



Cover

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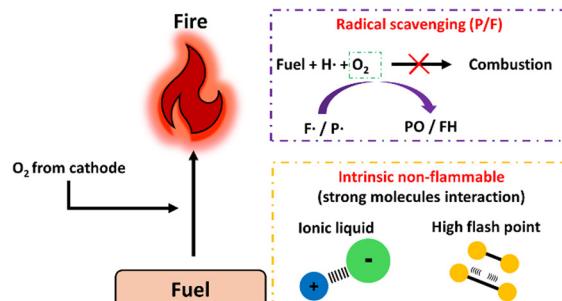
INSIDE COVER
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Łukasz Albrecht
et al., pp. 12119–12122
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2025, 61, 12119

HIGHLIGHTS

12056

Innovations in non-flammable and flame-retardant electrolytes for safer lithium-ion batteries

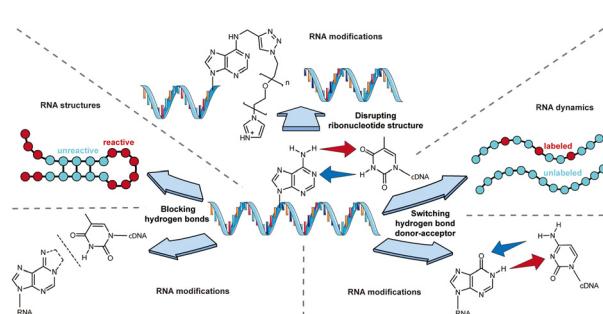
Won-Jang Cho, Yoo Jeong Huh, Soyeon Choi,
Uddhav Kulkarni, Kiran P. Shejale and Gi-Ra Yi*



12069

Chemical decoding strategies for detecting RNA modifications, dynamics and structures

Xiao Shu* and Wenping Li



Environmental Science: Atmospheres

GOLD
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Fundamental questions
Elemental answers



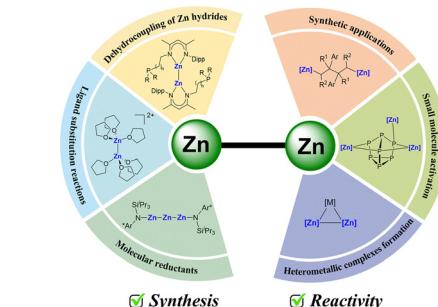
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FEATURE ARTICLES

12085

Recent advances in zinc–zinc bonded complexes: synthesis and reactivity

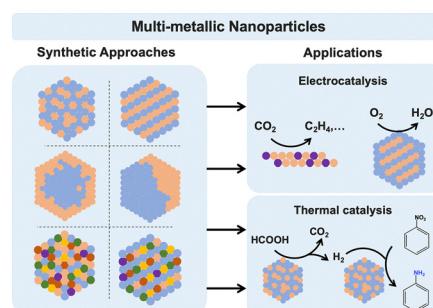
Shengjie Jiang, Shuilian Xu and Xin Xu*



12097

Multi-metallic nanoparticles: synthesis and their catalytic applications

Yuliang Chen, Ahsan Zohaib, Haobo Sun and Shouheng Sun*

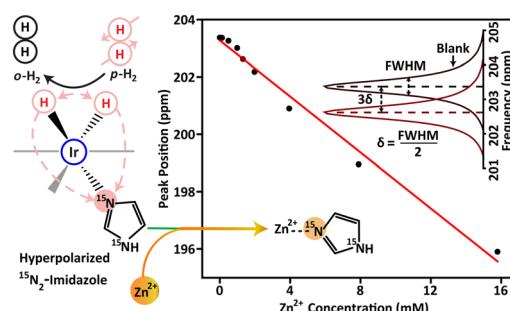


COMMUNICATIONS

12115

SABRE-SHEATH hyperpolarized $^{15}\text{N}_2$ -imidazole for Zn^{2+} sensing

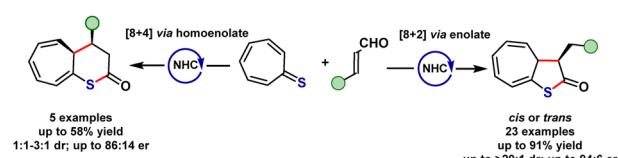
Brojo Kishor Shachib Dhali, Abubakar Abdurraheem, Mustapha Abdulmojeed, Anna Samoilenko, Megan Pike, Rielly J. Harrison, Franziska Theiss, Boyd M. Goodson, Eduard Y. Chekmenev* and Thomas Theis*



12119

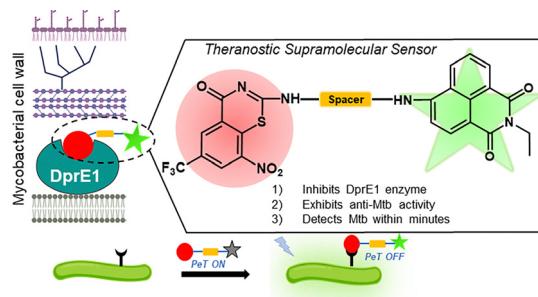
Divergent hetero-[8+n] higher order cycloadditions of tropothione and enals catalyzed by N-heterocyclic carbenes

Joanna Dybowska, Artur Przydacz, Weronika Olczyk, Lesław Sieroń, Anna Skrzynska* and Łukasz Albrecht*

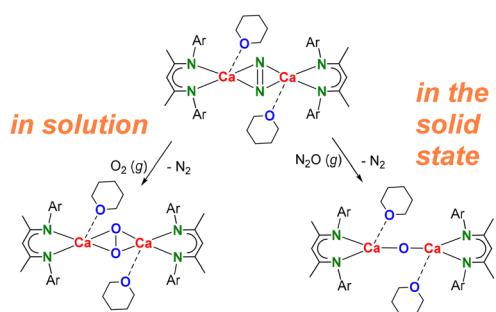


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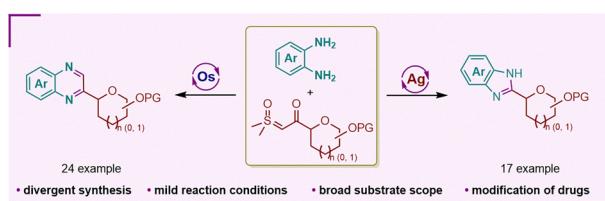
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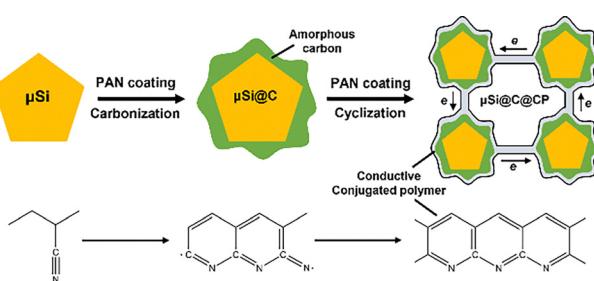
12127



12131



12135

**A dual-function probe for inhibition and rapid detection of *Mycobacterium tuberculosis***

Sonali Chhabra* and Raman Parkesh*

Low-coordinate calcium peroxide and oxide complexes

Stefan Thum, Marcel A. Schmidt, Jens Langer and Sjoerd Harder*

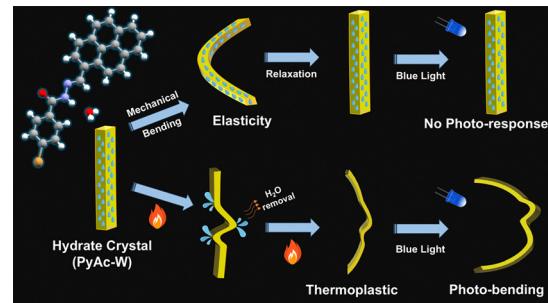
Switchable synthesis of benzimidazole/quinoxaline C-glycosides with o-phenylenediamines and sulfoxonium ylide glyco-reagents

Deng-Yin Liu, Xin-Yue Hu, Cong-Zhen Zhang, Miao-Miao Wen, Xiao-Xi Ren and Xu-Ge Liu*

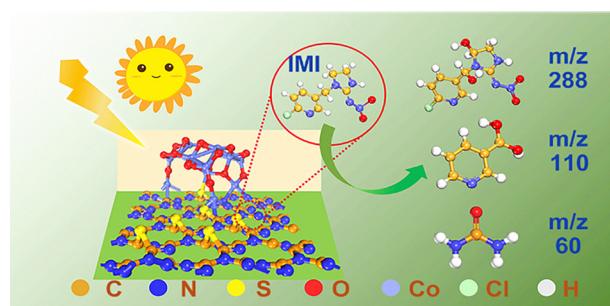


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12139

Water-driven modulation of multiresponsive properties in acylhydrazone-based crystalsDeepak Manoharan, Aritra Bhowmik,
Manish Kumar Mishra* and Soumyajit Ghosh*

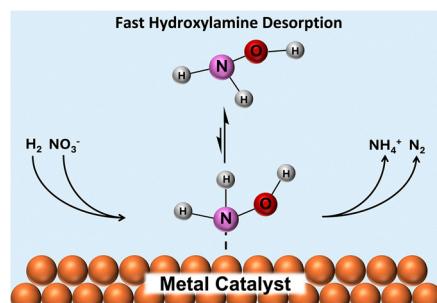
12143

Bulk-interface engineering of a CoO_x/SCN heterostructure for synergistically enhanced photocatalytic degradation of the imidacloprid insecticideGuangxue Pan, Yan Zhang, Mengmeng Liu, Zhuwei Cao,
Yi Zheng and Sheng Ye*

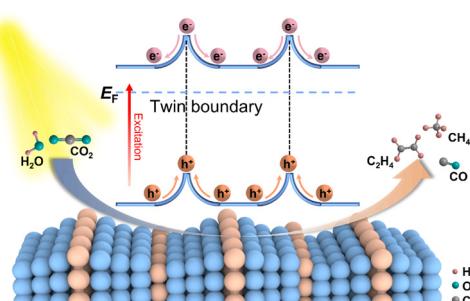
12147

Hydroxylamine: an overseen intermediate that brings into question nitrogen selectivity in metal-catalyzed nitrate and nitrite reduction

Janek Betting, Leon Lefferts* and Jimmy Faria Albanese*

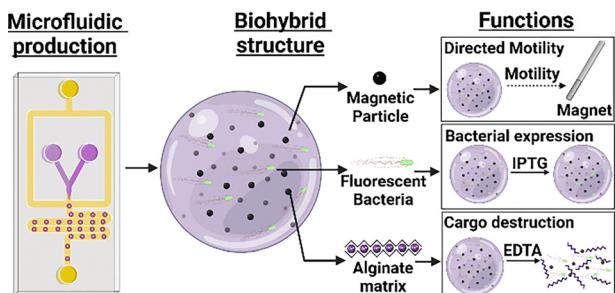


12151

Engineering twin $\text{Cu}_{0.3}\text{Zn}_{0.7}\text{S}$ for CO_2 photocatalytic reduction to ethyleneHang Zhao, Hao Song, Zhefei Pan, Xun Zhu,
Dingding Ye, Yang Yang, Hong Wang, Qiang Liao and
Rong Chen*

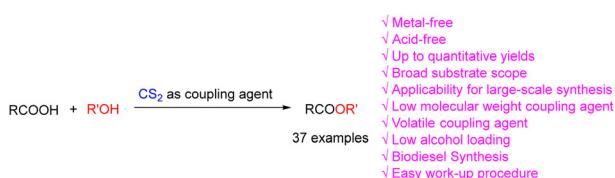
COMMUNICATIONS

12155

**Microfluidic generation of bacterial biohybrids for magnetic guidance and content release**

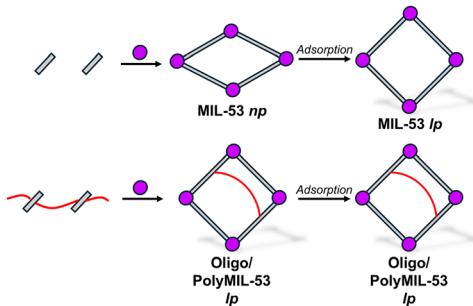
Nina O'Toole, Matthew E. Allen, Claudia Contini* and Yuval Elani*

12159

**Esterification of carboxylic acids using carbon disulfide (CS_2) as a coupling agent**

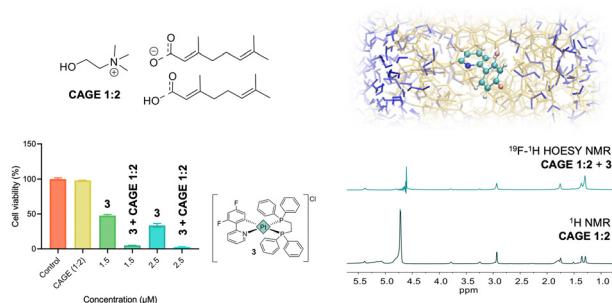
A. Ziyaei Halimehjani* and Z. Marjani

12163

**Permanently porous oligoMOFs and polyMOFs of MIL-53**

Debobroto Sensharma and Seth M. Cohen*

12167

**Choline–geranate (CAGE) ionic liquids potentiate the anticancer activity of platinum-based drugs**

Marta Costa Verdugo, Giulia Sierri, Laura Hernandez-Fernandez, Elena Formoso, José I. Miranda, Francesco Saverio Sica, Alejandro H. Orrego, Alba González, Elixabete Rezabal, Francesca Re and Luca Salassa*

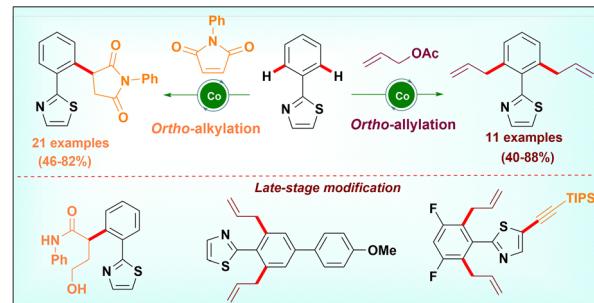


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12171

Cobalt(III)-catalyzed C–H functionalization of 2-arylthiazoles with maleimides or allyl acetate

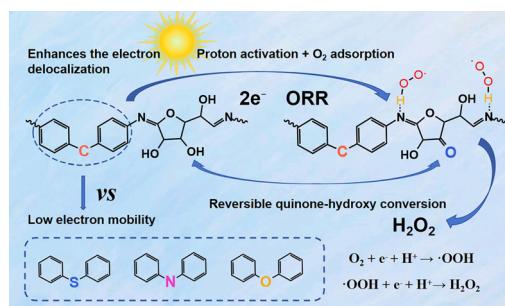
Pengfei Zhou, Guibin Wan, Zhihan Yuan, Aoran Guan, Zongwu Wei, Taoyuan Liang, Jun Jiang* and Zhuan Zhang*



12175

Chain-section engineering enables electron delocalization for efficient photocatalytic H_2O_2 synthesis in D-glucuronolactone-derived polymers

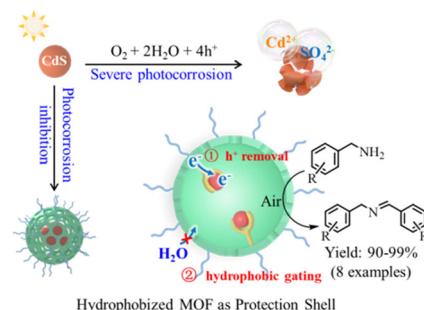
Yu Liu, Jiawei Lu, Shichen Cui, Haijiao Xie, Jianning He* and Qingyao Wu*



12179

A hydrophobized metal–organic framework as a protection shell to stabilize CdS quantum dots for sunlight-driven aerobic oxidation

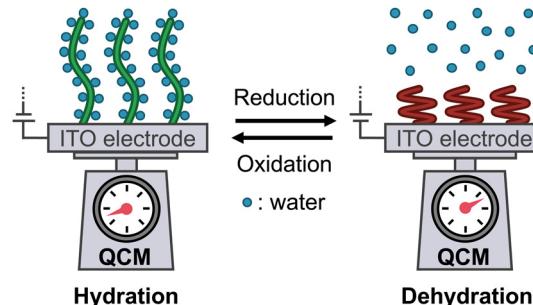
Zewei Liu, Zepeng Yu, Shu Li, Jun Pang, Yuzhu Wang, Zhiqiang Wu, Sijie Liu and Rong Tan*



12183

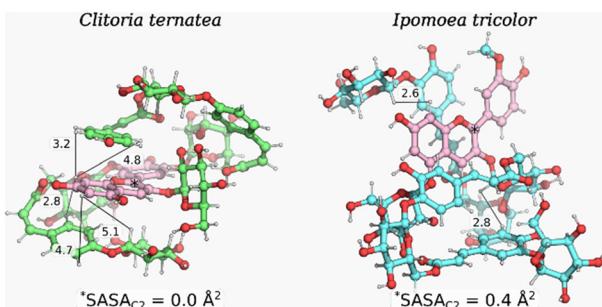
Redox-associated phase transition of a marginally stable synthetic polymer

Takafumi Enomoto,* Keita Terui, Shunsuke Yagi, Aya M. Akimoto and Ryo Yoshida*



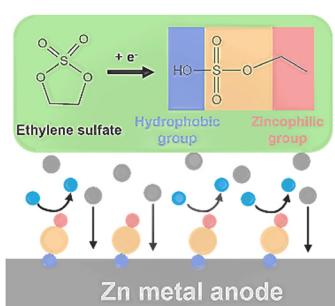
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12187

**Achieving a dramatic blue colour stability in anthocyanins bearing acylated sugars in position 3',5'**

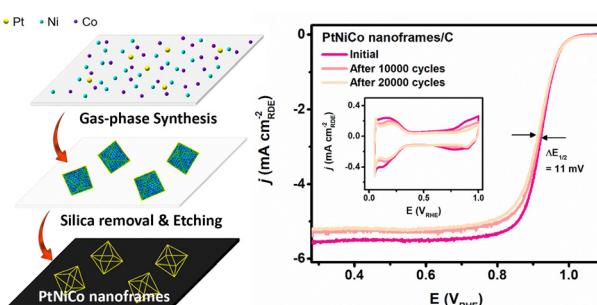
Joana Oliveira,* João T. S. Coimbra, Victor Freitas, Peiqing Yang, Nuno Basílio and Fernando Pina*

12191

**In situ formation of zincophilic–hydrophobic layers using self-assembling additives for stabilizing zinc metal anodes**

Zhengquan Xiao, Zihan Xu, En Gao and Shilin Wu*

12195

**Synthesis and characterization of ultra-small octahedral PtNiCo skeletons with high activity for the oxygen reduction reaction**

Minseok Ko, Mrinal Kanti Kabiraz, Yuseong Heo, Daehee Yang, Yeongseop Lee, Sang Hoon Joo, Young-Min Kim, Sang-Il Choi* and Won Seok Seo*

12199

**Divalent transition metal ion intercalated hydrated V₂O₅ nanosheet cathodes for ultra-long cycling aqueous zinc-ion batteries**

Jie Bai, Wenting Ji, Mengda Xue, De Li,* Huayu Wang and Lingyun Chen*

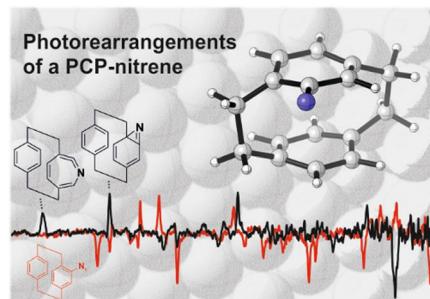


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12203

Photochemical rearrangements of a [2.2]paracyclophane-based nitrene studied by vibrational CD spectroscopy

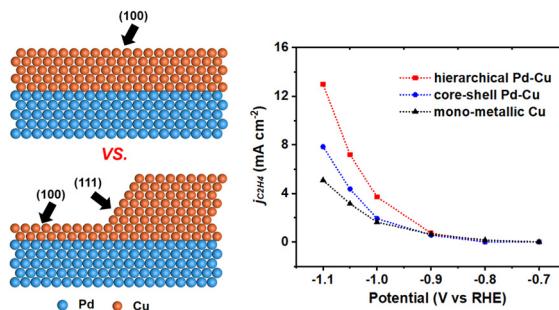
Frederike Beyer and Christian Merten*



12207

Architecture engineering and lattice modulation of exposed Cu (100)/(111) surfaces for efficient electrochemical CO₂ reduction

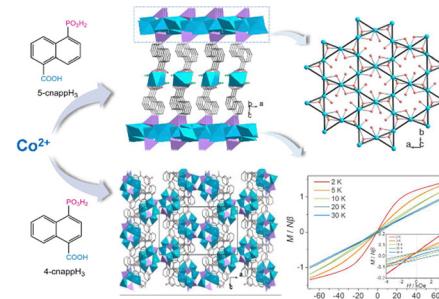
Zhen He, Hanwen Cheng, Hao Liu, Tengfei Xiong, Chengming Wang,* Xiaobin Liao* and Lingwen Liao*



12211

Metal–organic framework containing Co₃(μ₃-OH)-based kagomé layers showing long-range weak ferromagnetic ordering

Yan Xu, Qian-Qian Su, Bei Liu, Wen-Tao Sun, Song-Song Bao, Su-Zhi Li and Li-Min Zheng*



12215

Sulfonium triggered one-pot synthesis of dihydrofurans via [3+2] annulation of alkenes and active methylene compounds

Li Yang, Jin-Long Wang, Jia Shu, Xiang-Qin Xu, Shan-Shan Tang and Long-Yong Xie*

