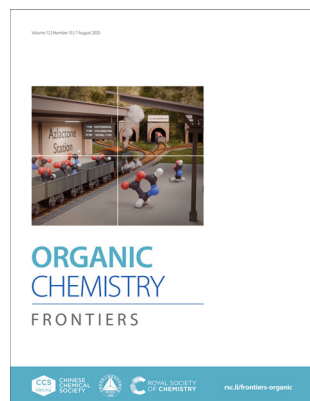


### IN THIS ISSUE

ISSN 2052-4129 CODEN OCFRA8 12(15) 4199–4400 (2025)



#### Cover

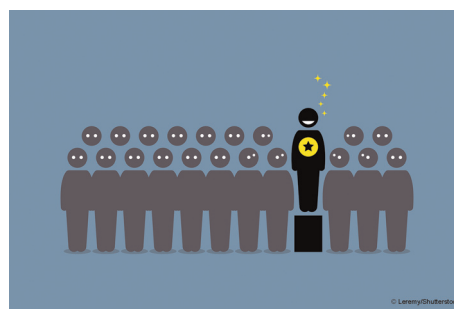
See Pedro P. de Castro, Giovanni W. Amarante *et al.*, pp. 4352–4398.

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### EDITORIAL

4208

#### Outstanding Reviewers for *Organic Chemistry Frontiers* in 2024

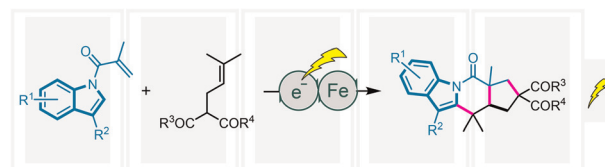


### RESEARCH ARTICLES

4209

#### Electrochemical [3 + 2]/[4 + 2] cyclization to indole-fused polycyclics

Chengcheng Yuan, Lufang Liao, Chengkou Liu,\*  
Yaqi Qiao, Zheng Fang, Zefu Zheng and Kai Guo



Electrochemical [3+2]/[4+2] cyclization to indole-fused polycyclics

- ☑ good air compatibility
- ☑ good water compatibility
- ☑ good group compatibility
- ☑ three-step addition
- ☑ exogenous oxidant free
- ☑ user-friendly undivided cell



# RSC Applied Interfaces

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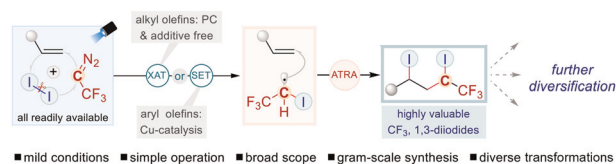
**Fundamental questions  
Elemental answers**

## RESEARCH ARTICLES

4216

### Light induced interrupted alkene diiodination with carbon atom insertion: access to trifluoromethylated 1,3-diiodoalkanes

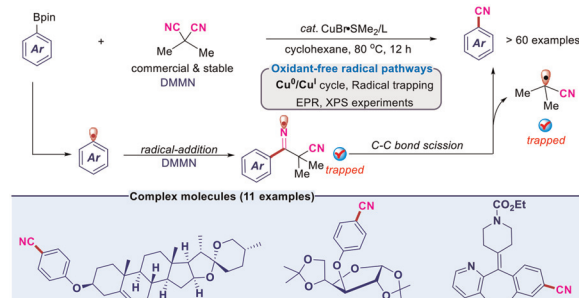
Tengfei Pang, Yu Yan, Jianjian Huang, Fangrui Zhong and Guojiao Wu\*



4223

### Copper-catalyzed radical transnitration of arylborons with dimethylmalononitrile and mechanistic insights

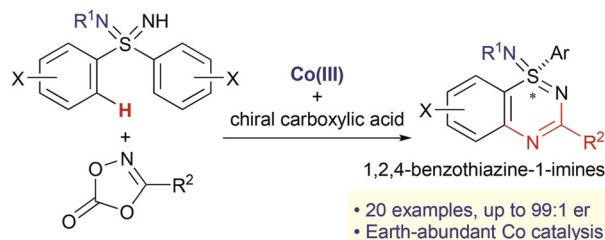
Xiaofu Jian, Xibao Zhang and Weilong Xie\*



4236

### Enantioselective C–H amidation of sulfondiimines for the synthesis of 1,2,4-benzothiadiazine-1-imines under cobalt catalysis

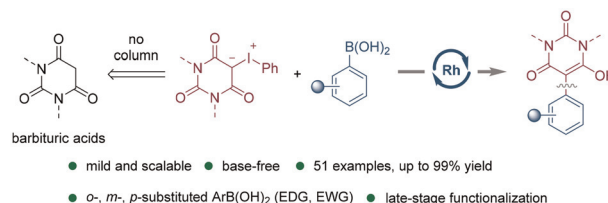
Ayami Murata, Tomonori Endo, Yuki Hirata, Kosuke Higashida, Tatsuhiko Yoshino\* and Shigeki Matsunaga\*



4242

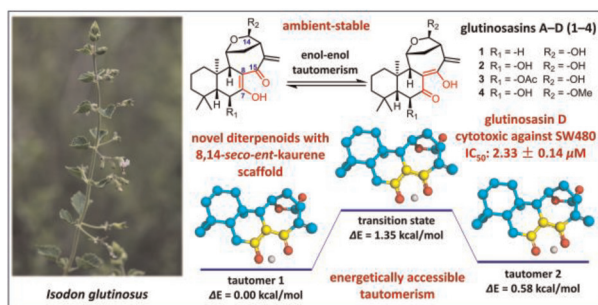
### Rh(III)-catalyzed base-free $\alpha$ -arylation of iodonium ylides with arylboronic acids: modular synthesis of 5-aryl barbituric acids

Mengling He, Shuoying Cai, Nursemanguli Baiheti, Linmei Zhao, Huaming Tao\* and Shaoyu Mai\*



## RESEARCH ARTICLES

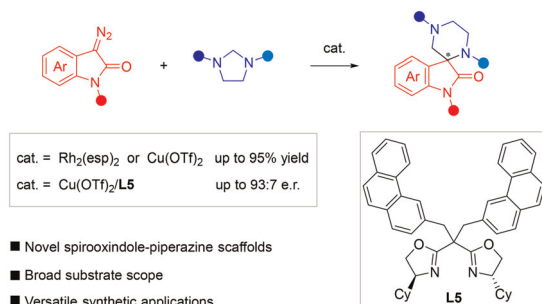
4247



### 8,14-seco-ent-Kaurane diterpenoids from *Isodon glutinosus*: enol–enol tautomerism and antitumor activity

Yang-Yang Fu, Kun Hu, Song-Yu Hou, Bing-Chao Yan, Xiao-Nian Li, Xing-Zhi Yang, Han-Dong Sun and Pema-Tenzin Puno\*

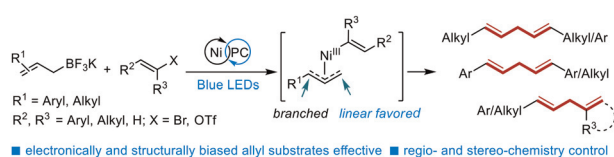
4255



### Catalytic (5 + 1) cycloaddition of diazooxindoles with imidazolidines to access novel piperazine-spirooxindole frameworks

Yijun Duan, Feng Chen, Yuncheng Liu, Wendi Xu, Xue Zhang, Ming Lang and Shiyong Peng\*

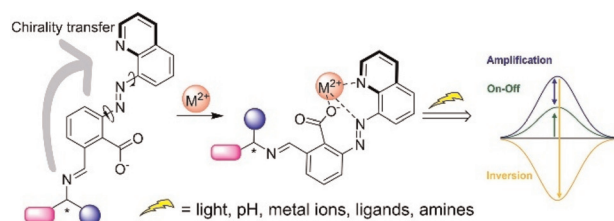
4264



### Photoredox/nickel dual-catalyzed regio- and stereo-selective cross-coupling of allyl trifluoroborates with alkenyl electrophiles: synthesis of 1,4-dienes

Peizhuo Lv, Xin Xie and Yuanhong Liu\*

4271



### Multi-stimuli-responsive and multimode azoquinoline chiroptical switches

Zimu Liu, Youming Lv,\* Hebo Ye,\* Hanwei Lu and Lei You\*



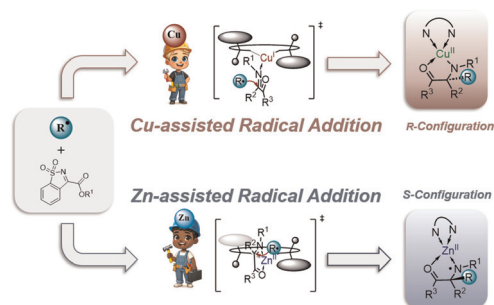


## RESEARCH ARTICLES

4281

### Unraveling the divergent mode of Cu- or Zn-assisted radical addition of imines: a mechanistic perspective on Lewis acidic metal-induced enantioselectivity

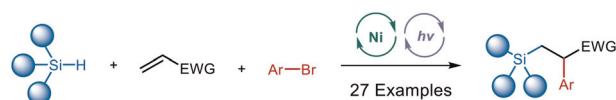
Dongmin Fu, Ruopeng Bai, Jiang Wu, Kai Yang,\*  
Xiaokang Guo,\* Yu Lan\* and Tao Zhang\*



4291

### Nickel/photo-cocatalyzed three-component silylarylation of electron-deficient alkenes

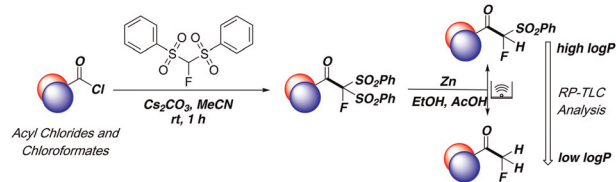
Pei Fan\* and Xiao-Xue Huang



4297

### Monofluoromethylation of acyl chlorides and chloroformates employing fluorobis(phenylsulfonyl)methane. Synthesis of monofluoromethyl ketones via selective zinc-mediated reductive desulfonylation

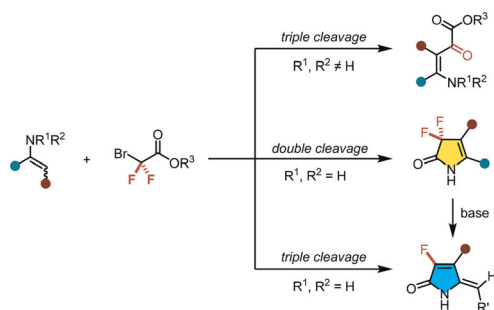
Alexander Knieb, Thomas Saal, Prabodh Rao,  
Xanath Ispizua-Rodriguez and G. K. Surya Prakash\*



4305

### Photoinduced diversity-oriented synthesis of $\alpha$ -ketoester $\beta$ -enamino esters, 3,3-difluoro-4-pyrrolin-2-ones, and 3-fluoro-3-pyrrolin-2-ones from bromodifluoroacetates and $\beta$ -enamino esters

Dewei Feng, Renhua Zheng,\* Zhifang Li, Xiao Geng\*  
and Lei Wang\*





Zahra Noori and Jordi Poater\*

✓ *ortho*-C-H silylation  
 ✓ via six-membered palladacycle  
 ✓ commercially available starting materials  
 ✓ distinct reactivities based on NBE derivatives

Wenguang Li,\* Jing Tao, Heyun Sheng, Man Cao,  
Ming Chen, Wenchao Gao, Xu Zhang, Wentao Li,  
Yongqi Yu\* and Ting Li\*

$R^4 = \text{H, Me}$

up to 96% yield  
 44 examples

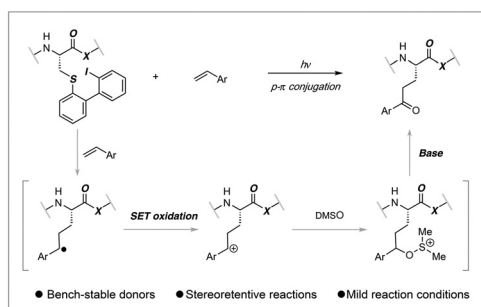
Hui Sun,\* Liyuan Zhang, Xin Wu and Bin Cui\*

## RESEARCH ARTICLES

4347

## A photoredox catalyzed Kornblum oxidation reaction for unnatural amino acid synthesis

Li-Fan Deng, Mingxing Huang, Weichen Wang, Shiyang Xu, Xiang Pu,\* Rong Tian\* and Yingwei Wang\*



## REVIEW

4352

## Azlactone rings: uniting tradition and innovation in synthesis

Marcelo H. R. Carvalho, Geovana F. Vargas, João P. R. S. Ribeiro, Pedro P. de Castro\* and Giovanni W. Amarante\*

