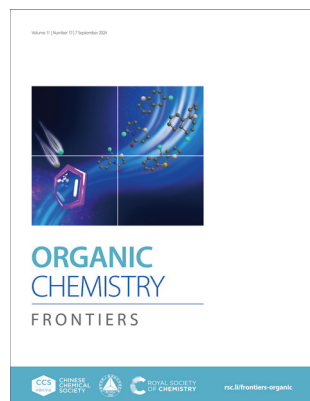
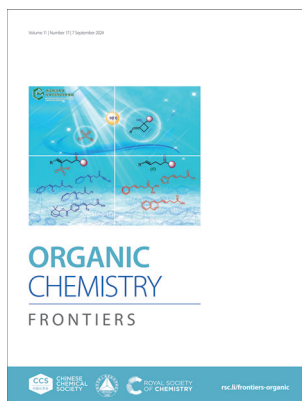


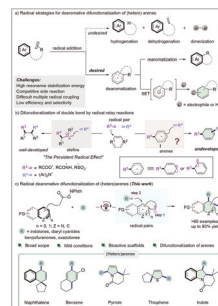
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ISSN 2052-4129 CODEN OCFRA8 11(17) 4641–4956 (2024)

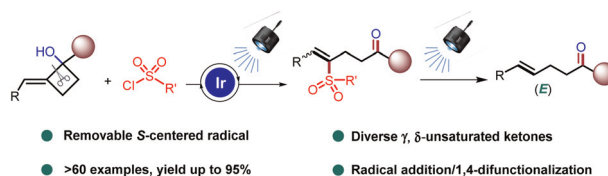
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RESEARCH ARTICLES

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Dearomative difunctionalization of arenes via highly selective radical relay reactionsNing Lei, Qian Zhang, Pan Tao, Cong Lu, Qian Lei and
Ke Zheng*

4663

Photoredox-enabled ring-opening of cyclobutanes via the formation of a carbon radicalChunhang Zhao, Wenjing Ma, Kairui Liu, Ruoyang Xu,
Xiuya Ma and Yan Zhang*

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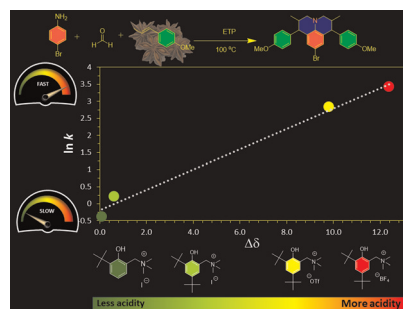


RESEARCH ARTICLES

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Beyond conventional Brønsted acid catalysis: leveraging the impact of charged moiety on the phenol for the construction of julolidine units

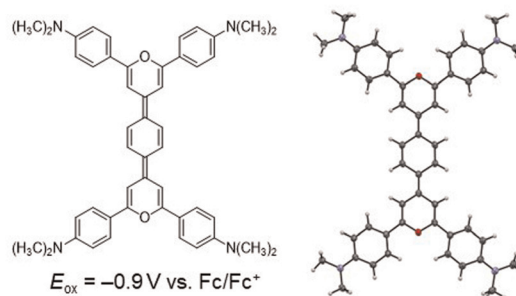
Brijesh Patel, Manas Barik, Prabhakar Murugan, Shilpa Dabas, Parul Rathour and Saravanan Subramanian*



4682

Quinoidal π -extension of dipyranylidene derivatives: towards efficient dopants for n-type organic semiconductors

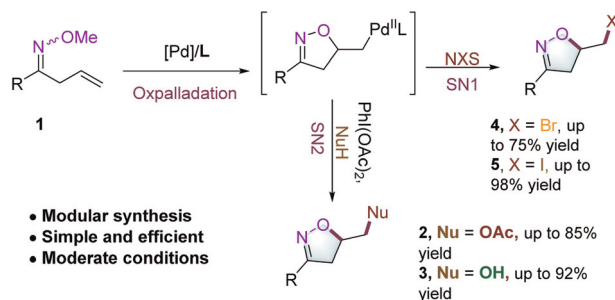
Takaya Matsuo, Kohsuke Kawabata and Kazuo Takimiya*



4689

Palladium-catalyzed epoxidation of olefins using electrophiles as oxidizing agents

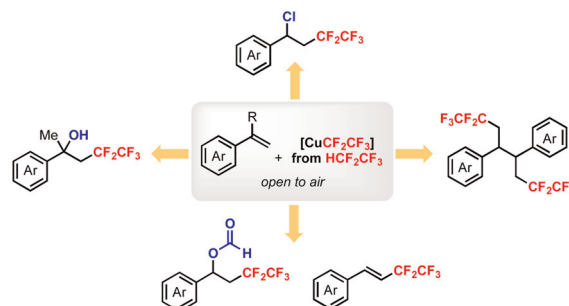
Biao Yao, Lujun Zhang, Yupeng Chen, Liren Zhang, Wanqing Wu* and Huanfeng Jiang*



4697

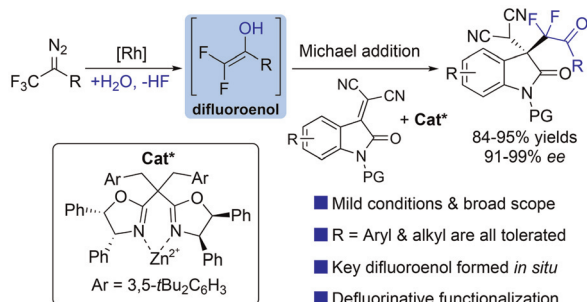
Divergent pentafluoroethylation of styrene derivatives using CuCF_2CF_3

Zhengjie Fu and Gavin Chit Tsui*

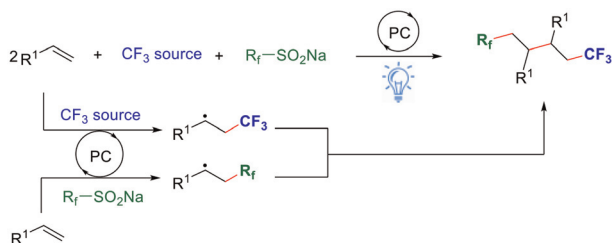


RESEARCH ARTICLES

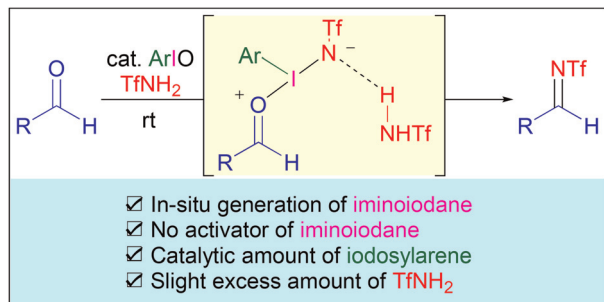
4702

**Asymmetric difluoroalkylation via Michael addition of an *in situ* generated difluoroenol intermediate**Xiongda Xie, Gang Chen, Jingjing Huang,*
Yongqiang Liu* and Xinfang Xu*

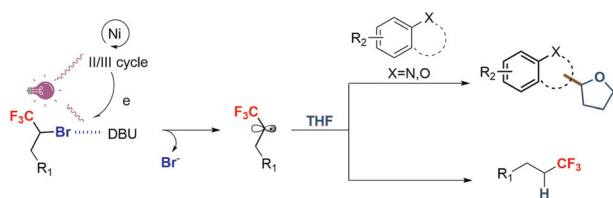
4708

**Photoredox-catalyzed three-component carbotrifluoromethylation of alkenes via radical-radical cross-coupling**Lin Tang,* Ge Lv, Taijun Wu, Lufang Zhang,
Xiaoyu Wang, Fengjuan Jia, Qiuju Zhou and
Guodong Zou

4716

**Synthesis of *N*-triflyl aldimines catalyzed by imino- λ^3 -iodane**Shun Sunagawa, Yoko Tezuka, Akira Tsubouchi,
Akira Yoshimura and Akio Saito*

4722

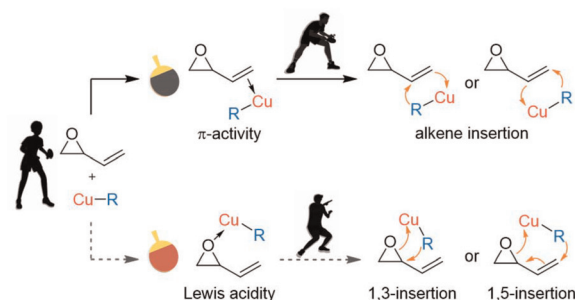
**Catalytic reduction of trifluoromethylated alkyl bromides and synthesis of alkylated heterocycles under visible light irradiation: synergetic action of a halogen bond and Ni catalysis**Gai-Rong Wang, Peng Guo, Guoliang Pu, Pan Wang,
An-Jun Wang, Peijun Liu, Jia Jia, Xuefei Li* and
Chun-Yang He*

RESEARCH ARTICLES

4730

Alkene insertion enables ring-opening of vinyl epoxides: a theoretical perspective

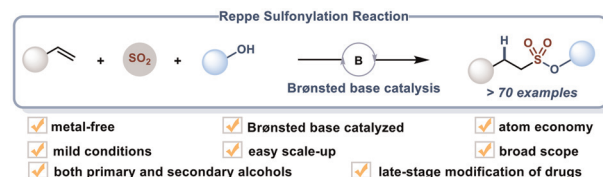
Jiabin Liu, Kai Yang, Jiying Liu, Dongmin Fu, Shi-Jun Li,* Wenjing Zhang* and Yu Lan*



4740

Brønsted base catalyzed Reppe sulfonylation reaction

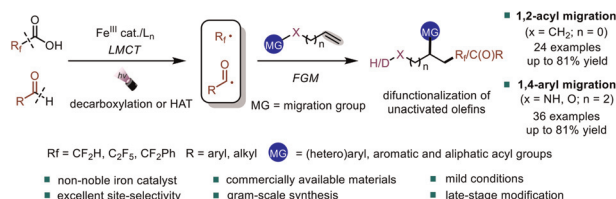
Xiaochun He, Xiaohong Wang, Fei Zhou, Hongzhuo Song, Xuemei Zhang* and Zhong Lian*



4748

Photoinduced difunctionalizations of unactivated olefins enabled by ligand-to-iron charge transfer and functional group migration strategies

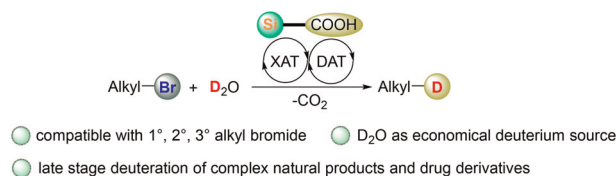
Mengqi Luo, Shibo Zhu, Jiawen Yin, Chao Yang, Lin Guo* and Wujiong Xia*



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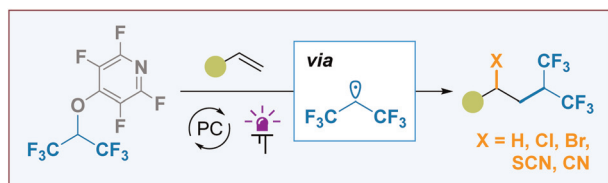
Photocatalyzed dehalogenative deuteration with silacarboxylic acids as halogen-atom transfer agents

Jia-Wei Hu, Jian Cao* and Li-Wen Xu*



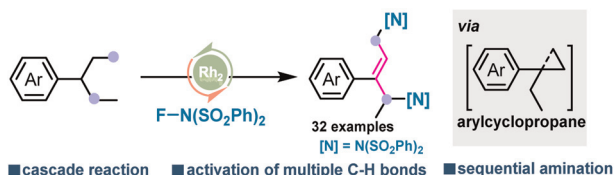
RESEARCH ARTICLES

4762

**A photocatalytic method for the generation of the 1,1,1,3,3,3-hexafluoroisopropyl radical**

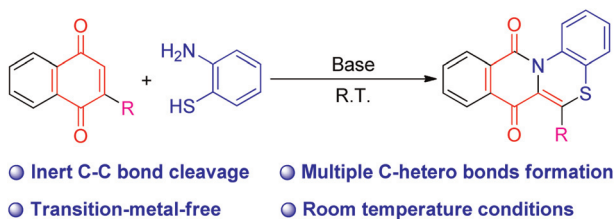
Sergey S. Lunkov, Vladislav S. Kostromitin, Artem A. Zemtsov, Vitalij V. Levin and Alexander D. Dilman*

4769

**Dirhodium-catalyzed one-step cascade intermolecular 1,4-diamination via cyclopropanation**

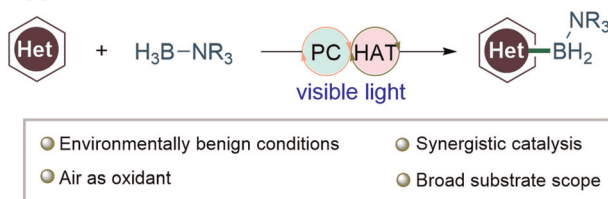
Qi Yang, Xinyu Liu, Song Qin* and Yuanhua Wang*

4779

**Base-promoted ring-opening/recyclization of naphthoquinones to access benzo[5,6][1,4]thiazino[4,3-*b*]isoquinoline-7,12-diones at room temperature**

Bin Tan, Zhuoqin Li, Xinlin Zhou, Chao Zhang, Guo-Jun Deng* and Shanping Chen*

4785

**Metal-free C–H borylation of heterocycles by merging photoredox and hydrogen atom transfer catalysis**

Changfu Wu, Shuang Luo, Xiaozu Liu* and Peijun Liu*

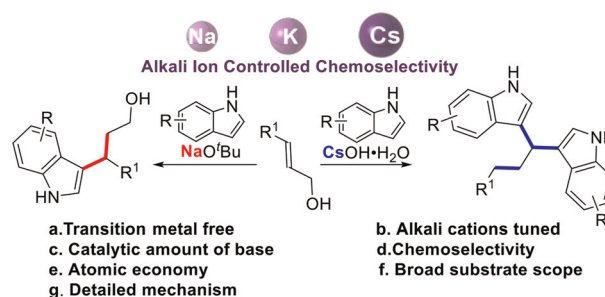


RESEARCH ARTICLES

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Alkali ion-controlled chemoselective indolation of allylic alcohols by base catalysis

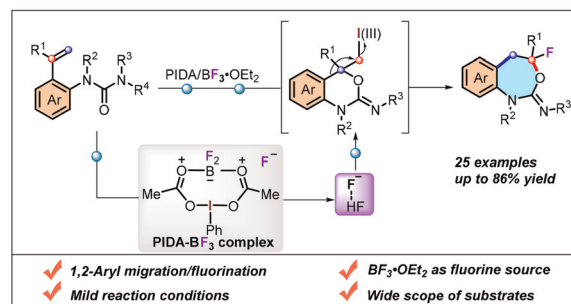
Ning Wang, Ruzhao Chen, Zhe Chen, Weikang Li, Xiuling Wen, Cunyuan Zhao and Zhuofeng Ke*



4805

Synthesis of fluoro-benzoxazepines *via* an I(III)/BF₃·Et₂O-enabled 1,2-aryl migration/fluorination cascade

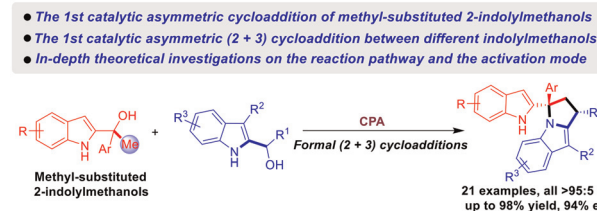
Jiaxin He, Haofeng Shi, Jialiang Wu, Dan Xiao, Kaiyue Yang, Yuli Sun and Yunfei Du*



4812

Catalytic asymmetric formal (2 + 3) cycloaddition involving methyl-substituted 2-indolylmethanols

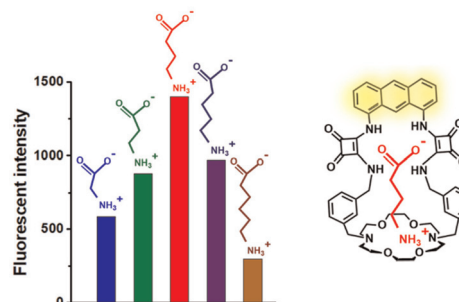
Si-Jia Liu, Tian-Zhen Li, Ning-Yi Wang, Qi Cheng, Yinchun Jiao,* Yu-Chen Zhang* and Feng Shi*



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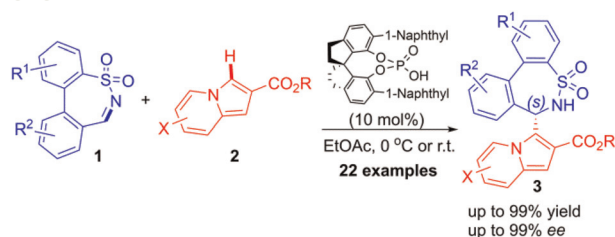
Zwitterion detection with a fluorescent squaramide cryptand: a study on size-dependent salt recognition and sensing

Marta Zaleskaya-Hernik, Marcin Wilczek, Łukasz Dobrzycki and Jan Romański*



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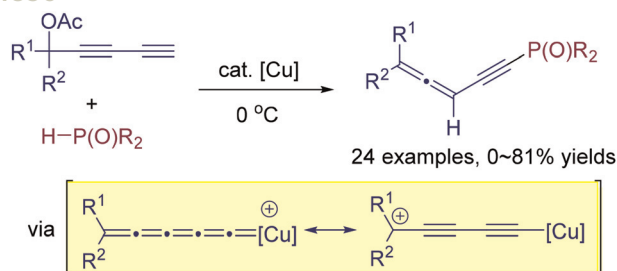
4829



Chiral phosphoric acid-catalyzed enantioselective synthesis of biphenyl-bridged ϵ -sultams via the Friedel–Crafts reactions of cyclic *N*-sulfonylimines with indolizines

Qian Li, Yuan-Yuan Xu, Bi-Xi Feng, Tao Wang* and You-Qing Wang*

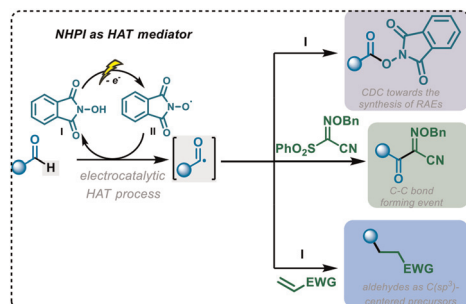
4836



Copper-catalyzed allenynylation of diynyl acetates with hydrophosphoryl compounds leading to phosphorylated allenes

Shaoqing Liu, Kaixin Yin, Yishuai Fan, Li-Biao Han and Ruwei Shen*

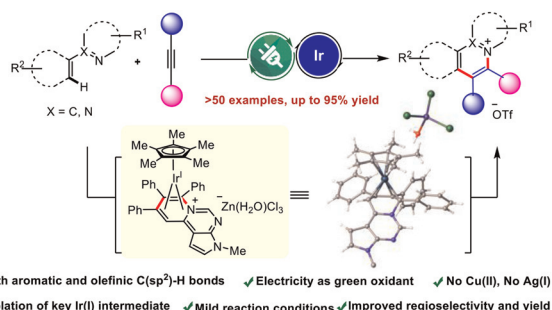
4842



Acyl radicals generated from aldehydes with NHPI as electrocatalyst: aldehydes and alcohols as carbon-centered radical precursors

Rodrigo G. Enríquez, Juan S. Dato-Santiago, Roberto del Río-Rodríguez, José Alemán* and Jose A. Fernández-Salas*

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Electrooxidative iridium-catalyzed sp^2 C–H activation–annulation leading to cationic π -extended heteroaromatics

Qi-Liang Yang,* Na-Na Guo, Shu-Xian Liu, Bei-Ning Zhang, Guodong Zou, Hai-Xia Wang, Dong-Chao Wang and Hai-Ming Guo*

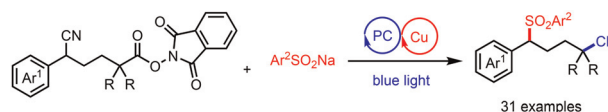


RESEARCH ARTICLES

4857

Photoredox/Cu dual catalyzed 1,4-cyanosulfonylation enabled by remote cyano migration

Xiaofei Xie, Yan Li, Zhengyuan Bo, Yingguang Zhu* and Kang Chen*



▲ Photoredox/Cu dual catalysis

♥ Regioselective 1,4-cyanosulfonylation

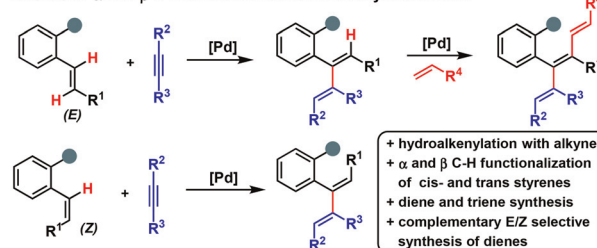
♦ Good functional group tolerance

♣ Mild reaction conditions

4862

Chelation-assisted α and β C–H functionalization of aryl alkenes with alkynes and alkenes

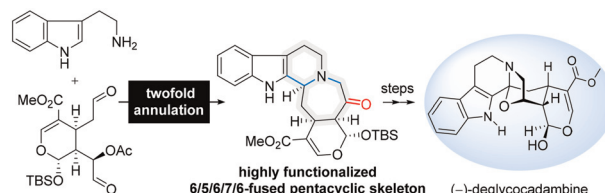
Cheng Zhang, Yu Lin, Yuhang Zhu, Chengxing Peng, Binbin Lv, Li Zhao,* Guofu Zhong, Jinfeng Wei and Jian Zhang*

This work: α and β C–H functionalization with alkynes/alkenes

4869

Total synthesis of (–)-deglycocadambine

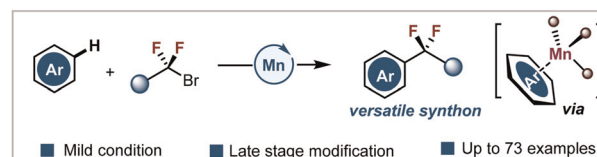
Fang-Xin Wang,* Ying-Tao Chen, Hui Liu, Heng-Shan Wang, Hong Liang, Zhen-Feng Chen and Yonggui Robin Chi*



4874

Ligand-assisted manganese-enabled direct C–H difluoromethylation of arenes

Kehan Zhou, Shuang Xia, Yuheng Xiao, Zhibin Huang, Jingyu Zhang* and Yingsheng Zhao*



■ Mild condition

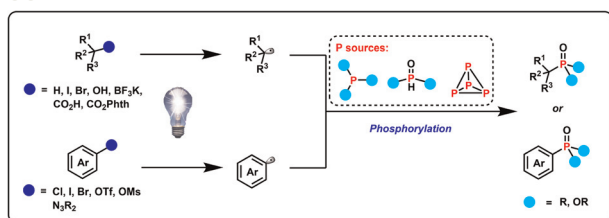
■ Late stage modification

■ Up to 73 examples



REVIEWS

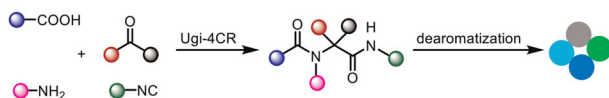
4882



Photocatalytic C–P bond formation based on the reaction of carbon-centered radicals with phosphides

Shi-Yi Zhao, Yi-Yun Huang, Shi-Hao Deng, Zhi-Peng Guan* and Zhi-Bing Dong*

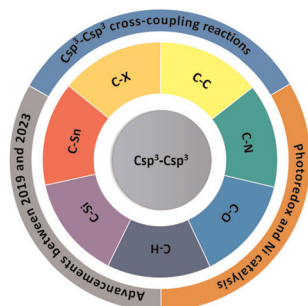
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Recent advances in post Ugi-4CR dearomatizations for constructing spiro heterocycles

Xiao Tang, Qianqian Tao, Liangliang Song* and Erik V. Van der Eycken*

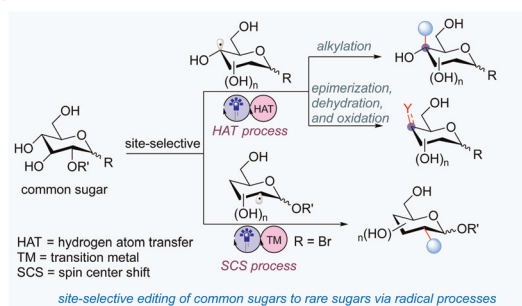
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Recent advancements in Ni/photoredox dual catalysis for Csp³–Csp³ cross-coupling reactions

Qi-Yun Huang and Min Shi*

4926



Site-selective editing of carbohydrate scaffolds to access rare sugars enabled by photoinduced radical processes

Liwen Xia, Qingqin Huang and Lei Dai*



REVIEWS

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Recent progress in asymmetric rearrangement reactions mediated by chiral Brønsted acids

Xi-Liang Liu, Mei-Ling Gong, Xiaodi Yang,* Ping Tian* and Qing-Hua Li*

