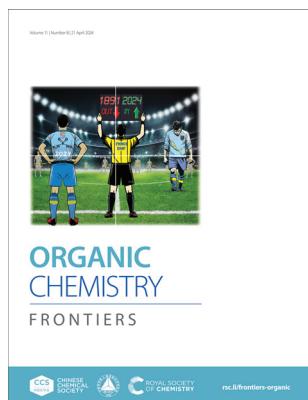


### IN THIS ISSUE

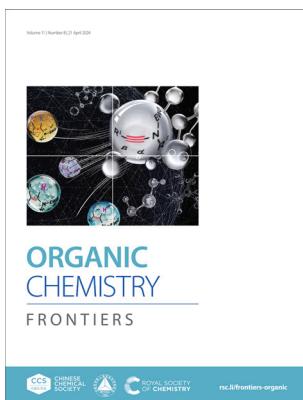
ISSN 2052-4129 CODEN OCFRA8 11(8) 2137–2420 (2024)



#### Cover

See Dmytro M. Volochnyuk,  
Serhiy V. Ryabukhin et al.,  
pp. 2155–2160.

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#### Inside cover

See Yan-Cheng Hu et al.,  
pp. 2351–2374.

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### PROFILE

2149

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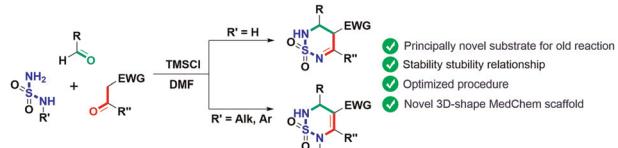


### RESEARCH ARTICLES

2155

Sulfamide instead of urea in Biginelli reaction: from  
black box to reality

Alexander Yu. Lyapunov, Andriy V. Tarnovskiy,  
Sergey Yu. Boron, Eduard B. Rusanov,  
Galyna P. Grabchuk, Dmytro M. Volochnyuk\* and  
Serhiy V. Ryabukhin\*



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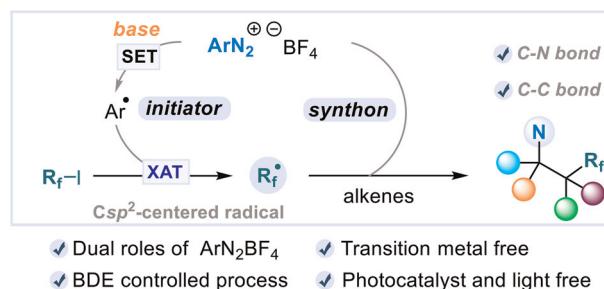
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## RESEARCH ARTICLES

2161

**Base-induced azofluoroalkylation of unactivated alkenes via halogen atom transfer**

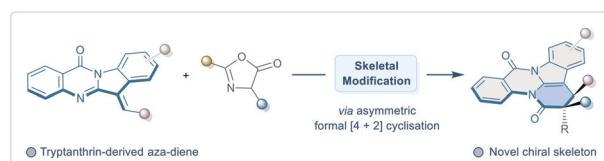
Jing Zhang, Yanchuang Zhao, Yu-Yi Zhu, Peng Lei, Hanru Liu, Chang-Sheng Wang, Shuya Xing, Yong Liu, Shao-Fei Ni,\* Thomas Castanheiro,\* Li-Wen Xu and Xinxin Shao\*



2171

**Stereoselective skeletal modification of tryptanthrins to install chiral piperidine-2-ones enabled by Brønsted acid catalysis**

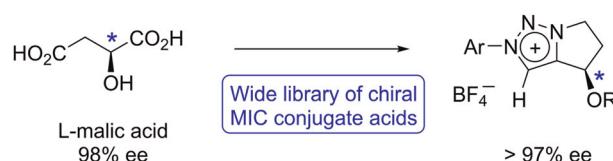
Rong Zeng, Xiang Zhang, Yuan-Yuan Lei, Zhuo-Zhuo Zhang, Min Jiang, Qing-Zhu Li, Jun-Long Li\* and Bo Han\*



2178

**Synthesis of enantiopure 1,2,3-triazolylidene-type mesoionic carbene (MIC) conjugate acids featuring a rigid bicyclic scaffold**

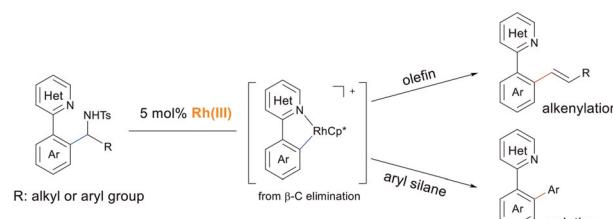
Vojtěch Dočekal, Mohand Melaimi, Simona Petrželová, Jan Veselý, Xiaoyu Yan and Guy Bertrand\*



2182

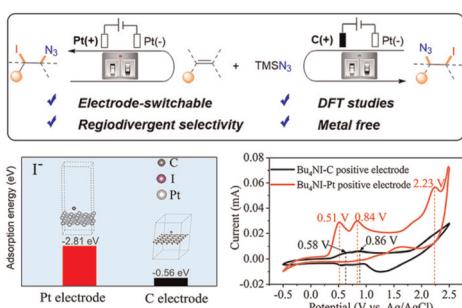
**Rhodium-catalyzed C–C bond alkenylation and arylation of  $\alpha$ -branched *N*-sulfonyl amines**

Lun Xu, Yucheng Liu, Hang Shi\* and Lun Li\*



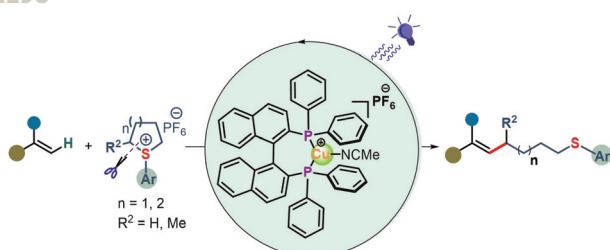
## RESEARCH ARTICLES

2189

**Electrode-switchable: exploring this new strategy to achieve regiodivergent azidoiodination of alkenes**

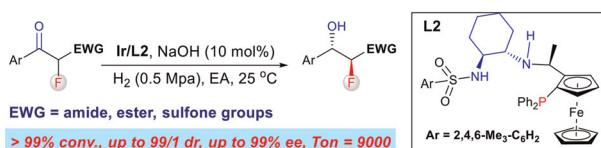
Xin-Lei Sun, Chen-Xi Xia, Yue Ren,\* Yu-Jin Li, Zhi-Qian Cao and Ling-Guo Meng\*

2195

**Visible light/copper catalysis enabled Heck-like coupling between alkenes and cyclic sulfonium salts *via* selective C-S bond cleavage**

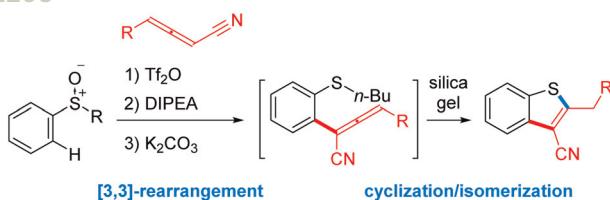
Xianqin Liu, Xufeng Li, Linyuan Wang, Yongjia Shi, Jian Lv and Daoshan Yang\*

2201

**Dynamic kinetic resolution of  $\alpha$ -F- $\beta$ -ketone amides (esters) *via* Ir/f-diaphos-catalyzed asymmetric hydrogenation**

Pengtao Yang, Dingguo Song, Lingxin Chen, Xianghua Zhao, Yirui Chen, Feiyang Shen, Fei Ling\* and Weihui Zhong\*

2208

**Synthesis of benzothiophenes *via* sulfonium-[3,3]-rearrangement of aryl sulfoxides with allenenitriles**

Lei Zhang, Kun Wan, Huanhuan Wang, Mengyao Wang, Ao Cui, Xin Huang and Bo Peng\*

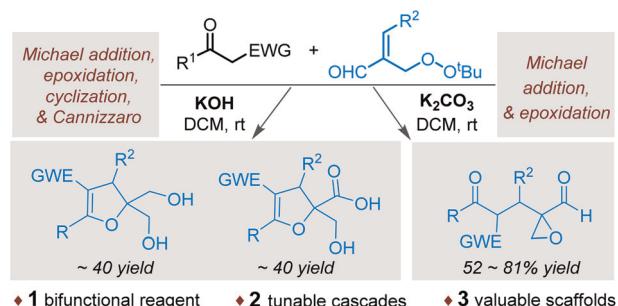


## RESEARCH ARTICLES

2215

**A formal (3 + 2) annulation–Cannizzaro cascade of bifunctional peroxides for the synthesis of dihydrofurans**

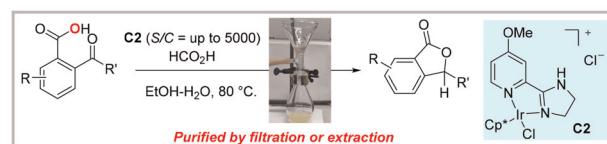
Yiwei Chen, Min Gao, Qianlan Xu, Jiumeng Zhang\* and Lin Hu\*



2220

**Iridium-catalyzed reductive  $\gamma$ -lactonization of *ortho*-acylbenzoic acids in water: sustainable access to phthalides**

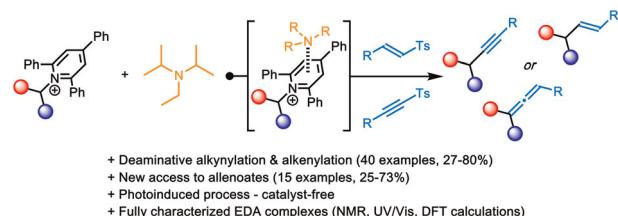
Yang Chen, Jingyu Zhang, Hongguang Du,\* Renshi Luo,\* Jiaxi Xu and Zhanhui Yang\*



2231

**Electron donor–acceptor complex photoactivation for deaminative alkynylation, alkenylation and allenylation: a comprehensive study**

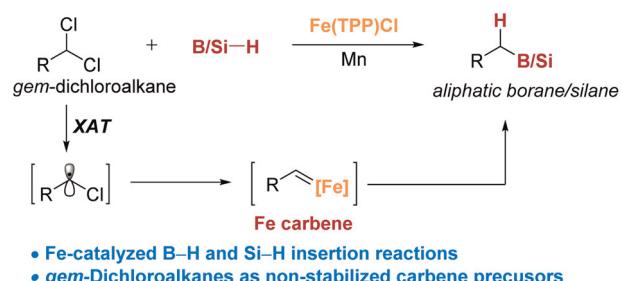
Romain Lapierre, Lina Truong, Matthieu Hedouin, Hassan Oulyadi,\* Bruno Schiavi, Alexandre Jean, Philippe Jubault\* and Thomas Poisson\*



2241

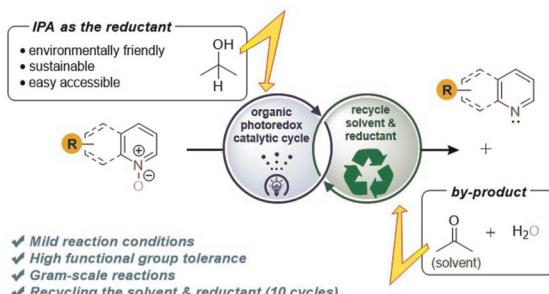
**Fe-catalyzed B–H and Si–H insertion reactions of *gem*-dihaloalkanes**

Xinyu Wang and Zhaobin Wang\*



## RESEARCH ARTICLES

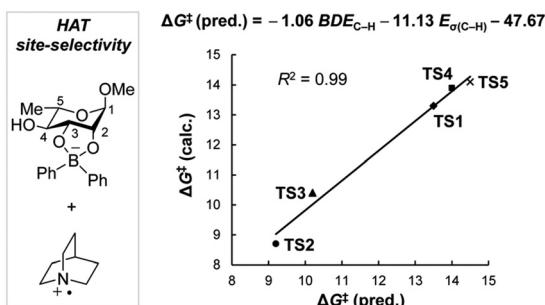
2249



## Deoxygenation of N-heterocyclic N-oxides using isopropanol as a recyclable reductant

Ho Kyeong Ryu, Yun Do Song and Jun Hee Lee\*

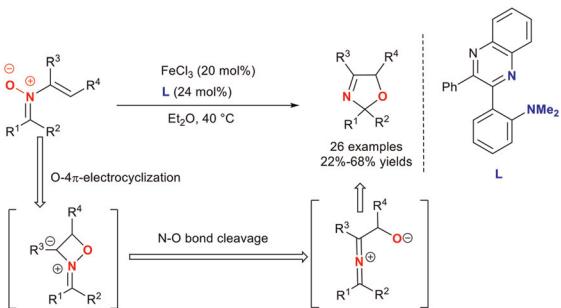
2269



## Origin of site-selectivity of hydrogen atom transfer in carbohydrate C–H alkylations via photoredox catalysis

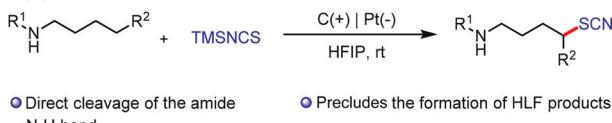
Yujie Ji, Lingfei Hu, Han Gao, Yan-Bo Wu, Xiangying Lv\* and Gang Lu\*

2277

Iron(III)/quinoxaline-derived N,N-ligand catalyzed oxygen transfer reaction of N-vinyl nitrones through selective 4 $\pi$ -electrocyclization and N–O bond cleavage

Yan-Jiao Lu, Feng-Lan Lu, Jin-Qi Zhang, Chun-Hua Chen,\* Cui Liang, Xiao-Pan Ma\* and Dong-Liang Mo\*

2283

Electrochemical remote C(sp<sup>3</sup>)-H thiocyanation

Xinyu Pang, Hui He, Xiangrui Meng, Linbao Zhang, Shaofei Ni,\* Ming Li\* and Weisi Guo\*

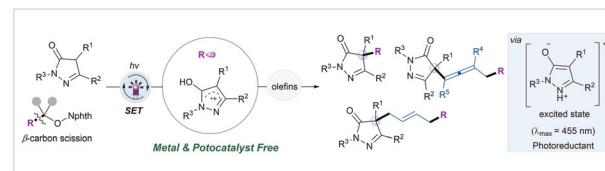


## RESEARCH ARTICLES

2289

**Photoinduced alkylation of pyrazolones via  $\beta$ -scission of unstrained aliphatic alcohol derivatives**

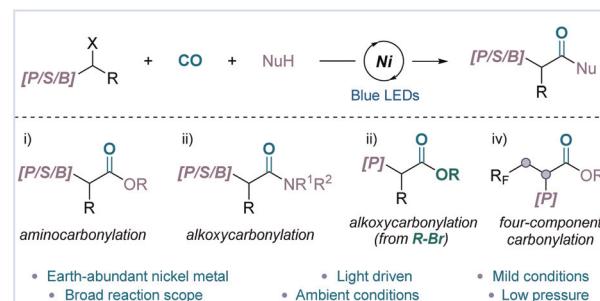
Xinxin Geng, Pan Tao, Yujun Li and Ke Zheng\*



2297

**Nickel/photoredox-catalyzed carbonylative transformations of  $\alpha$ -phosphorus-,  $\alpha$ -sulfur-, and  $\alpha$ -boron-substituted alkyl halides**

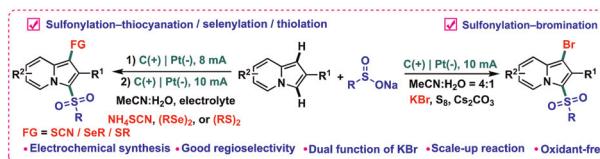
Le-Cheng Wang and Xiao-Feng Wu\*



2306

**Regioselective electrochemical cascade C–H sulfonylation–bromination of indolizines to access difunctionalized indolizines**

Wenxuan Jiang, Xiang Liu,\* Chuanying Zhu, Meiyi Chen, Weidan Li and Hua Cao\*



2313

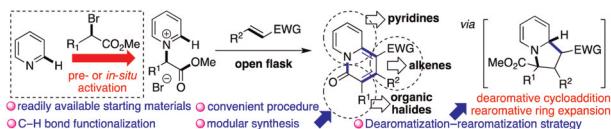
**Selective photochemical synthesis of primary arylamines and symmetric diarylamines via amination of aryl bromides using  $\text{Ni}(\text{NH}_3)_6\text{Cl}_2$  as a nitrogen source and catalyst**

Zhehui Xu, Jianyang Dong, Geyang Song, Fuqiang Kong, Gang Li and Dong Xue\*

Selective photochemical synthesis of primary arylamines and symmetric diarylamines via the amination of aryl bromides using  $\text{Ni}(\text{NH}_3)_6\text{Cl}_2$  as both a nitrogen source and catalyst

## RESEARCH ARTICLES

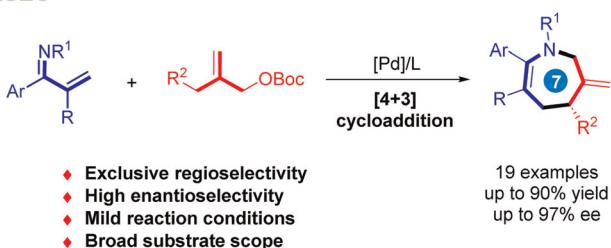
2319



### A dearomatization–rearomatization strategy for construction of 4*H*-quinolizin-4-ones *via* C–H bond functionalization of pyridines

Dong Qiu and Yijin Su\*

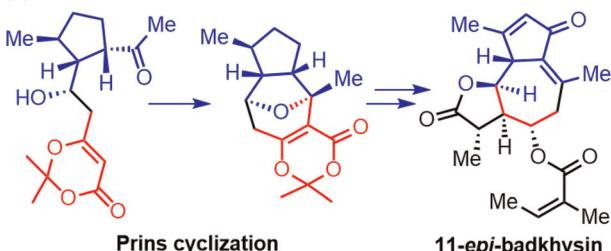
2326



### Palladium-catalyzed asymmetric [4 + 3] cycloaddition of acyclic $\alpha,\beta$ -unsaturated imines with trimethylenemethane donors: access to chiral non-fused azepines

Ting-Peng Li, Shuixiu Su, Jia-Huan Shen, Meng Zang, Yang-Zi Liu, Quannan Wang\* and Wei-Ping Deng\*

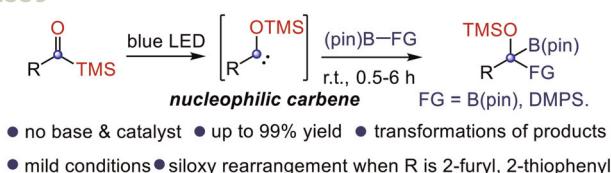
2332



### Prins cyclization of 1,3-dioxinone: synthesis of 11-*epi*-badkhyisin

Xiaoliang Xu, Ping Hua, Yiren Xu, Baoqing He, Jingfeng Zhao, Liang Li, Wen Chen\* and Hongbin Zhang\*

2339



### Photo-induced catalyst-free formal carbon insertion of acylsilanes into B–B and B–Si bonds

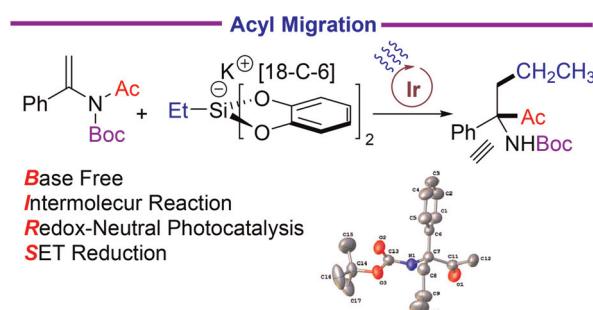
Xiongxiong Lu, Qingbin Zhao, Hao Zhang, Pan Xu, Xuenian Chen and Zhenxing Liu\*

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2344

**Unprecedented single-electron-transfer reduction-based N → C acyl migration reactions of imides enabled by redox-neutral photocatalysis**

Linge Huai, Li Zhang,\* Zhentao Wang\* and Yewen Fang\*

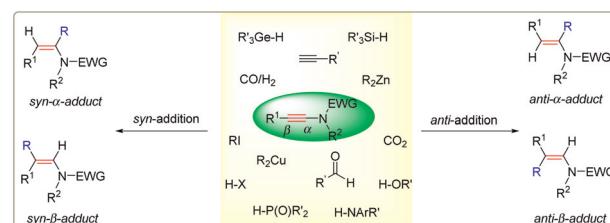


## REVIEWS

2351

**Catalytic intermolecular hydrofunctionalizations of ynamides**

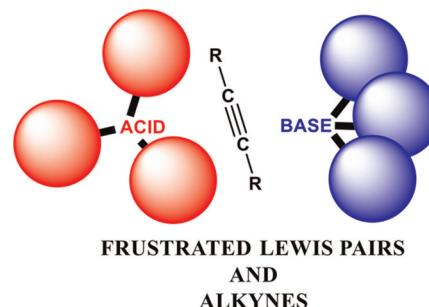
Ying-Ying Zhao, Yu-Jing Jia and Yan-Cheng Hu\*



2375

**Frustrated Lewis pair chemistry of alkynes**

Jing Guo,\* Maying Yan and Douglas W. Stephan\*



2397

**Advancement in the C–H bond alkylation of (hetero)arenes catalyzed by the most abundant transition metal—iron**

Chandini Pradhan and Benudhar Punji\*



## CORRECTION

2418

**Correction: Cu-catalyzed arylation of S-tosyl peptides with arylboronic acids**

Junjie Ying, Jingrong Huang, Chenguang Liu, Fa-Jie Chen,\* Chunfa Xu\* and Fen-Er Chen\*

