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Inside cover

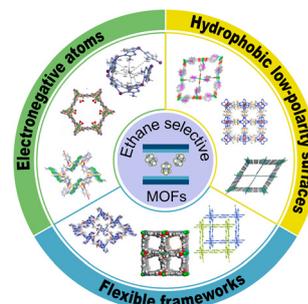
See Atsushi Kondo *et al.*, pp. 152–155. Image reproduced by permission of Atsushi Kondo from *Chem. Commun.*, 2026, 62, 152.

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Ethane-selective metal–organic frameworks for one-step purification of ethylene

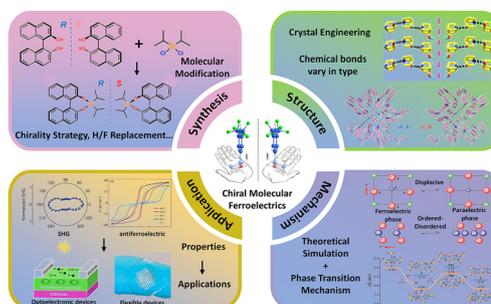
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Progress in chiral organic ferroelectrics

Yipeng Zang, Bolin Feng and Xiaoqing Gao*



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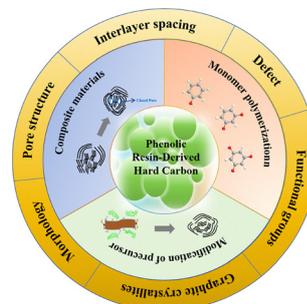
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HIGHLIGHTS

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Phenolic resin-derived hard carbon for sodium-ion batteries: insights and prospects

Zeyu Zhu, Jinlin Pan, Binghao Wu, Qiang Li, Weixiang Li,* Jingui Duan* and Ya-Xia Yin*

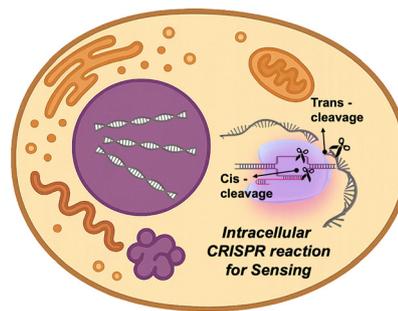


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Intracellular biosensors by functional nanomaterial-integrated CRISPR technologies for real-time molecular sensing

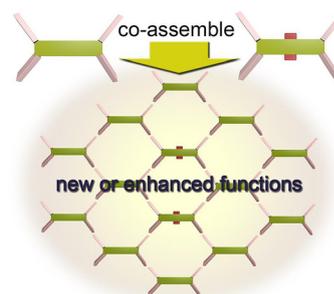
Min Yu Choi, Chenzhong Li, Jin-Ha Choi* and Jeong-Woo Choi*



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Recent advances in non-stoichiometric multicomponent hydrogen-bonded organic frameworks

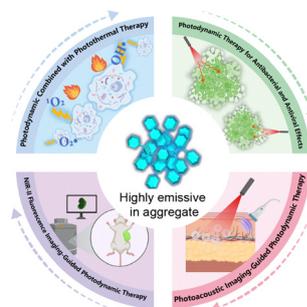
He Zhao, Baiyang Fan, Guiyan Liu, Xingliang Liu and Pengchong Xue*



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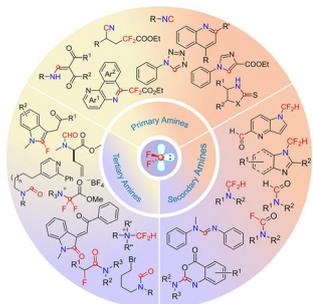
Frontiers in photodynamic therapy: type I NIR-II photosensitizers with aggregation-induced emission features

Ye Tong, Xue Li,* Dong Wang* and Ben Zhong Tang*



FEATURE ARTICLES

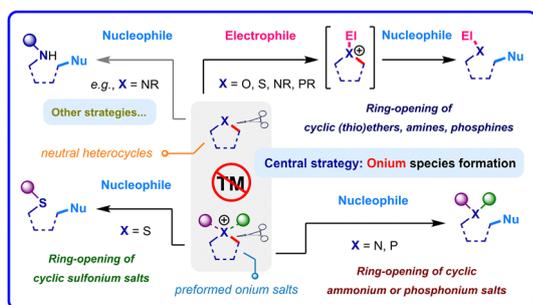
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Multifaceted reactions of difluorocarbene with amines: synthesis and mechanistic insights

Jinghan Bu, Xuanwen Tao, Mengyi Huang, Zixin Chen, Tao Zhao and Qiang Yang*

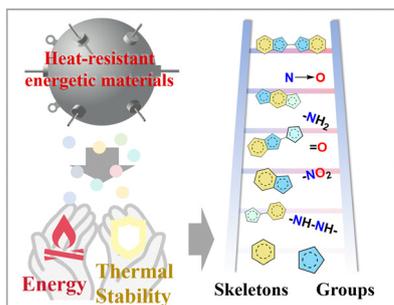
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Recent advances in transition-metal-free deconstructive functionalization of saturated N-, O-, P-, and S-heterocycles

Pengcheng Li,* Jia-Lin Tu and Binbin Huang*

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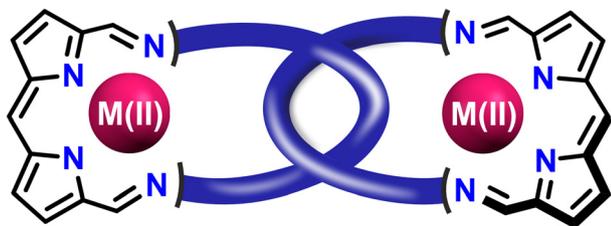


Balancing energy and thermal stability: a review of advanced heat-resistant energetic materials

Boqian Yang, Honglei Xia,* Mingjing Tang, Xiujuan Qi,* Siwei Song, Yi Wang and Qinghua Zhang*

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Mechanically interlocked porphyrinoids: self-assembly of metal-stabilised catenaphyrins

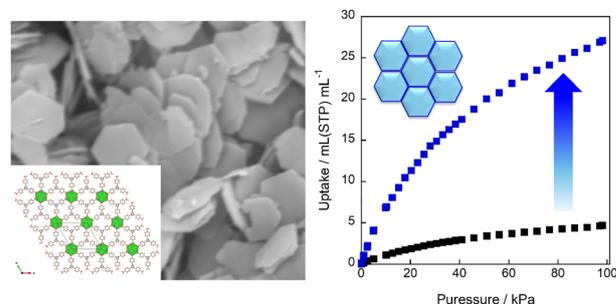
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Enhancement of volumetric adsorption capacities on a 2D layered MOF by controlling crystal morphology

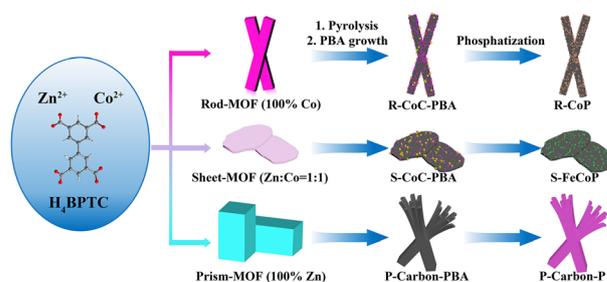
Yuna Kawanami, Wataru Nakanishi and Atsushi Kondo*



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Engineering hierarchical porous carbon-supported Fe-doped cobalt phosphides from MOF templates for alkaline water oxidation

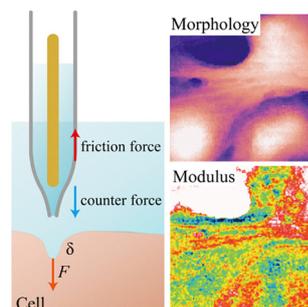
Linchao Xu, Junliang Chen, Qipeng Li* and Jinjie Qian*



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Non-contact electrochemical imaging of Young's modulus of single living cells

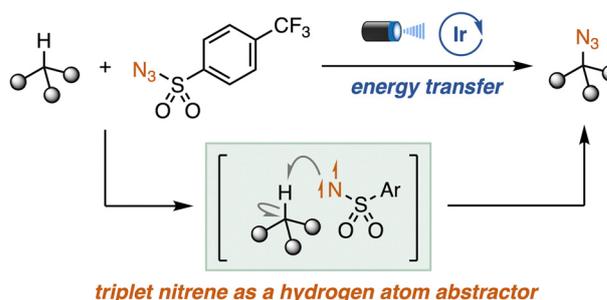
Rong Jin, Yanyan Xu, Kang Wang, Dechen Jiang* and Danjun Fang*



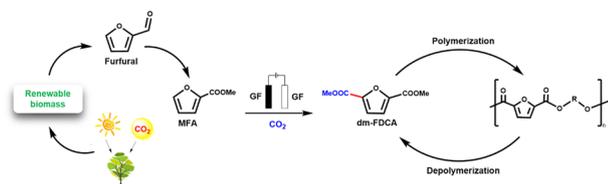
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Triplet nitrene-mediated photocatalytic azidation of tertiary C(sp³)-H bonds

Noriaki Shimamoto, Norihito Arichi* and Hiroaki Ohno*



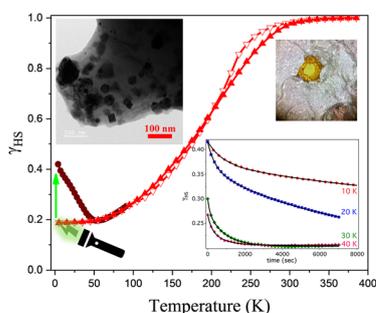
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Electrochemical upcycling biomass-derived methyl 2-furoate and CO₂ into monomers for recyclable polyesters

Pengfei Shi, Xinyu Chai, Yuefeng Wang, Chenbao Lu,*
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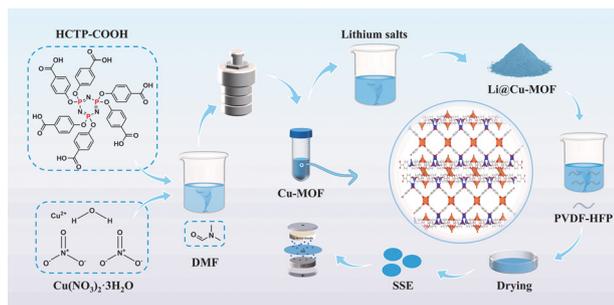
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Remarkable impact of KBr pelletization on spin switching: probing Hofmann-type 3D spin-crossover frameworks by solid-state optical spectroscopy

Chinmoy Das and Pradip Chakraborty*

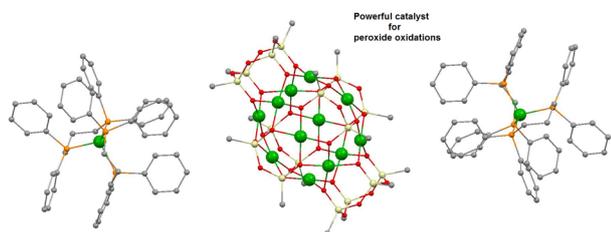
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Anion-mediated regulation of open metal sites in metal-organic framework materials or high-performance solid-state electrolytes

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High-nuclearity Cu₁₄ ionic complex featuring 1,3-bis(diphenylphosphino)propane and methylsilsesquioxane ligands: highly efficient catalysis of mild peroxidative alkane functionalizations

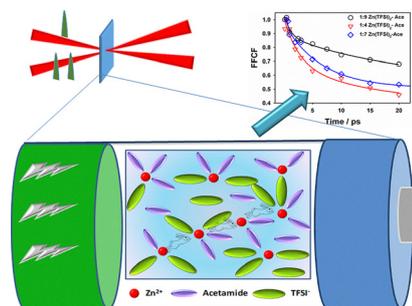
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Ultrafast Zn²⁺ solvation dynamics unmask a hopping mechanism in eutectic battery electrolytes

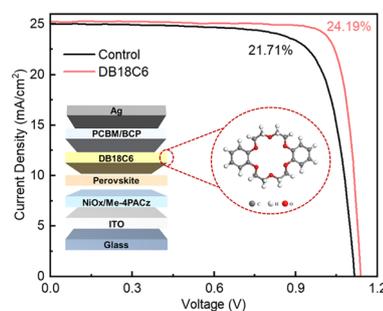
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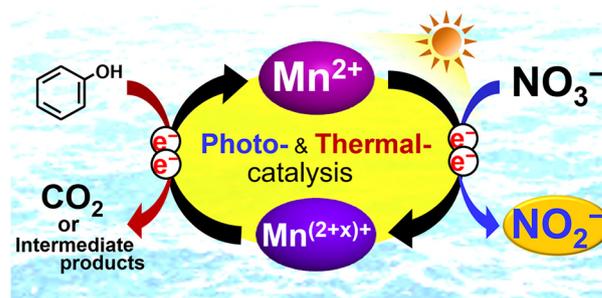
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Photo- and thermal catalysis of nitrate to nitrite by manganese ions under light up to 600 nm

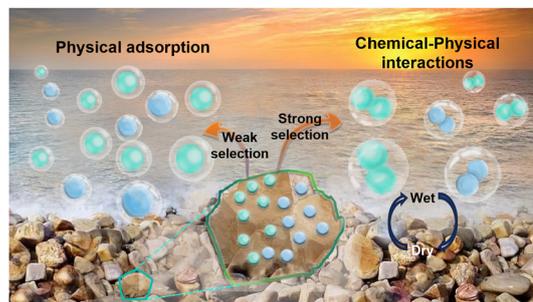
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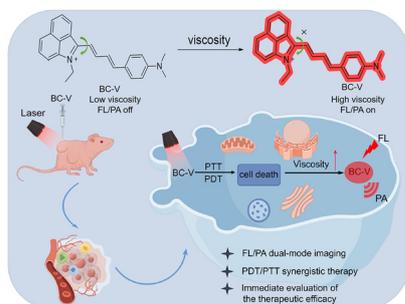
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Chiral amplification of prebiotic peptide synthesis induced by chemical–physical interactions on calcite surfaces

Shichao Yu, Xiangxiao Zheng, Xiaofan Guo, Li Zhang, Yufen Zhao and Jianxi Ying*



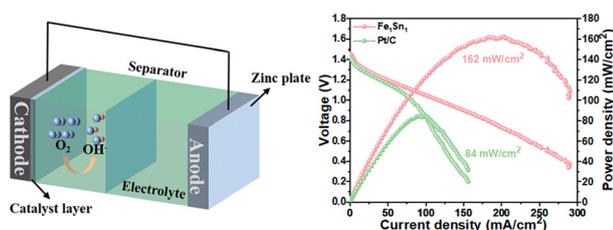
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A dual-mode viscosity-activatable probe for the immediate evaluation of photodynamic/photothermal therapy efficacy

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Metal-organic-framework-derived Fe/Sn bimetallic electrocatalyst for efficient oxygen reduction reaction in rechargeable zinc-air batteries

Benchi Zhang, Yunjiao Yang, Guangyang Lan, Wenchang Wang, Zhidong Chen* and Changhai Liu*

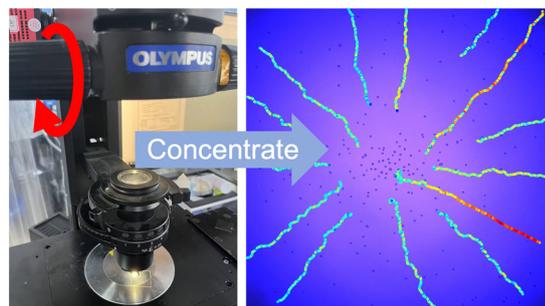
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Halide-free deep eutectic solvents with low viscosity and corrosion for efficient SO₂ capture and conversion under environmental conditions

Tao Yang and Tianxiang Zhao*

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Radial illumination enables the concentration, dispersion, lateral transport, and sorting of photocatalytic TiO₂ microspheres

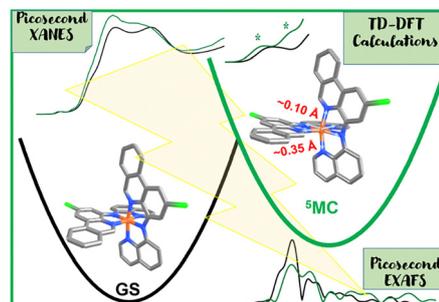
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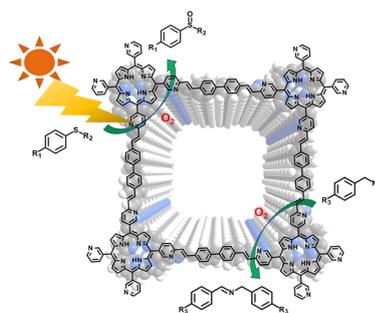
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A vinylene-linked porphyrin covalent organic framework for efficient sunlight-driven photocatalytic organic transformations

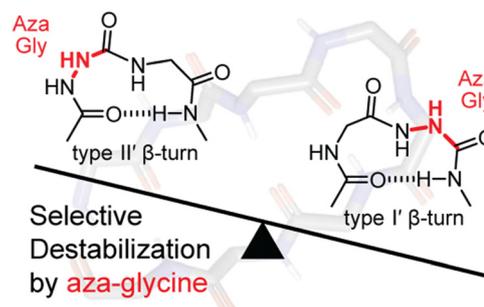
Xiao-Meng Zhang, Jing-Lan Kan, Ying Dong, Fan Yang,* Qi-Kui Liu* and Cheng Liu*



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Backbone nitrogen substitution restricts the conformation of glycine residues in β -turns

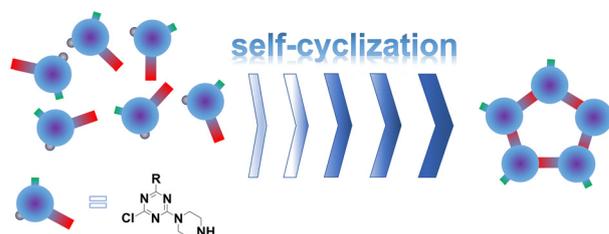
Fengyi Gu, Diana Thomas and Robert W. Newberry*



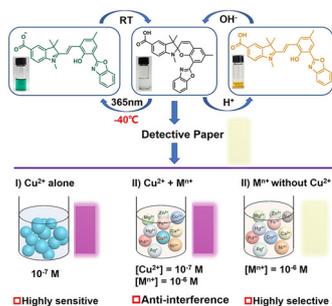
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One-pot synthesis of novel triazine/piperazine-based macrocycles and investigation of their porous properties

Ho-Yin Lai, Yao-Chih Lu, Hsiang-Jen Cheng, Hsiu-Fu Hsu* and Long-Li Lai*



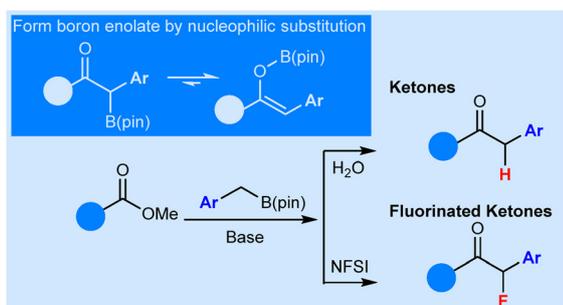
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A spiropyran-based colorimetric probe for the highly selective and sensitive detection of copper(II) ions

Wangen Miao,* Limei Xu, Jingli Liu and Xiaoqin Zhou*

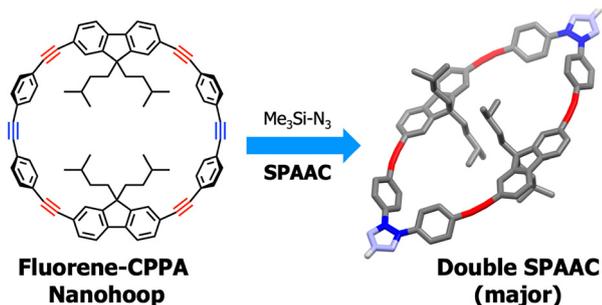
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Synthesis of ketones and mono-fluoro ketones via boron enolates formed by substitution of esters with benzylboronic esters

Pankaj Kumar,* Leah Mistry, Josephine M. Stewart and Graham Pattison*

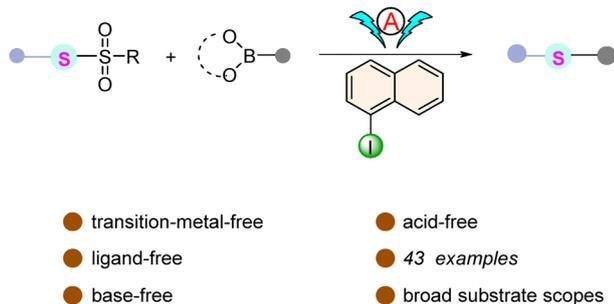
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Selective strain-promoted reactivity of a fluorene-derived [6]cycloparaphenyleneacetylene carbon nanostructure

Robert J. Herman, Said Jalife, Abigail G. LeBlanc, Muhammad Usama Gul Khan, Marvin L. Stewart, Sheila W. Njoroge, Sajila Riman Tanha, Frank R. Fronczek, Judy Wu and Semin Lee*

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Electroreduction cross-coupling of thiosulfonates with (hetero)aryl boronic acids to access thioethers

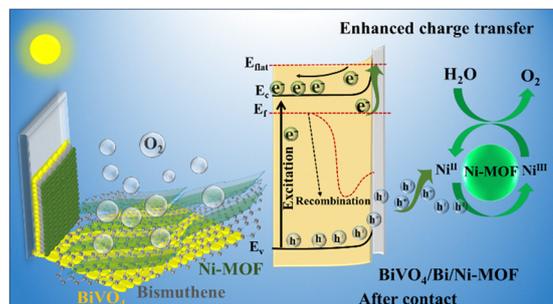
Yaqin Zhou, Jiang Lei, Meimei Chen, Chi Zhang, Zhiheng Zhao and Lijun Gu*



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Interlayer bismuthene as a charge-transporter improves the photoelectrochemical water oxidation activity of a bismuth vanadate metal–organic framework

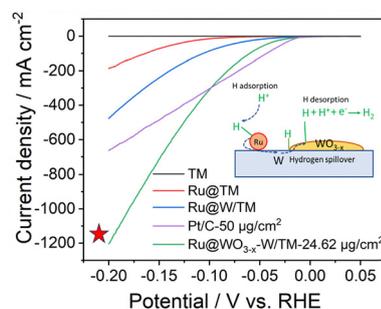
Deepak Kumar, Sagnik Mukherjee and Arindam Indra*



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Construction of a Ru@WO_{3-x}-W catalyst with hydrogen spillover effect toward ampere-level hydrogen evolution in acidic solution

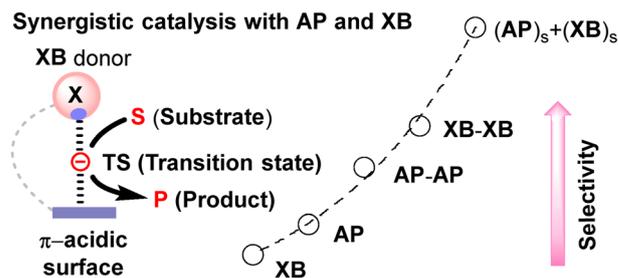
Hailin Ye, Yuefei Xin, Zhengjie Zhang, Shichun Cheng, Ruyi Zhang, Mingming Wang, Yuchan Zhu* and Zhandong Ren*



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Anion- π catalysis with halogen bonding

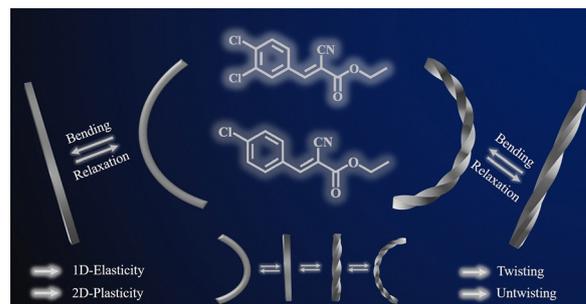
Bingqian Shi, Qianmu Xu, Kaiyang Fan, Jie Zhang, Hongling Wang and Xiang Zhang*



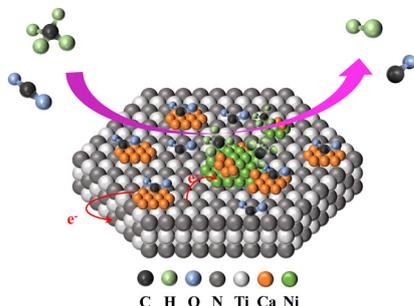
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Reversible twisting-induced crystalline–polycrystalline transformation in cyanoacrylate crystals

Thiyagaraj Parthasarathy, Aritra Bhowmik, Biswajit Bhattacharya, Manish Kumar Mishra* and Soumyajit Ghosh*



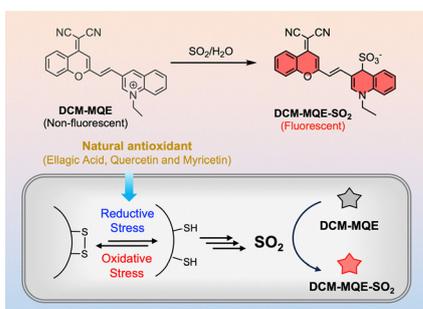
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Boosting methane dry reforming via enhanced CO₂ adsorption over TiN-supported Ni catalysts

Zhuoshi Zheng, Yu Zhang, Yanxi Zhao,* Chengchao Liu, Aihua Lin, Yuhua Zhang and Jinlin Li*

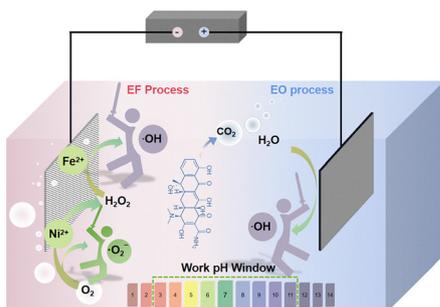
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A fluorescent probe for sulfur dioxide reveals intracellular reductive stress triggered by natural antioxidants

Sijie Luo, Lie Xiang, Huihong Liu, Yanyan Luo, Lei Shi,* Guhuan Liu* and Sheng Yang*

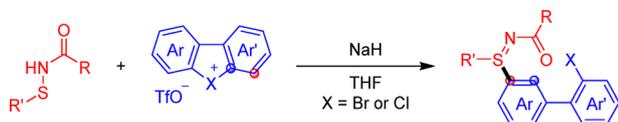
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Electro-synergy for the degradation of refractory organic pollutants: coupling heterogeneous electro-Fenton and electro-oxidation

Yuhui Cai, Hao Liu, Jingru Shu, Yuntai Lin and Rui Yang*

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- ◆ 36 examples, up to 99% yield
- ◆ excellent *meta*-selective arylation
- ◆ Ambient conditions and simple operations
- ◆ High efficiency and applicability

Regioselective functionalization of sulfenamides: S-arylation with cyclic diaryl λ^3 -bromanes and λ^3 -chloranes

Jiahong Chen, Yuanyuan Huang, Nan Wang, Mengke Wang,* Weichun Huang, Xinxing Wu, Xiaoping Xu* and You Zi*

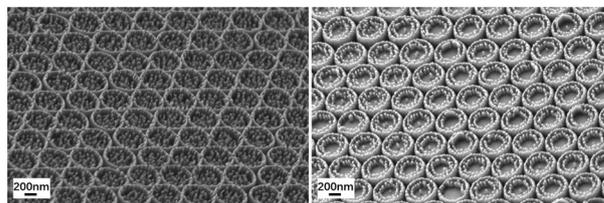


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Fabrication of a nanowire array surrounded by hexagonally ordered cylindrical walls and structure-enhanced SERS performance

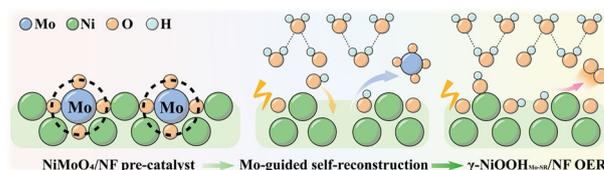
Shengjun Liu, Jizhe Song, Sujuan Feng,* Jiacheng Li, Xiaolong Wang, Xinyue Wang, Dejun Jiang and Guangqiang Liu*



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A Mo-guided self-reconstructed highly active NiOOH catalyst for a durable alkaline oxygen evolution reaction

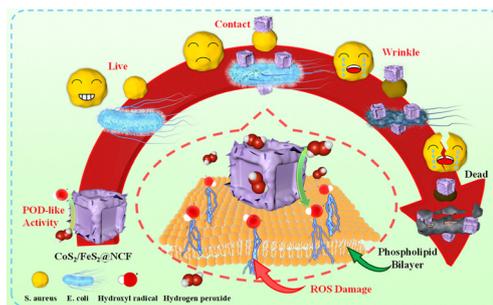
Huihui Zhi, Zhibei Liao, Hao Jiang, Yuan He, Zhanwei Chen, Shaowei Yang* and Hepeng Zhang*



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Coupling calcination with sulfidation strategy to fabricate a hydrophilic bimetallic transition nanozyme for boosting antibacterial efficiency

Tian-shuo Wang, Yu-hang Lin, Lian-xi Pu, Yin-min Min, Min Zhang, De-ping Wang, Li-jun Ding* and Kun Wang*



CORRECTION

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Correction: Inversion of circularly polarized luminescence in chiral PIM membranes via co-assembly with achiral perovskite quantum dots

Cong Yu, Wanshuang Zhou, Zhuang Liu, Qiang Chen, Shi-Peng Sun, Lingyan Feng* and Xinbo Wang*

