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See Lei Zhu, Jian Zhou, Jin-Sheng Yu *et al.*, pp. 12302–12314.
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See Jake L. Greenfield *et al.*, pp. 12365–12368.
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HIGHLIGHTS

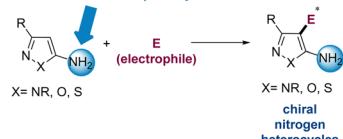
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Asymmetric electrophilic functionalization of amino-substituted heteroaromatic compounds: a convenient tool for the enantioselective synthesis of nitrogen heterocycles

Gonzalo Blay,* Alicia Monleón, Marc Montesinos-Magraner, Amparo Sanz-Marco and Carlos Vila*

Catalytic Enantioselective Electrophilic Functionalization

Increase the Nucleophilicity



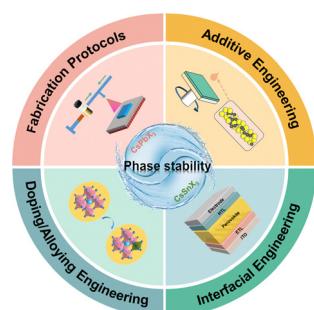
Pyrazoles, Isoxazoles Isothiazoles
Less-electronrich N-heterocycles
(poor nucleophilicity)

Introduction of exocyclic amino group
(increased nucleophilicity)

12287

Toward durable all-inorganic perovskite solar cells: from lead-based to lead-free

Hongzhe Xu, Zhaochen Guo, Peng Chen* and Songcan Wang*



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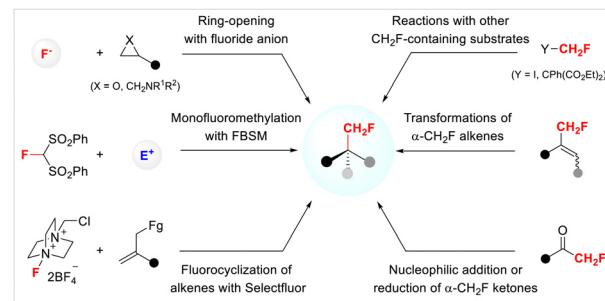
Fundamental questions
Elemental answers

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Recent advances in catalytic enantioselective construction of monofluoromethyl-substituted stereocenters

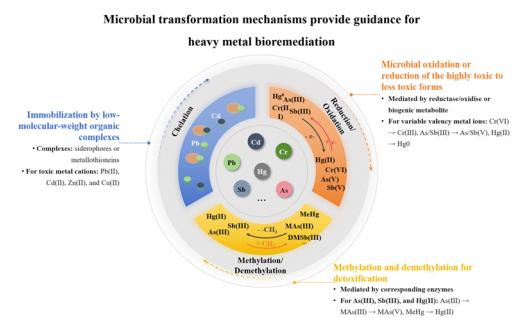
Bo-Jie Li, Yu-Long Ruan, Lei Zhu,* Jian Zhou* and Jin-Sheng Yu*



12315

Advances in mechanism for the microbial transformation of heavy metals: implications for bioremediation strategies

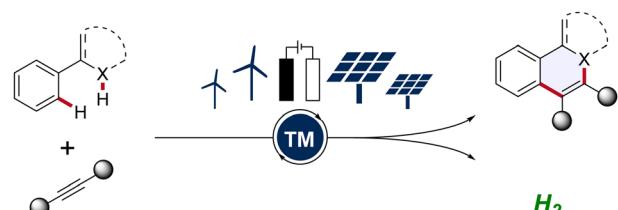
Chunlian Ding,* Zihan Ding, Qingcai Liu, Weizao Liu* and Liyuan Chai



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Metallaelectro-catalyzed alkyne annulations via C–H activations for sustainable heterocycle syntheses

Preeti Kushwaha, Anjali Saxena, Tristan von Münchow, Suman Dana, Biswajit Saha* and Lutz Ackermann*

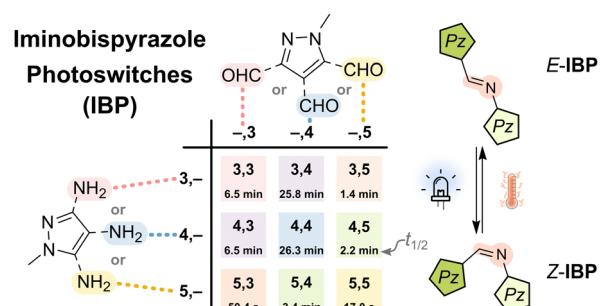


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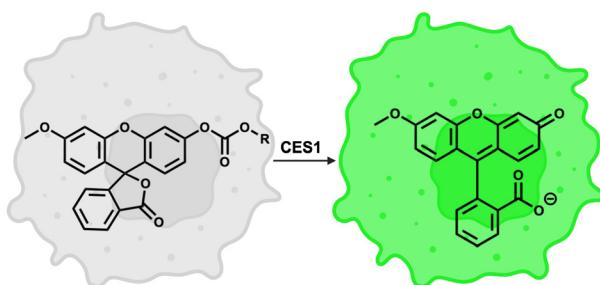
Iminobispyrazole (IBP) photoswitches: two pyrazole rings can be better than one

Jiarong Wu, Clara Li, Lasse Kreimendahl and Jake L. Greenfield*



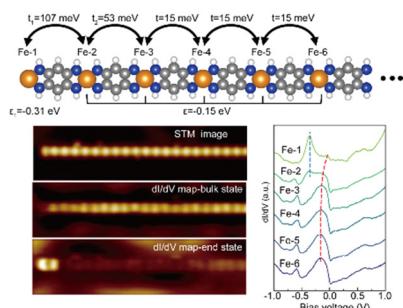
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**Fluorogenic chemical tools to shed light on CES1-mediated adverse drug interactions**

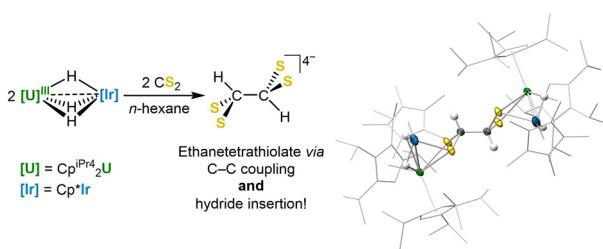
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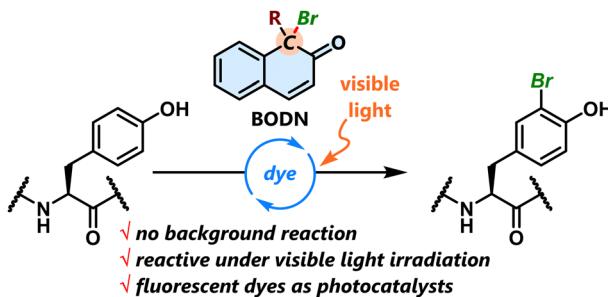
Nuoyu Su, Tingfeng Zhang, Weiliang Zhong, Guangyao Miao, Jiandong Guo, Zhengfei Wang* and Weihua Wang*

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Christopher Z. Ye, Iker Del Rosal, Erik T. Ouellette, Stephan Hohloch, Laurent Maron, Clément Camp* and John Arnold*

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**BODNs as biocompatible brominating reagents: visible-light photocatalytic tyrosine modification under physiologically favorable conditions**

Rakuto Yoshida, Yuichiro Hori, Daisuke Uraguchi* and Keisuke Asano*

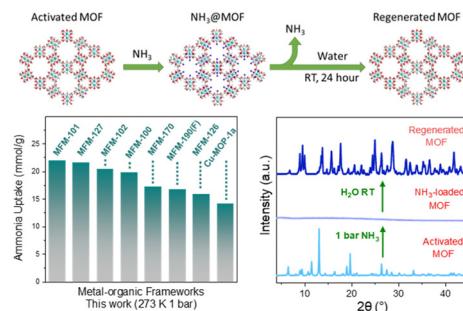


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High ammonia adsorption in copper-carboxylate materials: host–guest interactions and crystalline–amorphous–crystalline phase transitions

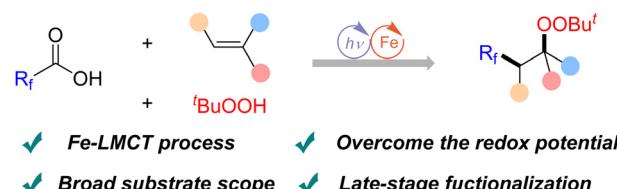
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Photoinduced fluoroalkylation-peroxidation of alkenes enabled by ligand-to-iron charge transfer mediated decarboxylation

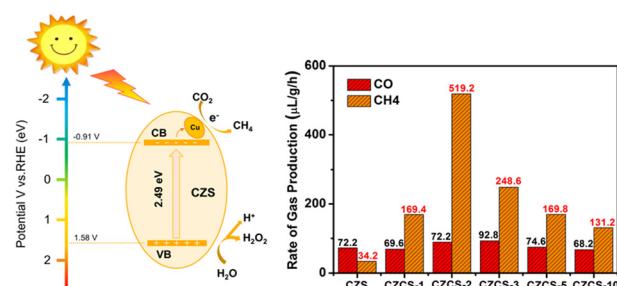
Qiuwei Huang, Chenhao Lou, Leiyang Lv* and Zhiping Li*



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Cu-doped CdZnS nanocrystals: a leap forward in selective photocatalytic CO₂ reduction to methane

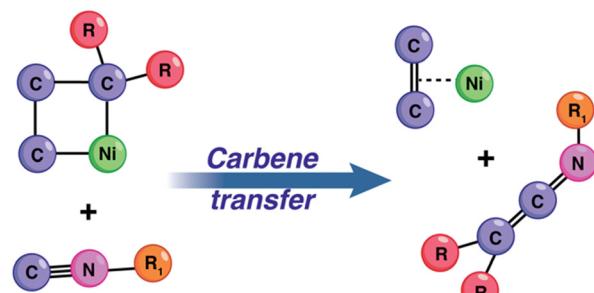
Jiwei Li, Ze Luo, Tianqing Zhou, Haibo Huang,* Xilin She* and Hua Tang



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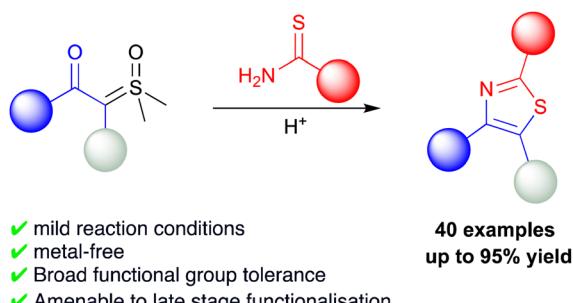
Carbene transfer reactivity from a nickelacyclobutane

Maria L. G. Sansores-Paredes, Martin Lutz and Marc-Etienne Moret*

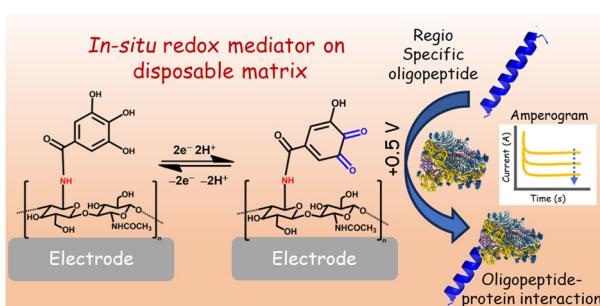


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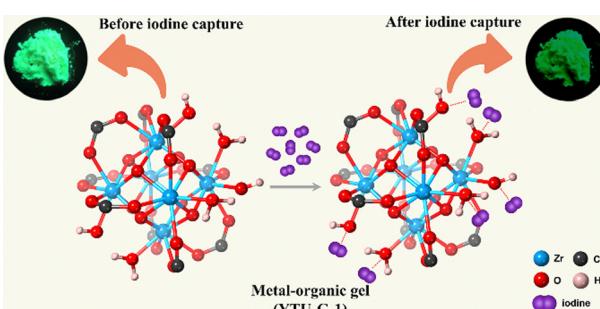
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Electrochemically grafted gallic acid-chitosan: a metal-free *in situ* redox platform for regiospecific oligopeptide-viral spike protein interaction

Vinoth Krishnan, Chinnaiyah Sivakumar, Kannadasan Anand Babu, Sevakumaran Vigneswari, Rajamani Lakshminarayanan, Sudhakar Natarajan and Murugan Veerapandian*

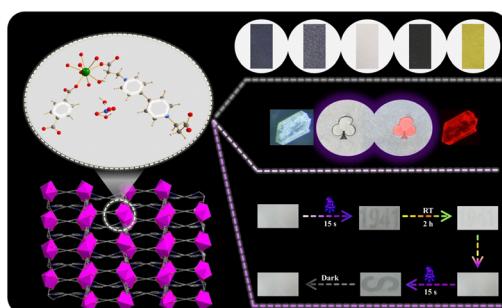
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AIgen-functionalized metal–organic gel as a bifunctional platform for efficient adsorption and portable sensing of gaseous iodine

Jian Xie, Ji Lei, Lilin Zhang, Jinpeng Liang, Sen Mei, Lixi Chen, Xia Wang, Wei Liu, Yanlong Wang* and Baowei Hu*

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Two-dimensional viologen-based lanthanide coordination polymers as multi-stimuli responsive materials to light and amines with a fluorescence response

Hao Wang, Xiao-Han Sun, Tian-Tian Wang, Yu-Xin Li, Ying-Ming Xu and Wen-Bin Sun*

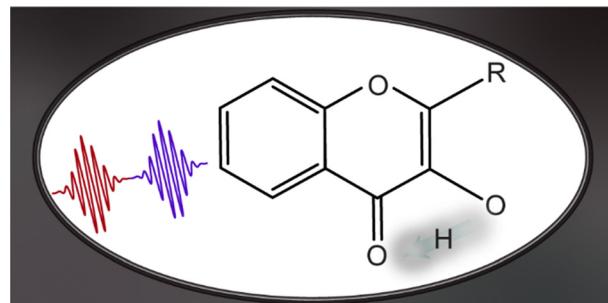


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Characterizing excited-state intramolecular proton transfer in 3-hydroxyflavone with ultrafast transient infrared spectroscopy

Valerie S. Winkler and Joseph A. Fournier*



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Ring-extended carbazole modification to activate efficient phosphorescent OLED performance of traditional host materials

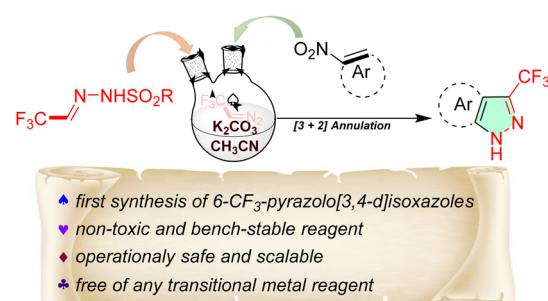
Zhen-Long Tu,* Li-Yuan Hu, Jun-Yi Wang, Cong Wang, Xunwen Xiao* and Xu-Feng Luo*



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The [3+2] annulation of *in situ* formed trifluorodiazooethane with 4-nitroisoxazoles: access to trifluoromethylpyrazolo[3,4-d]isoxazoles

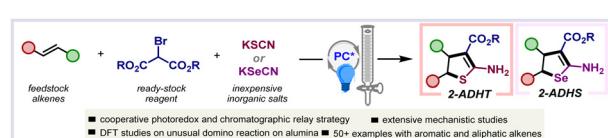
Huamin Wang,* Li-Qin Meng, Wenjing Niu, Wan-Qi Yang, Yu Ou and Ying-Wu Lin*



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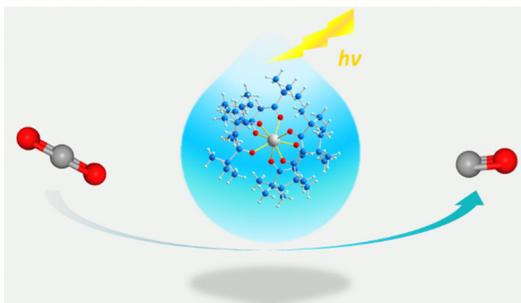
A chromatographic relay conjugated photoredox strategy: S, Se-pharmacophore from alkenes via formal [2+2+1] heteroannulation

Injamam Ul Hoque, Saradindu Debnath, Rabindranath Lo and Soumitra Maity*



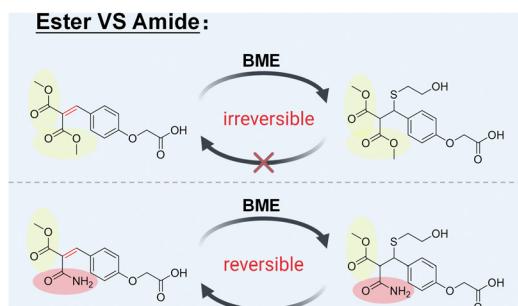
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**Photocatalytic CO_2 reduction to CO catalysed by lanthanide complexes**

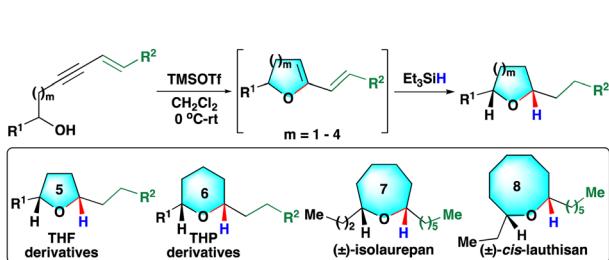
Yingzhe Zhao, Jianling Zhang,* Haoxiang Wang, Renjie Zhang, Yunan Teng, Meiling Li, Yi Song and Zhonghao Tan

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**New electrophiles targeting thiols in a reversible covalent manner**

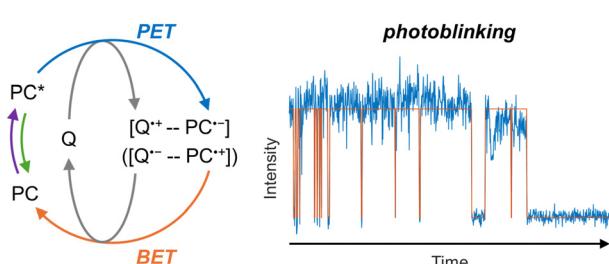
Xingyu Ma, Manyi Xu, Fengge Wang, Tingting Hu, Xinyuan Chen and Chong-Jing Zhang*

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**Unlocking a reductive hydroalkoxylation cascade for the stereoselective synthesis of cyclic ethers: total synthesis of (\pm) -isolaurepan and (\pm) -*cis*-lauthisan**

Santosh J. Gharpure* and Raj Kumar Patel

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**Visualizing back electron transfer in eosin Y photoredox catalysis**

Kai Gu, Wenqiao Zhou and Chunming Liu*

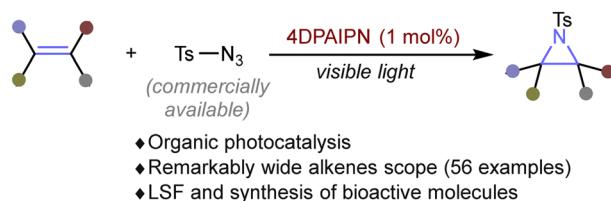


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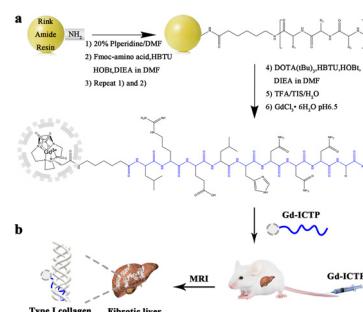
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Organic photosensitized aziridination of alkenes

Chunying Wu and Yunbo Zhu*



12453

A robust collagen-targeting MRI peptide contrast agent for *in vivo* imaging of hepatic fibrosisZhao Liu, Linge Nian, Xiangdong Cai, Yue Hu,
Junqiang Lei* and Jianxi Xiao*

RETRACTION

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Retraction: A robust collagen-targeting MRI peptide contrast agent for *in vivo* imaging of hepatic fibrosis

Zhao Liu, Linge Nian, Xiangdong Cai, Yue Hu, Junqiang Lei* and Jianxi Xiao*