

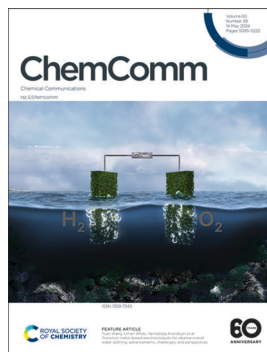
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See Takashi Ubukata *et al.*, pp. 5149–5152. Image reproduced by permission of Takashi Ubukata from *Chem. Commun.*, 2024, 60, 5149.



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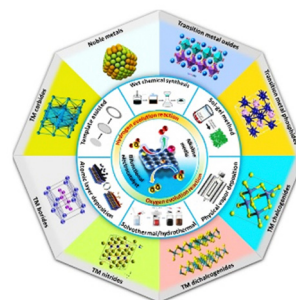
See Yuan Wang, Umair Aftab, Hamidreza Arandiyani *et al.*, pp. 5104–5135. Image reproduced by permission of Yuan Wang from *Chem. Commun.*, 2024, 60, 5104.

FEATURE ARTICLES

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Transition metal-based electrocatalysts for alkaline overall water splitting: advancements, challenges, and perspectives

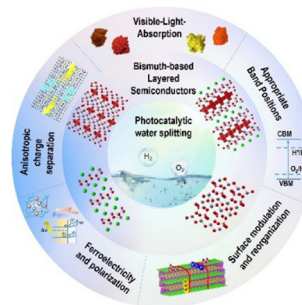
Muhammad Nazim Lakhani, Abdul Hanan, Altaf Hussain, Irfan Ali Soomro, Yuan Wang,* Mukhtiar Ahmed, Umair Aftab,* Hongyu Sun and Hamidreza Arandiyani*



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Advances in the structural engineering of layered bismuth-based semiconductors for visible light-driven photocatalytic water splitting

Xiaoping Tao, Xiaoyuan Zhou and Rengui Li*



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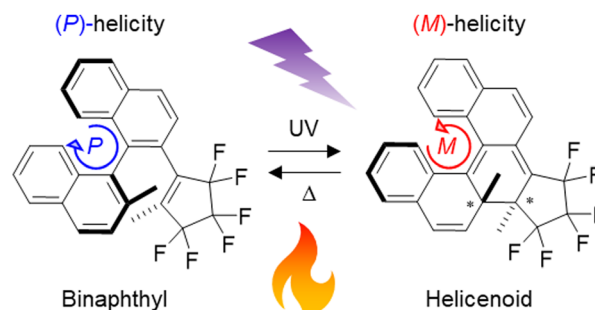


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A chiral photoswitch based on enantiospecific interconversion between binaphthyl and heliceneoid skeletons

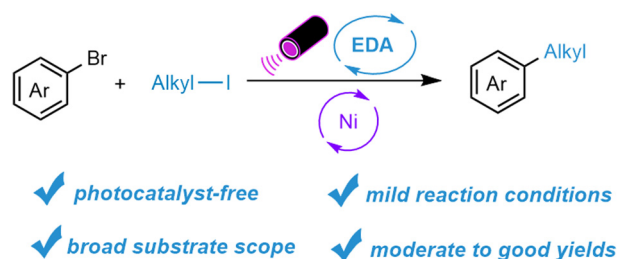
Tetsuya Nakagawa, Ryuji Kato, Yuichi Iiyoshi, Masaki Furuya, Tomoki Kitano, Ryo Nakamura, Yasushi Yokoyama and Takashi Ubukata*



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Nickel-catalyzed C(sp²)–C(sp³) coupling via photoactive electron donor–acceptor complexes

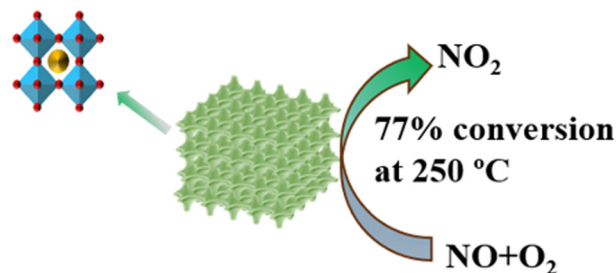
Salman Alsharif, Chen Zhu, Xiushan Liu, Shao-Chi Lee, Huifeng Yue* and Magnus Rueping*



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Three-dimensional ordered macroporous LaFe_{1-x}Mn_xO₃ with high stability for efficient NO oxidation and sulfur resistance

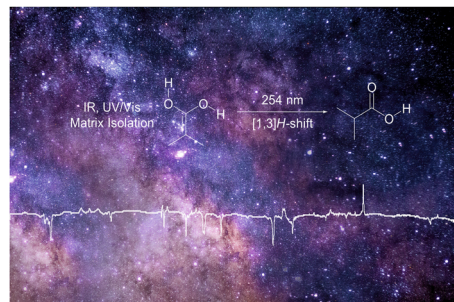
Shengjie Zuo, Ping Wang, Miao He, Jiasai Yao, Haocheng Li, Jing Xiong, Xiaohua Sun,* Yuechang Wei* and Zhenxing Li*



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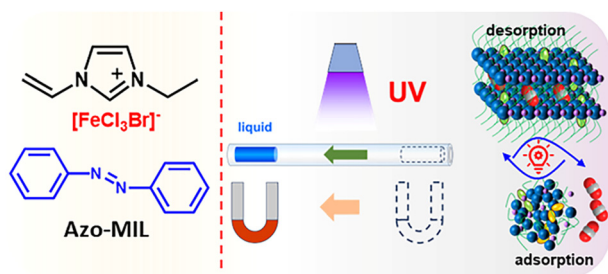
The enol of isobutyric acid

Akkad Danho, Artur Mardyukov and Peter R. Schreiner*



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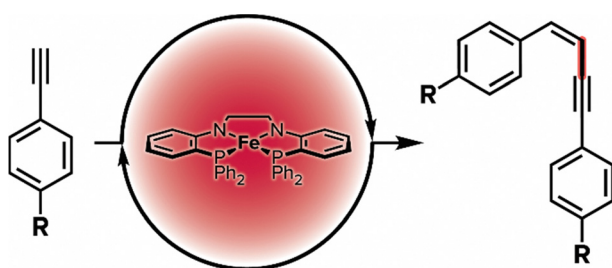
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Magnetic ionic crystals with light controllable mobility and CO₂ physisorption/desorption

Yifan Ge, Shuai Tan, Yong Wu and Caihong Wang*

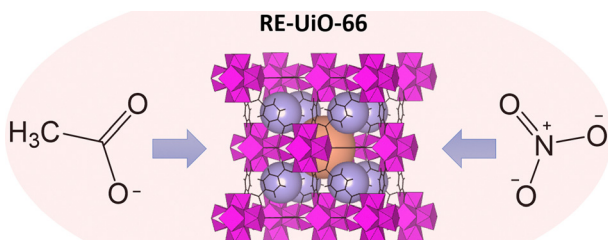
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Z-selective dimerization of terminal alkynes by a (PNNP)Fe^{II} complex

Jeremiah E. Stevens, Justin D. Miller, Matthew C. Fitzsimmons, Curtis E. Moore and Christine M. Thomas*

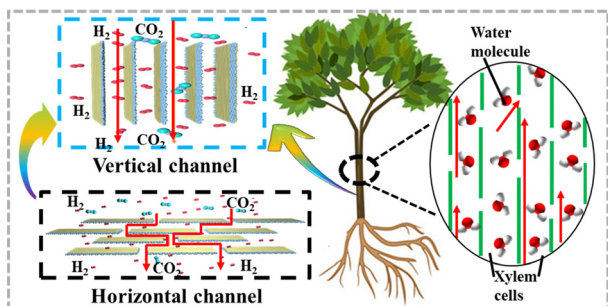
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Rare-earth acetates as alternative precursors for rare-earth cluster-based metal-organic frameworks

Micaela Richezzi, P. Rafael Donnarumma, Christopher Copeman and Ashlee J. Howarth*

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A vertically-stacked MXene/rGO composite membrane for highly efficient H₂/CO₂ separation

Zhaorui Dong, Yiyi Fan, Xiuxia Meng,* Yun Jin, Jian Song, Xiaobin Wang, Naitao Yang,* Jaka Sunarso* and Shaomin Liu

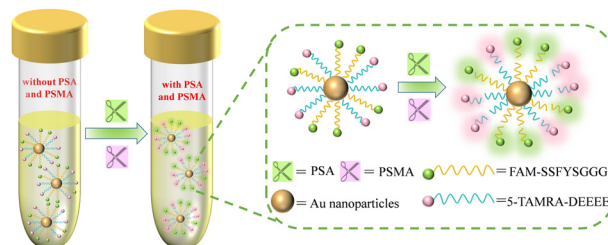


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Precise prostate cancer diagnosis using fluorescent nanoprobes for detecting PSA and PSMA in serum

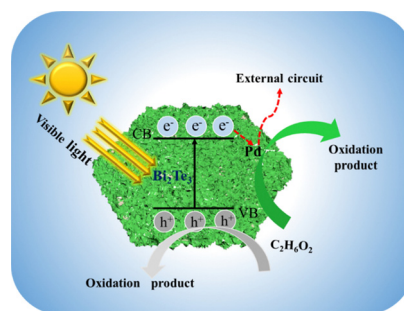
Mingyi Ouyang, Ming Jia, Zixuan Chang, Yinian Wang, Keyi Wang, Xiaonan Gao* and Bo Tang*



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Bi₂Te₃ nanosheets promoted Pd for ethylene glycol electrooxidation both in the dark and under visible light irradiation

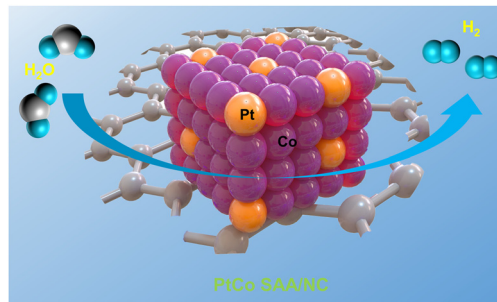
Fangfang Ren, Zhenghao Fei, Yun Yang,* Shuli Wang and Ligang Feng*



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A nitrogen-doped carbon nanosheet composited platinum–cobalt single atom alloy catalyst for effective hydrogen evolution reaction

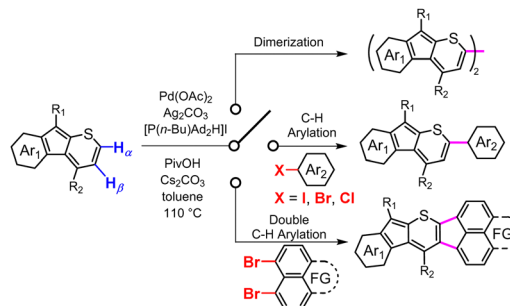
Xudong Niu, Huilong Geng, Zhengyu Lv, Jian Wei,* Dongyao Xu* and Wenxing Chen*



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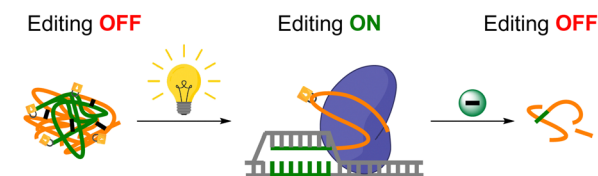
C–H arylation of thiopyran derivatives with aryl halides

Yangzhe Su, Min Wang, Jianping Xu, Weinan Chen and Gang Zhou*



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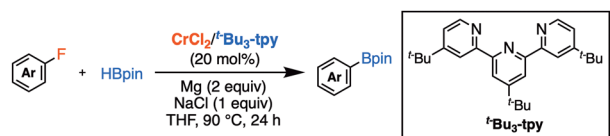
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☒ modular design ☒ orthogonal stimulus ☒ rapid responses

Chemical control of CRISPR/Cpf1 editing via orthogonal activation and deactivation of crosslinked crRNA

Cui-Lian Lin, Wen-Da Chen, Li Liu and Liang Cheng*

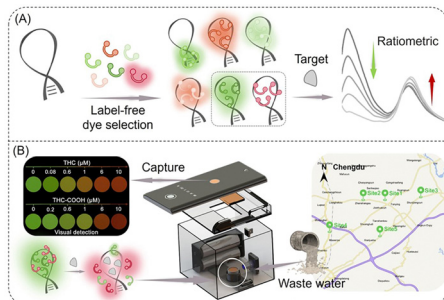
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Cr-catalyzed borylation of C(aryl)-F bonds using a terpyridine ligand

Senlin Liu, Zheng Luo, Shuaiyong Zhao, Meiming Luo* and Xiaoming Zeng*

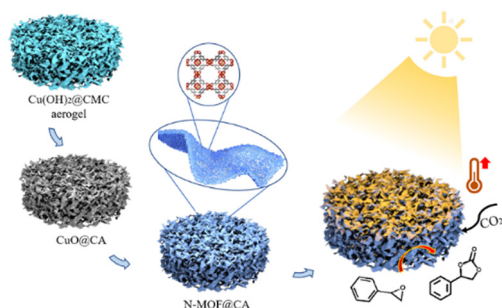
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A simple aptamer-dye fluorescence sensor for detecting Δ^9 -tetrahydrocannabinol and its metabolite in urban sewage

Yingnan Wei, Lin Yang, Yi Ye, Linchuan Liao, Hao Dai, Zeliang Wei, Yao Lin* and Chengbin Zheng*

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A MOF nanoparticle@carbon aerogel integrated photothermal catalytic microreactor for CO₂ utilization

Junyi Chen,* Lei Shao, Bing Zhang, Weiliang Tian, Yu Fu and Liying Zhang*

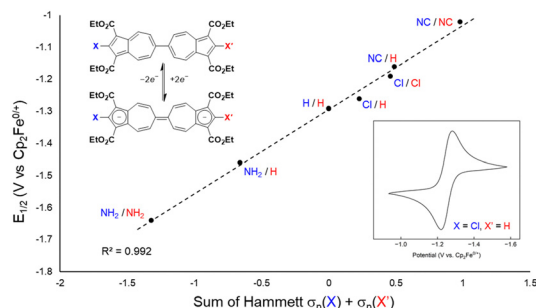


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Tuning the redox profile of the 6,6'-biazulenenic platform through functionalization along its molecular axis

Shaun R. Kelsey, Georgii Griaznov, Andrew D. Spaeth, Daron E. Janzen, Justin T. Douglas, Ward H. Thompson and Mikhail V. Barybin*



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Self-assembled tetrazine cryptophane for ion pair recognition and guest release by cage disassembly

Louise Miton, Elise Antonetti, Marie Poujade, Jean-Pierre Dutasta, Paola Nava, Alexandre Martinez* and Yoann Cotelle*

