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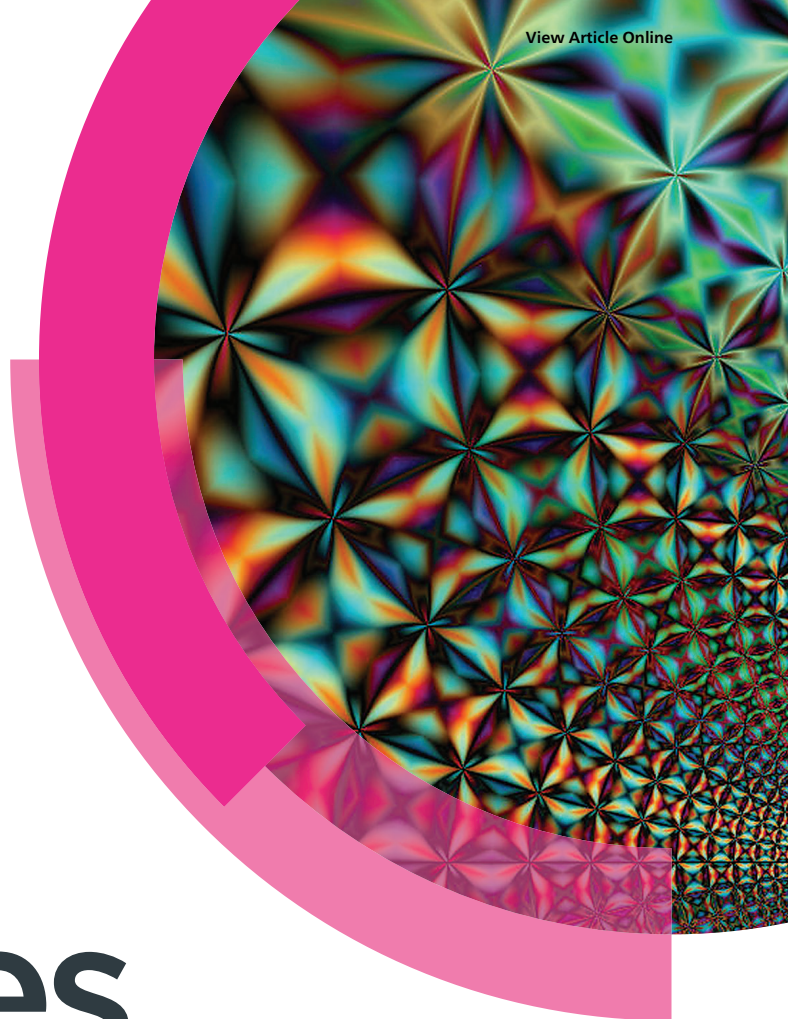


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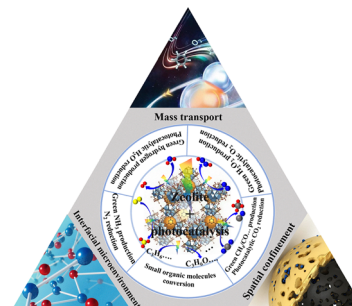


HIGHLIGHTS

1354

Application of zeolites in photocatalytic solar-energy conversion: mechanisms, advances, and challenges

Yunfeng Bao, Peng Zou, Hailong Liu and Anmin Zheng*

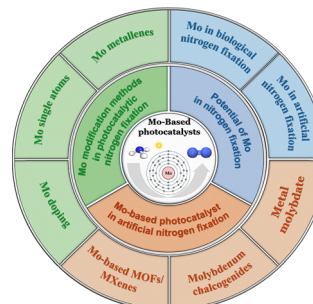


FEATURE ARTICLES

1369

Advances in molybdenum-containing photocatalysts for nitrogen fixation

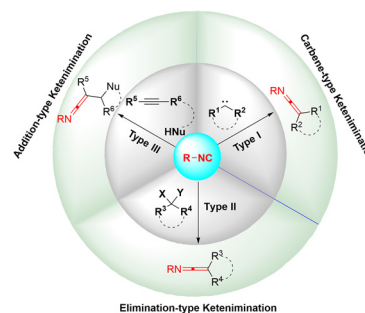
Xu Zhu, Shumin Chen, Jiale Wang, Shiyu Chen, Yuyan Wu, Bijun Zhou, Pengyan Li and Hongda Li*



1391

The ketenimination of isocyanides: recent advances and future perspectives

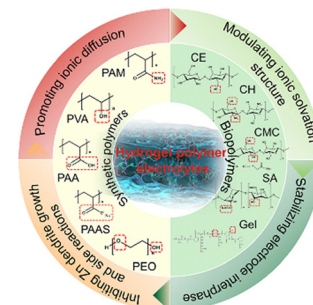
Yingying Shan,* Daiying Lv, Xiuhua Zhang, Jia Wang and Dianpeng Chen*



1409

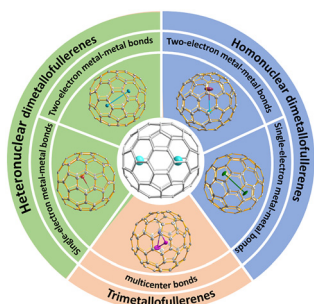
Recent advances in hydrogel polymer electrolytes for stable zinc metal anodes

Chengwu Yang, Pattaraporn Woottapanit, Xinyu Zhang and Jiaqian Qin*



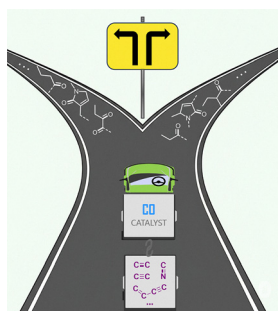
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1427

**Metal–metal bonds inside fullerenes**

Zhanxin Jiang, Ziqi Hu* and Shangfeng Yang*

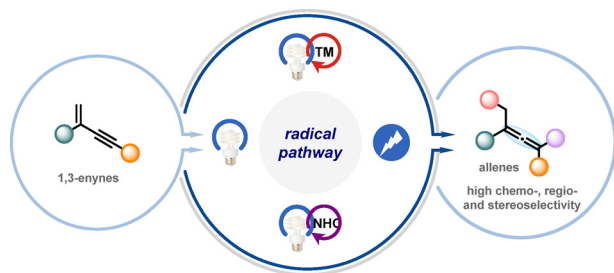
1440

**Turn left and turn right: recent advances in selectivity controlled carbonylation**

Yang Yuan, Chang-Sheng Kuai and Xiao-Feng Wu*

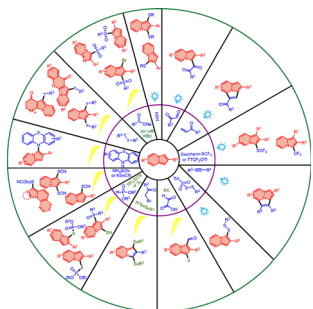
REVIEWS

1459

**1,4-Difunctionalization of 1,3-enynes: new opportunities for the synthesis of allenes via photochemistry and electrochemistry**

Keyi Peng, Xiangyuan Yao, Ya Chen* and Guo-Jun Deng*

1479

**Greening indolizine chemistry: advances in electro-/photochemical direct C–H functionalization**

Xiang Liu,* Suijie Zhong, Jubin Liu, Haifeng Fu and Hua Cao*

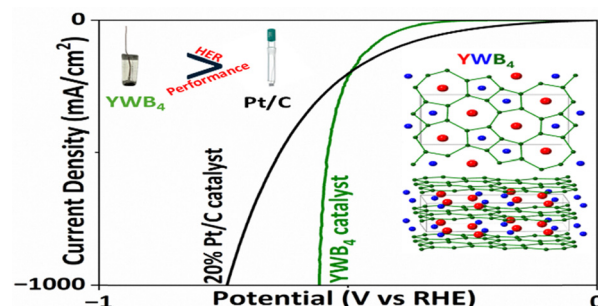


COMMUNICATIONS

1497

Probing layered $Y(TM)B_4$ ($TM = Cr, Mo$ and W) borides as efficient hydrogen evolution reaction electrocatalysts

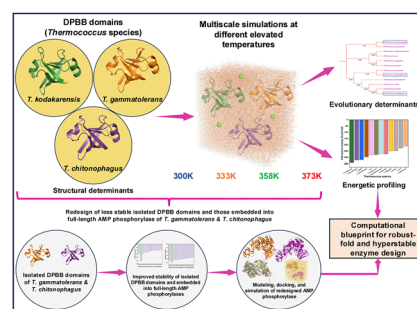
MD Ali Hossain, Lesly Delgado, Rutva Joshi, Sylvie Rangan and Georgiy Akopov*



1501

Decoding fold robustness and thermostability in *Thermococcus* AMP phosphorylase and its DPBB domains

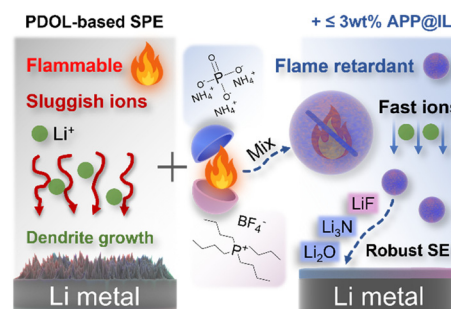
Khushboo Bhagat and Aditya K. Padhi*



1505

A molecularly engineered flame retardant composite at ultra-low loading enables a safe PDOL electrolyte for solid-state Li metal batteries

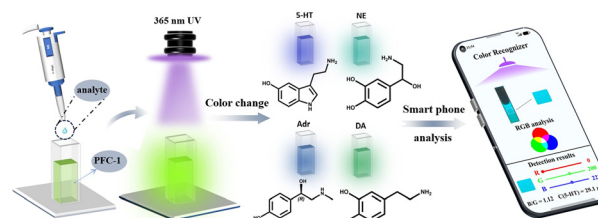
Xiaobin Chen, Sili Qiu, Dazhu Chen and Chen Liu*



1510

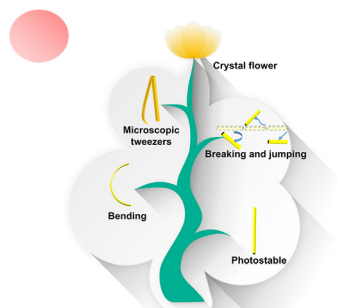
Excimer-to-monomer switching in a pyrene HOF for discriminative neurotransmitter sensing

Wei Zhang, Ziyao Zhang, Gongxun Bai, Shiqing Xu, Hui Xu* and Junkuo Gao*



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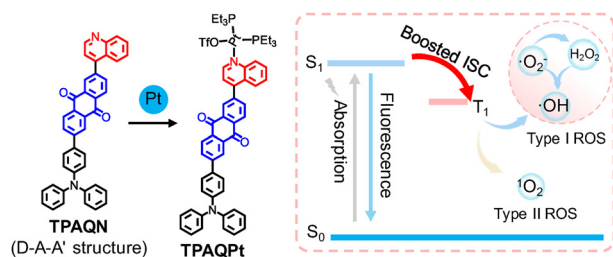
1515



Substituent-modulated organic single crystals with a rapid natural light photomechanical response

Zhengcheng Wang, Lin Gao, Qi Yu* and Guoming Wang*

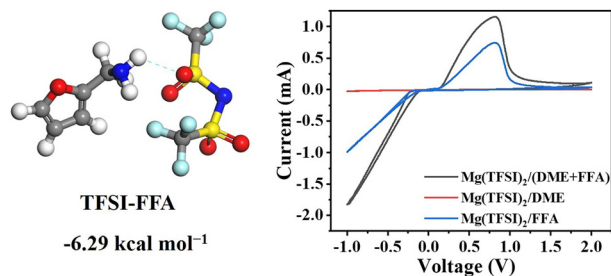
1520



An AIE-active platinum complex for enhanced photodynamic therapy

Ping Liang, Wenjing Li, Ben Zhong Tang and Guangxue Feng*

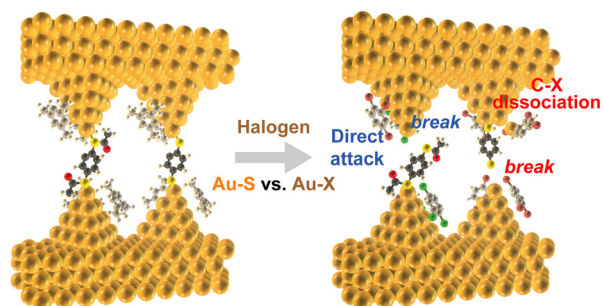
1525



Amine-based anion receptor enables an improved magnesium plating/stripping reversibility

Tianyi Zhang, Ning Yuan, Zhenfang Zhou, Zhonghua Zhang* and Guicun Li*

1529



Mechanistic insights into the halogenated solvent effect on the Au-S bond cleavage

Sha Yang,* Yirong Zhang and Wei Liu*

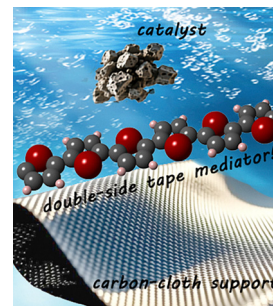


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1533

Polythiophene as an efficient mediator to anchor *in situ*-grown Ni hydroxide cluster for the urea oxidation reaction

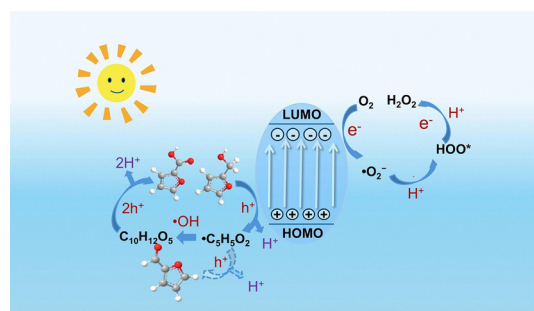
Shi-Jie Lu, Hao-Nan Li, Kai Wei, Weijia Song, Hsiao-Chien Chen and Nian-Tzu Suen*



1537

Harnessing topological porphyrin frameworks for synergistic H₂O₂ generation and furfuryl alcohol oxidation

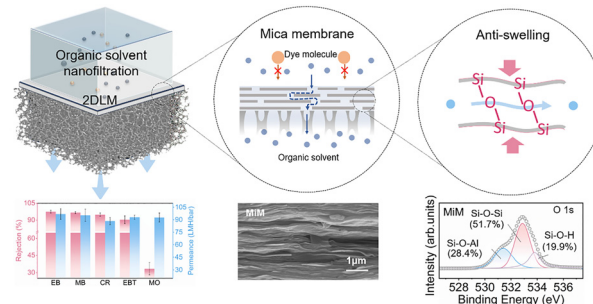
Meng-Yu Sun, Ben-Hao Liu, Xu-Sheng Wang, Lan Li, Hai-Bo Huang* and Hua Tang*



1541

Facile synthesis of a self-stabilized lamellar mica membrane for efficient organic solvent nanofiltration

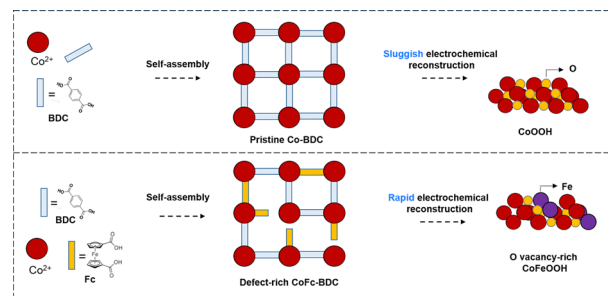
Mingbo Xie, Huacun Li, Jinkang Liu, Jun Xie, Xu Yan, Qingwei Wang, Meiqing Shi, Liyuan Chai and Liyuan Zhang*



1545

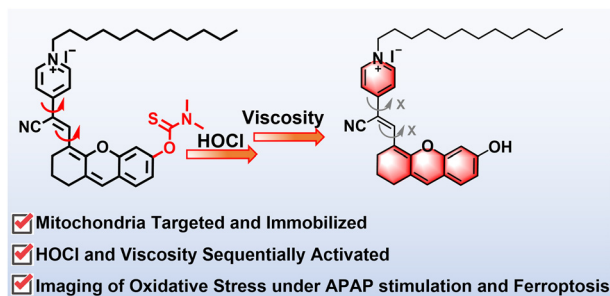
Defect-driven accelerated structural transformation from metal–organic frameworks: a boost for the oxygen evolution reaction

Han Wang, Dong Yan, Suran He, Tao Yu, Fan Yang, Mingxu Liu and Chun-Chao Hou*



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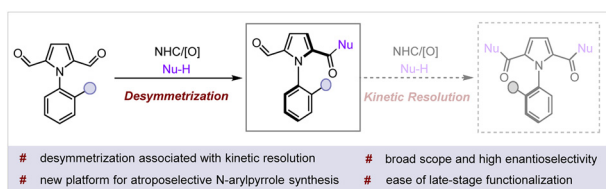
1550



A mitochondria-anchored dual-lock probe for sequential detection of HOCl and viscosity during oxidative stress and ferroptosis

Xue Wu, Yaran Yang, Chenchun Zhou, Junjie Kou, Mingxia Li, Fanpeng Kong* and Bo Tang

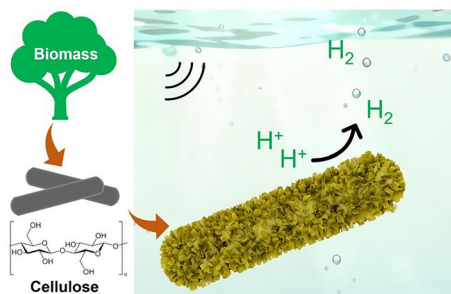
1554



Enantioselective synthesis of *N*-arylpyrrole aldehydes via NHC-organocatalytic atroposelective desymmetrization followed by kinetic resolution

Chunyang Hu, Zuquan Liu, Chenxing Li, Jianquan Feng, Yiwei Zhu* and Ding Du*

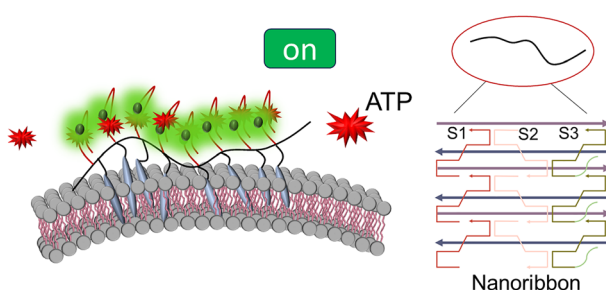
1559



Hybridization of preheated cellulose microcrystals with MoS₂ sheets for enhanced piezo-catalytic hydrogen evolution

Hailong Zhang, Jianzhong Guo, Shuying Liang, Hongbo Yu,* Xianhong Li* and Chunzheng Wu*

1563



The "Nanoribbon Sentinel": a cell-surface aptasensor for real-time imaging of gliotransmitter release

Meirong Cui, Chenxu Hu, Yiyu Cheng, Jiahao Dong, Lianhui Wang and Jie Chao*

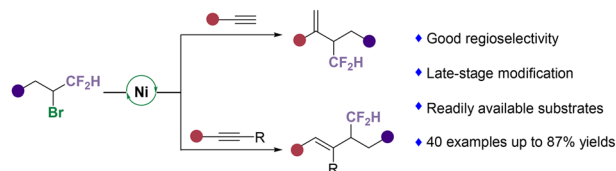


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1567

Nickel-catalyzed reductive coupling of secondary alkyl bromides with alkynes to construct allylic difluoromethyl alkenes

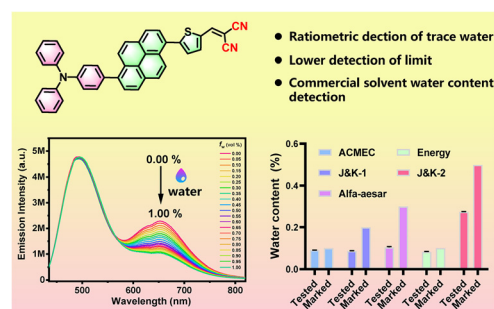
Jinxu Dong, Xiaohong Wen, Yihang Xu, Jiaming Chen, Yanli Yuan and Xiaojun Zeng*



1572

Construction of a pyrene-based AIEgen for ratiometric detection of trace water in organic solvents

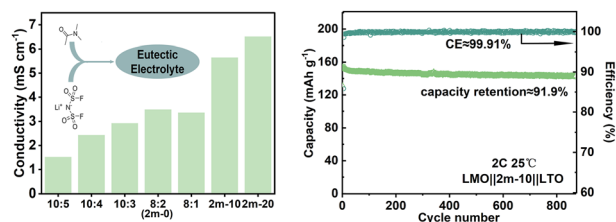
Minglun Liu,* Xiaoxue Zheng, Min Zhang, Shankun Yao, Pan Zhang, Lili Liang and Yuncong Chen*



1576

A dimethylacetamide-based eutectic electrolyte for high-performance aqueous lithium-ion batteries

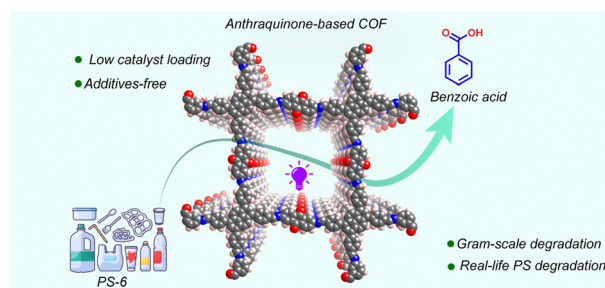
Jiajie Zhang and Changkun Zhang*



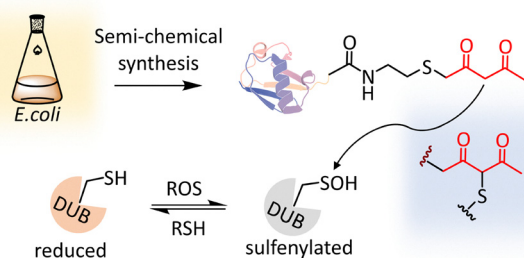
1581

An anthraquinone-based covalent organic framework for sustainable photocatalytic oxidative degradation of polystyrene

Aparna Tiwari, Supriti Dutta, Bikash Mishra, Pekham Chakraborty and Pradip Pachfule*



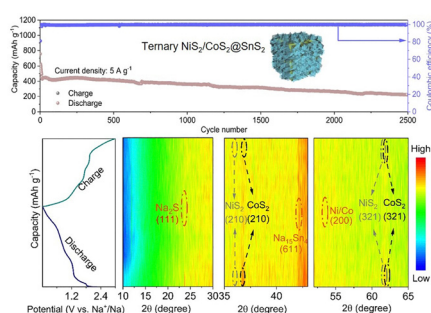
1586



Acetylacetonemodified ubiquitin C-terminus enables specific capture of sulfenylated deubiquitinases

Liwen Liu, Pincheng Li, Shuo Yang, Dingfei Yan, Beichen Wang, Yi-Ming Li* and Yu Wang*

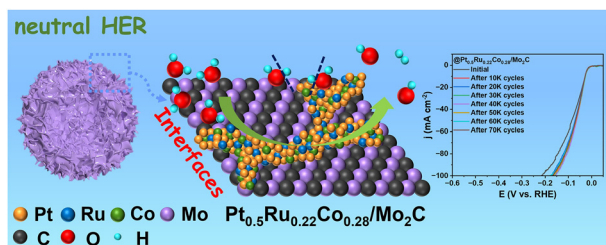
1591



Designing a ternary $\text{NiS}_2/\text{CoS}_2@ \text{SnS}_2$ nanocube as a secondary battery anode displaying excellent capacity and stability

Huizi Songtian, Fengming Ma, Fan Zhou, Keke Wang, Fan Bu, Xulai Yang, Tianli Han,* Jinjin Li* and Jinyun Liu*

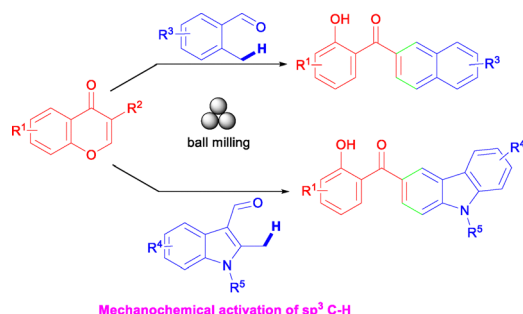
1596



Alloying and interface effects endow supported PtRuCo nanochains with 70 000-cycle stability in hydrogen evolution under neutral conditions

Yangqin Feng and Qiang Yuan*

1601



Efficient synthesis of benzo(hetero)aryl-5-yl(2-hydroxyphenyl)methanones via mechanochemical benzannulation

Qiuling Xu, Qinghong Cui and Junliang Wang*

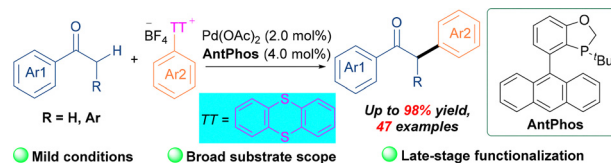


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1606

Efficient Pd/AntPhos-catalyzed α -arylation of benzyl aryl ketones with aryl thianthrenium salts

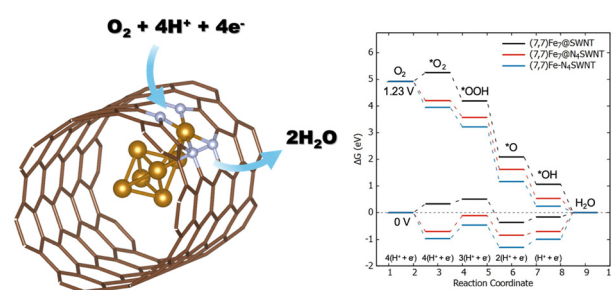
Xiangdong Zhang, Rui Shi and Guodu Liu*



1610

Iron cluster encapsulated N-doped single-walled carbon nanotubes as ORR electrocatalysts: a first-principles study

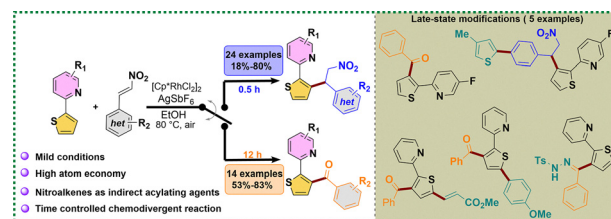
Yuqing Fu, Chengli Hung, Bryan M. Wong and Juchen Guo*



1614

Time-dependent Rh(III)-catalyzed chemodivergent reactions of 2-pyridylthiophenes with nitroalkenes

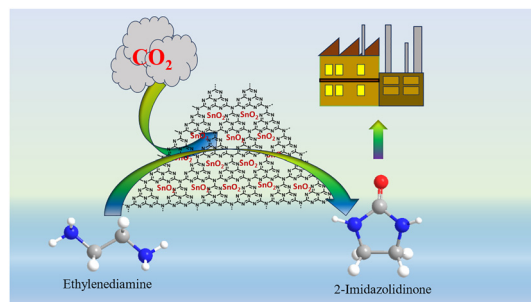
Cheng Wang, Qiang Zhang, Sisi Qin, Zhimin Lai, Taoyuan Liang, Guan Huang, Shuangliang Zhao* and Zhuan Zhang*



1618

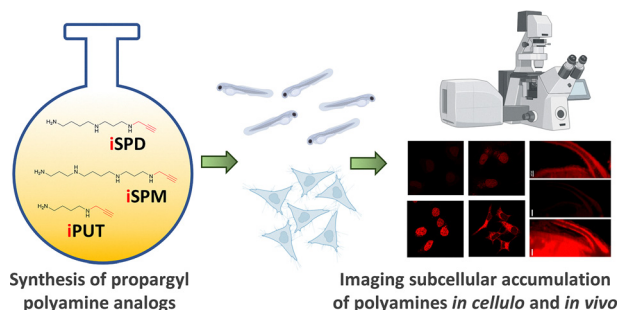
Synthesis of 2-imidazolidinone from ethylenediamine using CO_2 as a C1 building block over the $\text{SnO}_2/\text{g-C}_3\text{N}_4$ catalyst

Akash Mandal, Sumanta Mondal, Aniruddha Singha, Akash Surajlal Rane, Sourav Ghosh, Ranjit Thapa, Asim Bhaumik* and Biswajit Chowdhury*



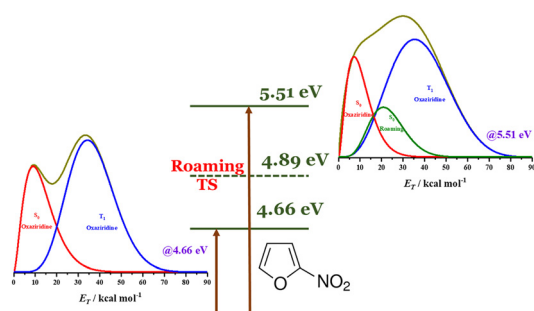
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1623

Minimal-tag polyamines for *in situ* probing of their intracellular distribution

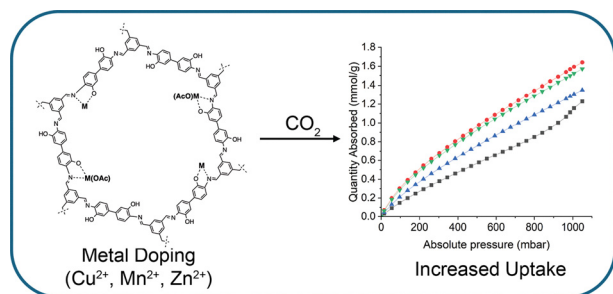
Zuzanna Sas, Maciej Zakrzewski, Agnieszka D. Wardak, Przemysław Wanat, Wojciech Czeszkowski, Justyna Zmorzyńska, Anna A. Marusiak* and Remigiusz A. Serwa*

1628

Delineating the roaming and non-roaming pathways for the NO release in *o*-nitrofur and *o*-nitrothiophene

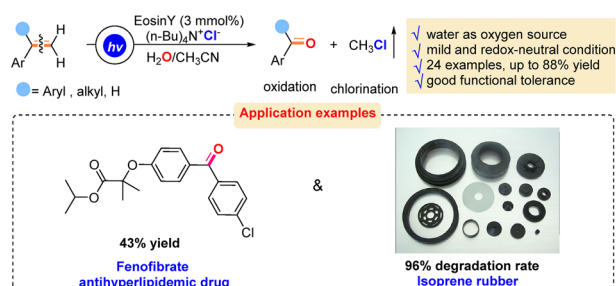
Sumitra Singh, Supriyo Santra, Shaivi Kesari, Monali Kawade, Debashree Ghosh* and G. Naresh Patwari*

1632

Tuning CO_2 uptake capacity in covalent organic frameworks *via* metal doping

Harrison D. Root,* Matthew J. Hurlock, Jessica M. Rimsza, Brianna M. Addison, Sydney A. Goodman-Miller, Ping Lu, Benjamin Siu, Melissa L. Meyerson, Jessica Román-Kustas and Tina M. Nenoff*

1637



Photocatalytic oxidative cleavage of styrenes using water and chlorides for application in rubber degradation

Xu-Qin Zhong, Zhi-Cheng Fu,* Wen-Li An, Ting Wang, Jin-Ni Deng and Ming-Jun Chen*

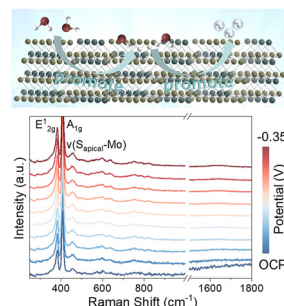


COMMUNICATIONS

1641

Regulating the electronic structure of molybdenum disulfide by chromium incorporation for robust hydrogen evolution reaction

Shuixiang Xie, Xinyu Zhu, Yuhang Zhang, Fan Zhang, Wenqian Fan, Zhaochang Yang, Guangyu Zhang, Mingzheng Ge, Wei Zhang and Rui-Qing Li*



1645

A screen-printed electron transport layer for efficient air-processed perovskite solar cells

Xinsheng Tang, Yangyang Liu, Tianxiao Liu, Lingyuan Wang, Yu Zhao, Zilong Wang and Shangshang Chen*



1650

Core-shell covalent organic framework-copper nickel disulfide nanoreactors for the synergistic treatment of wound infections

Hongmei Deng, Tongyao Wang, Junlun Zhu, Ziwei Xiang, Yuzhu Long, Yuzhu Yuan, Wei Wen, Shengfu Wang, Shaojiang Zheng,* Xiuhua Zhang* and Huayu Xiong*

