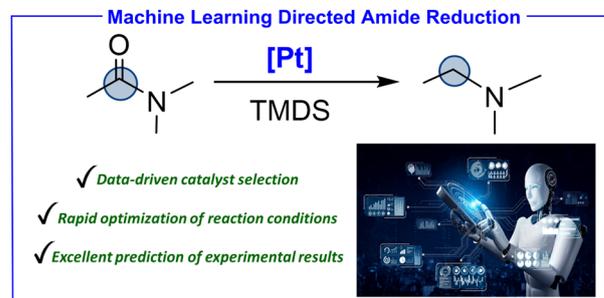
Sun Ho Park, Hye Mi Kim, Mariana L. Díaz-Ramírez, Sunggi Lee* and Nak Cheon Jeong*



14597

Machine learning directed discovery and optimisation of a platinum-catalysed amide reduction

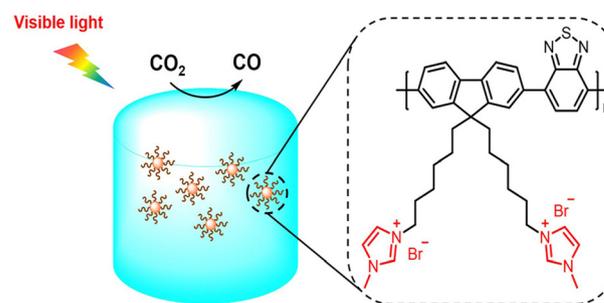
Eleonora Casillo, Benon P. Maliszewski, César A. Urbina-Blanco, Thomas Scattolin, Catherine S. J. Cazin* and Steven P. Nolan*



14601

Efficient CO₂ photoreduction using a water-soluble conjugated polyelectrolyte grafted imidazolium-functionalized side chain

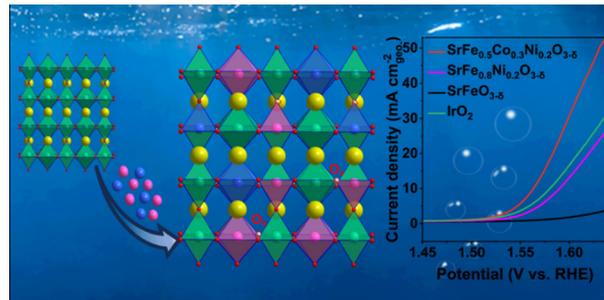
Mantao Chen, Waner Li, Tingting Zhang, Tianjing Xu, Bo Wang, Chao Zeng, Fei Li* and Chunhui Dai*



14605

Unveiling the effect of codoping in strontium ferrite for oxygen evolution in alkaline media

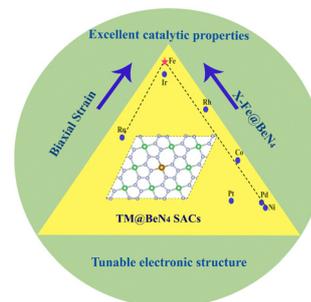
Shuangshuang Zhu, Mingyuan Wang, Yuguang Mao, Jiayuan Wang, Jiabao Ding,* Guiwu Liu and Weifeng Zhang*



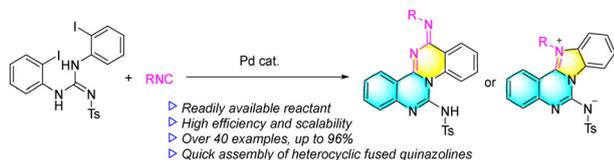
14609

Tunable electronic structure and excellent catalytic properties of transition-metal-doped BeN₄ monolayer

Wen-Hui Zhao, Dong-Yin Sun, Zi-Qiang Deng, Shi-Yao Liu, Lie-Mao Cao, Xiao-Hui Deng, Wen-Jin Yin and Zhen-Kun Tang*



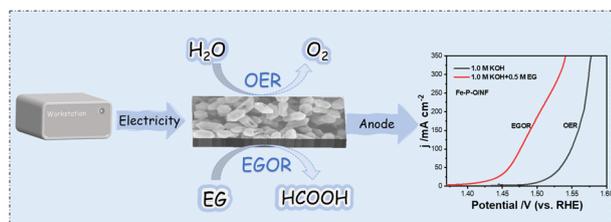
14613



Palladium-catalyzed cascade cyclization of isocyanides with di-(*o*-iodophenyl)sulfonylguanidines: access to heterocyclic fused quinazolines

Shen Ge, Yi-Ming Zhu, Xiao-Ping Xu,* You Zi* and Shun-Jun Ji*

14617



Amorphous Fe–O–P electro(pre)catalysts for energy-efficient H₂ production coupled with ethylene glycol oxidation

Feifei Yuan, Xiaoli Chen, Wenhui Yang, Wanting Wu, Manjie Zheng, Jun Xu,* Nan Yu* and Liyong Chen*

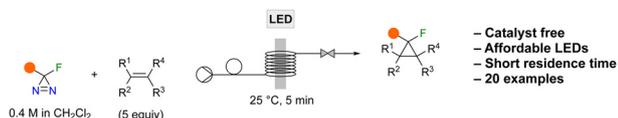
14621



Effects of dissolved 3d-block metal ions on PEM water electrolysis performance

Shuang Kong,* Kazuna Fushimi, Ailong Li and Ryuhei Nakamura*

14625



Synthesis of aryl fluorocyclopropanes from aryl fluorodiazirines and alkenes in continuous flow

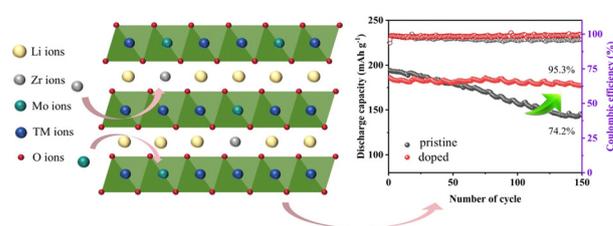
Hoang-Minh To, Shima Mirakhorli and Thierry Ollevier*



14629

Boosting the electrochemical performance of the Ni-rich $\text{LiNi}_{0.96}\text{Co}_{0.02}\text{Mn}_{0.02}\text{O}_2$ cathode by high-valence Zr/Mo dual-doping

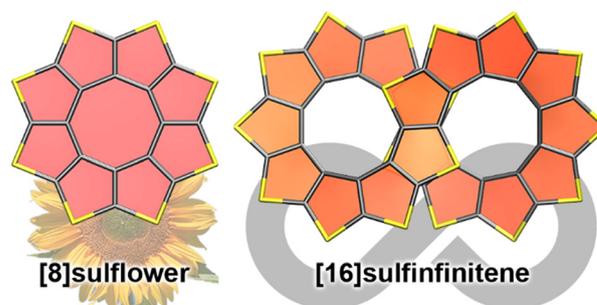
Hongmei Cao, Yudong Zhang,* Xunzhu Zhou, Jie Yu, Xiang Chen and Lin Li*



14633

Sulfinfinitenes: infinitenes of fused thiophene rings

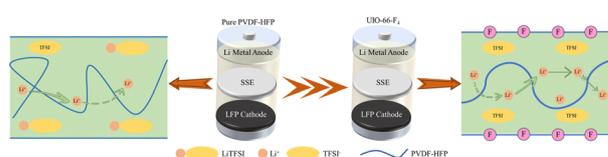
Peter B. Karadakov* and Edward Cummings



14637

The effects of fluorinated metal–organic frameworks as additives in polymer-based electrolytes for all-solid-state lithium batteries

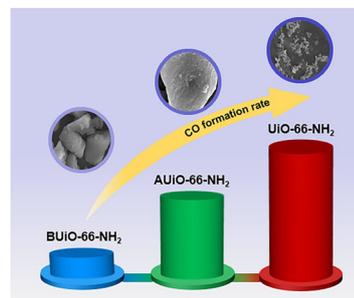
Liang He, Zexi Di, Jiaying Li, Sijia Wang, Wei Kong, Ruiqi Li, Arkadii Proskurin, Changzhu Lv* and Tao Wei*



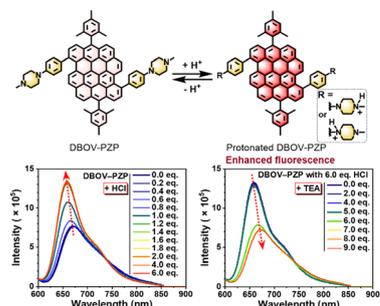
14641

Varied CO_2 photoreduction activities of UiO-66-NH_2 MOFs with different aggregation morphologies

Shu-Ran Zhang, Yan-Hong Zou, Hai-Ning Wang,* Guang-Juan Xu, Wei Xie, Na Xu, Yan-Hong Xu* and Ya-Qian Lan*



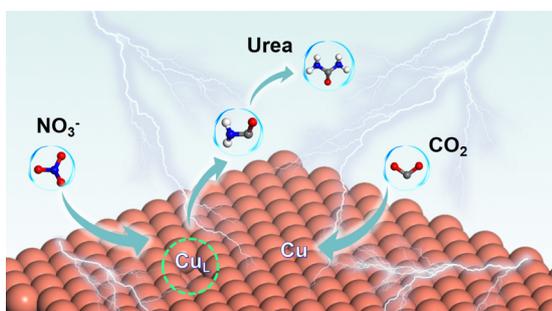
14645



Acid-induced fluorescence enhancement of piperazinyphenyl-substituted nanographene

Hao Zhao, Rafael Muñoz-Mármol, Lilia Moshniaha, QiQi Yang, Mischa Bonn, Xiaomin Liu, Ryota Kabe, Giuseppe Maria Paternò* and Akimitsu Narita*

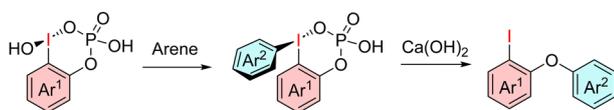
14649



Electroreduction of CO₂ and nitrate for urea synthesis on a low-coordinated copper catalyst

Peng Guo, Xindong Wang, Yufei Wang, Yanwei Luo* and Ke Chu*

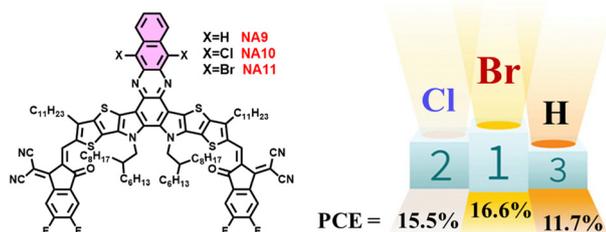
14653



Synthesis of phosphate stabilised iodanes and their application in intramolecular aryl migrations

Jan Rick Koch, Mattis Damrath, Pim Puylaert and Boris J. Nachtsheim*

14656



Efficient organic solar cells with benzo[*b*]phenazine-core acceptors: insights into the effects of halogenation

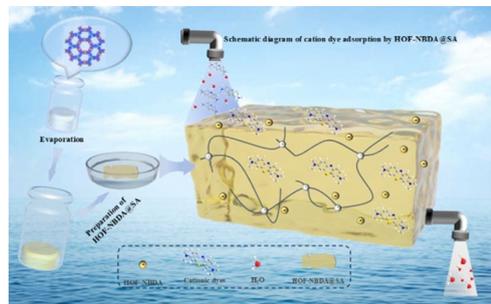
Han Tian, Kangbo Sun, Yufei Wang, Zhanxiang Chen, Guangye Zhang* and Zhenghui Luo*



14660

A stable HOF-embedded alginate hydrogel membrane for selective adsorption of cationic dyes

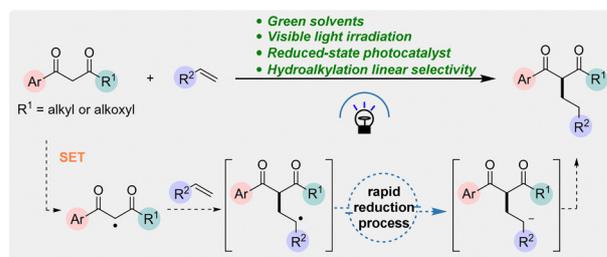
Ruiqi Zhu, Qiuxia Wu, Shengjie Lin, Limin Wang, Ye Liang, Lin Zhang,* Dian Zhao, Yabing He* and Banglin Chen*



14664

Visible-light-induced hydroalkylation of alkenes with aromatic β -ketoesters

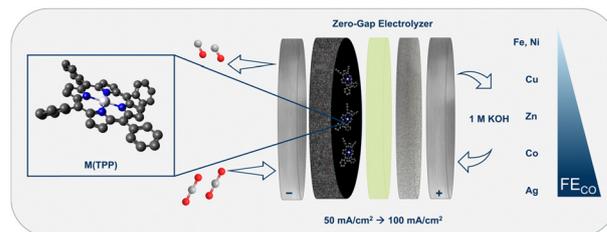
Ming Gong, Qingrui Li, Honghong Qin, Haixin Fu, Guoping Li,* Yabo Li* and Yangjie Wu



14668

Scaling up electrochemical CO₂ reduction: enhancing the performance of metalloporphyrin complexes in zero-gap electrolyzers

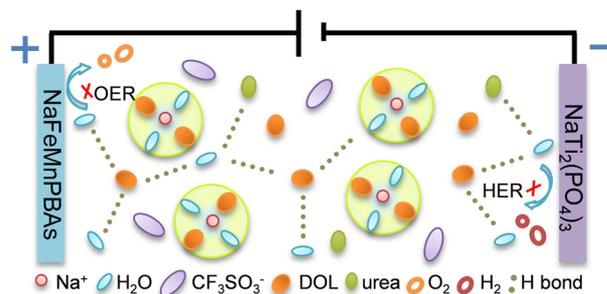
Wiebke Wiesner, Jenny Yurley Maldonado Arias, Julia Jökel, Rui Cao and Ulf-Peter Apfel*



14672

Synergistic effect of hydrogen-bond interaction and interface regulation for stable aqueous sodium-ion batteries

Lingyu Du,* Miaomiao Xie, Zizhen Liu, Weiyu Cao, Jianchao Sun and Litao Kang*



CORRECTION

14676

Correction: Impacts of trace level chromium on formation of superoxide within uranyl triperoxide complexes

Sarah K. Scherrer, Harindu Rajapaksha, Dmytro V. Kravchuk, Sara E. Mason and Tori Z. Forbes*

