

EES Catalysis

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Exceptional research on energy and environmental catalysis

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Fundamental questions
Elemental answers

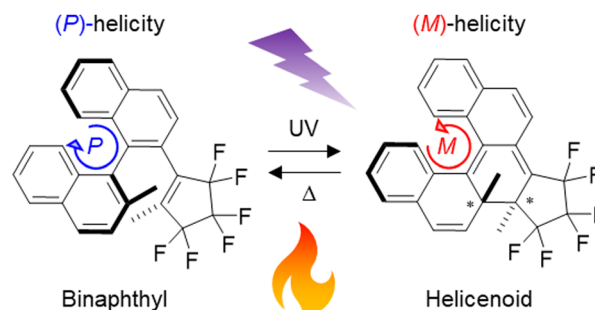


COMMUNICATIONS

5149

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

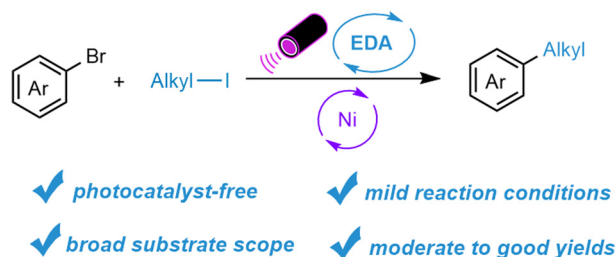
Tetsuya Nakagawa, Ryuji Kato, Yuichi Iiyoshi, Masaki Furuya, Tomoki Kitano, Ryo Nakamura, Yasushi Yokoyama and Takashi Ubukata*



5153

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

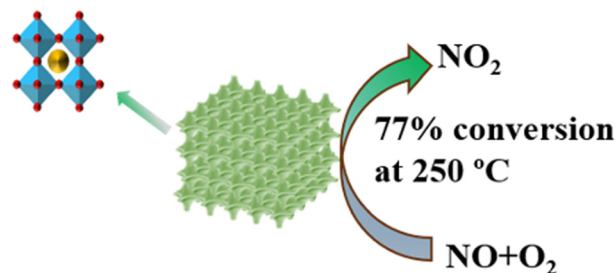
Salman Alsharif, Chen Zhu, Xiushan Liu, Shao-Chi Lee, Huifeng Yue* and Magnus Rueping*



5157

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

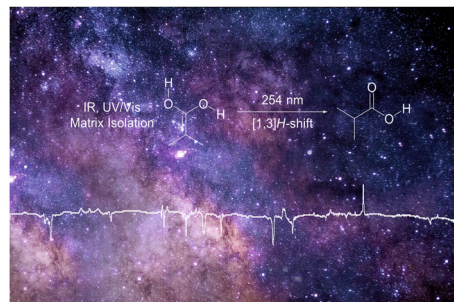
Shengjie Zuo, Ping Wang, Miao He, Jiasai Yao, Haocheng Li, Jing Xiong, Xiaohua Sun,* Yuechang Wei* and Zhenxing Li*



5161

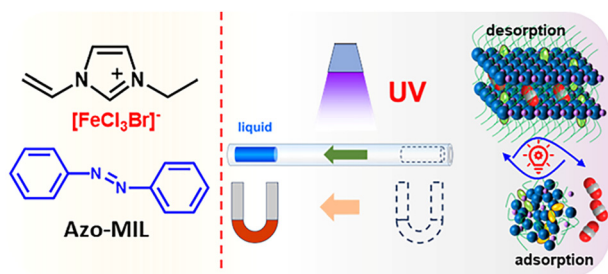
The enol of isobutyric acid

Akkad Danho, Artur Mardyukov and Peter R. Schreiner*



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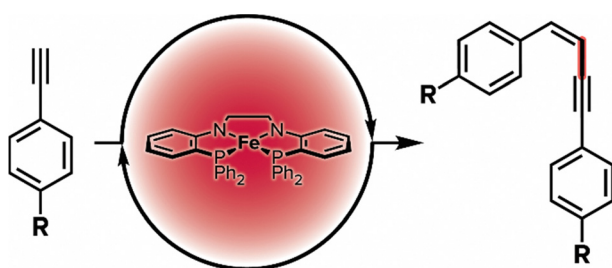
5165



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

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

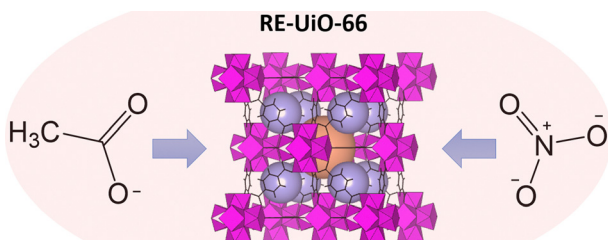
5169



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*

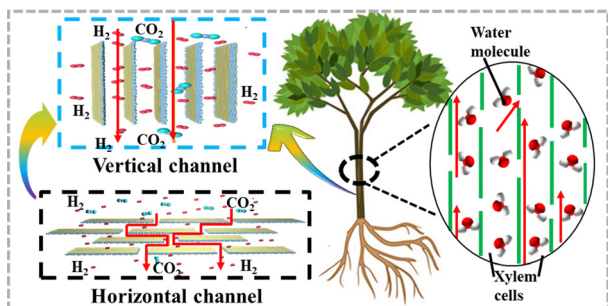
5173



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*

5177



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

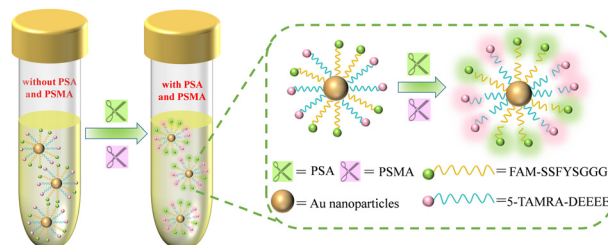


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Precise prostate cancer diagnosis using fluorescent nanoprobes for detecting PSA and PSMA in serum

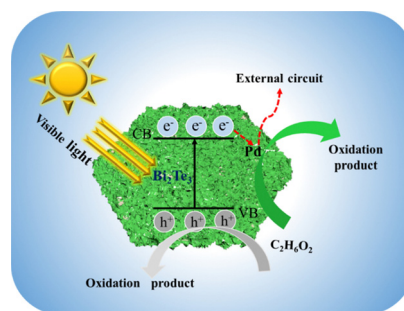
Mingyi Ouyang, Ming Jia, Zixuan Chang, Yinian Wang, Keyi Wang, Xiaonan Gao* and Bo Tang*



5185

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

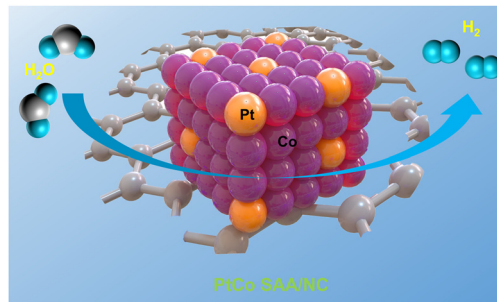
Fangfang Ren, Zhenghao Fei, Yun Yang,* Shuli Wang and Ligang Feng*



5189

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

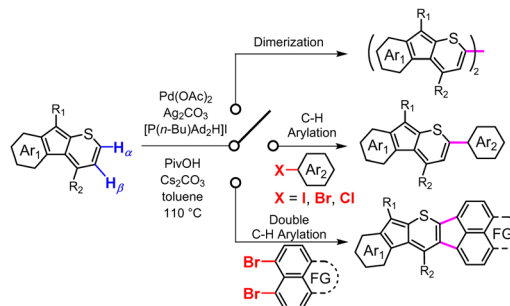
Xudong Niu, Huilong Geng, Zhengyu Lv, Jian Wei,* Dongyao Xu* and Wenxing Chen*



5193

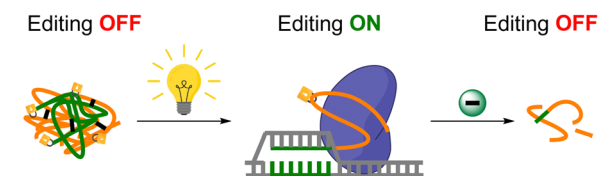
C–H arylation of thiopyran derivatives with aryl halides

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



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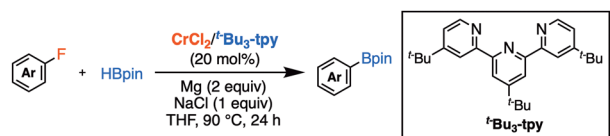
5197


☒ 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*

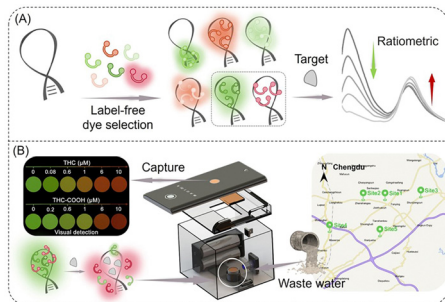
5201



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

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

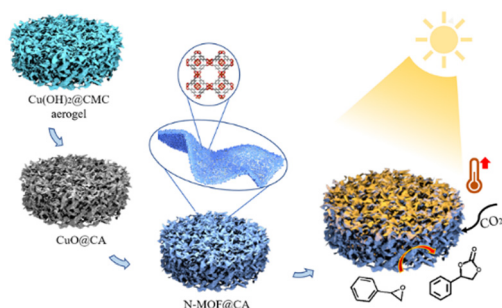
5205



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*

5209



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*

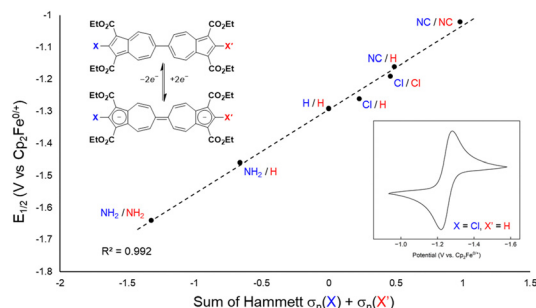


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5213

Tuning the redox profile of the 6,6'-biazulenic 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*



5217

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*

