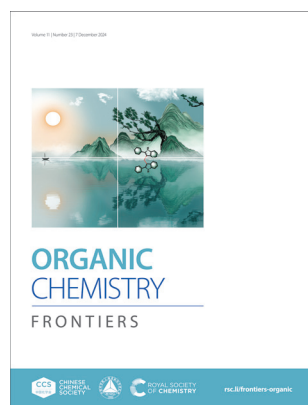


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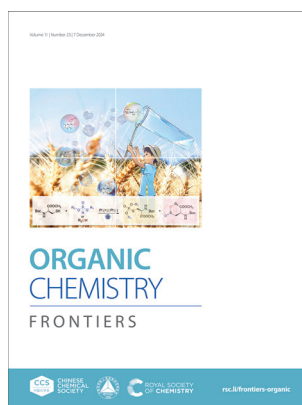
ISSN 2052-4129 CODEN OCFRA8 11(23) 6591-6960 (2024)



#### Cover

See Xuan Ding, Guang Li *et al.*, pp. 6603–6608.

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#### Inside cover

See Yue Weng *et al.*, pp. 6609–6616.

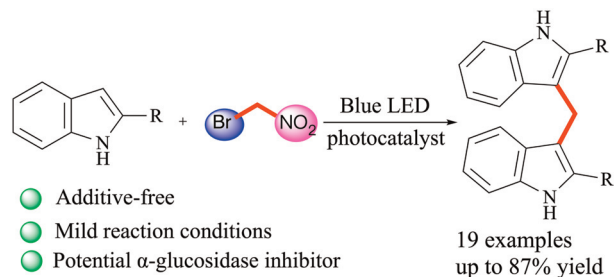
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### RESEARCH ARTICLES

6603

#### Photoredox-catalyzed bisarylation of bromonitroalkanes enabled by the dual role of nitro functionality: synthesis of bis(indolyl) methanes as promising $\alpha$ -glucosidase inhibitors

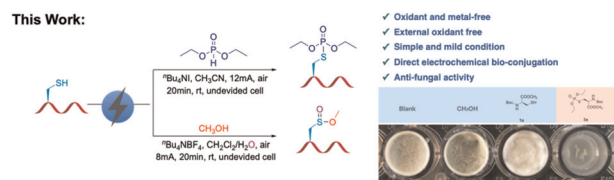
Xuan Ding,\* Wei Zhang, Yi-Wei Huang, Yi-hang Li, Jing Su, Yana Lv, Shifang Liu, Yi Yuan and Guang Li\*



6609

#### Electrochemical diversification of cysteine derivatives and cysteine-containing peptides to phosphorothioates and sulfinates

Longyu Xiao, Yifan Li, Jun Huang, Li Pan, Pan Wu and Yue Weng\*



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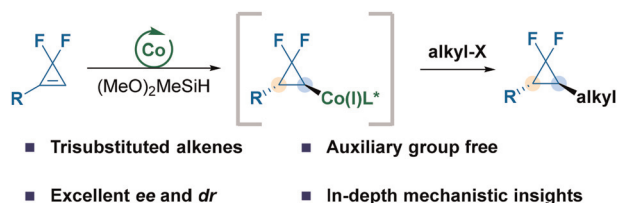
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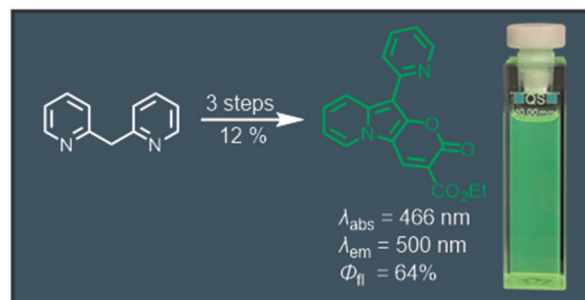
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## RESEARCH ARTICLES

6617

**Cobalt-catalyzed stereoselective synthesis of chiral *gem*-difluorocyclopropanes with vicinal stereocenters**Bingxue Liu, Deguang Liu, Cong Niu, Yu Xia, Xi Lu,\*  
Yao Fu\* and Qiang Liu\*

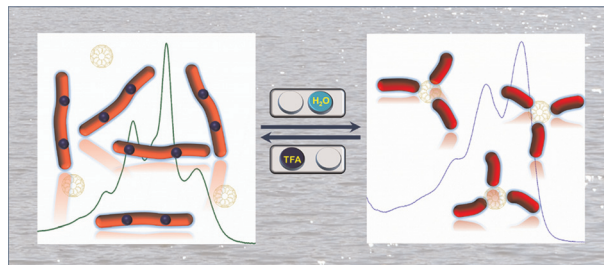
6627

**Strongly fluorescent indolizine-based coumarin analogs**Jaqueline S. A. Badaro, Antoni Wrzosek, Olaf Morawski,  
Adam Szewczyk,\* Irena Deperasińska\* and  
Daniel T. Gryko\*

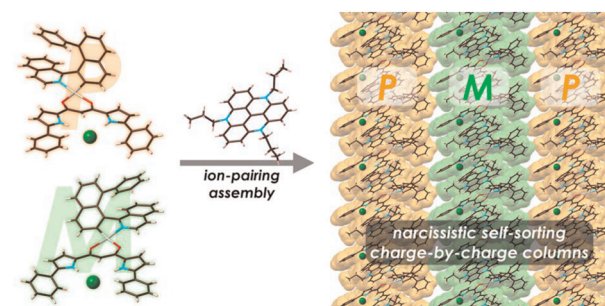
6642

**Remote controlled supramolecular switching using a ring-substituted *peri*-naphthoindigo derivative**

Indraneel Debnath, Tirupati Roy and Kingsuk Mahata\*

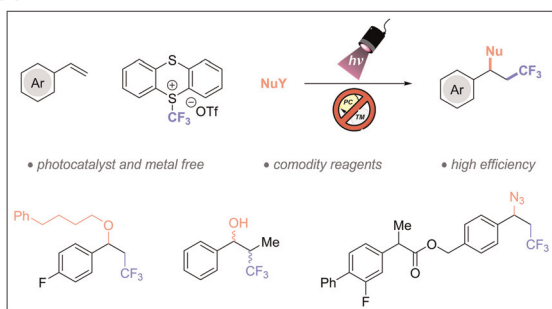


6651

**Ion-pairing assemblies of anion-responsive helical Pt<sup>II</sup> complexes**Yohei Haketa, Maho Kawami, Wataru Ota, Tohru Sato  
and Hiromitsu Maeda\*

## RESEARCH ARTICLES

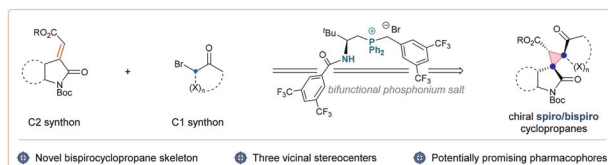
6660



### Photocatalyst-free light-mediated three-component alkoxy-, hydroxy-, and azidotrifluoromethylation of alkenes

Yingmin Ji, Aida Jaafar, Carolina Gimbert-Suriñach, María Ribagorda,\* Adelina Vallribera,\* Albert Granados\* and María Jesús Cabrera-Afonso\*

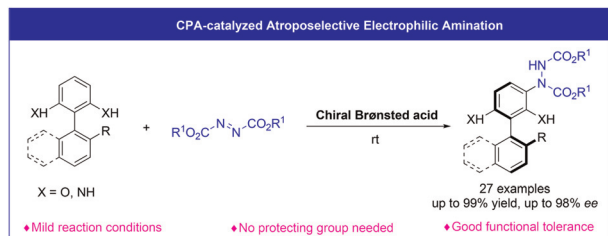
6666



### Asymmetric synthesis of bis-spiro cyclopropane skeletons via bifunctional phosphonium salt-catalyzed [2 + 1] annulation

Xiaojun Yu, Fan Wang, Juan Du, Jian-Ping Tan, Jianke Pan, Lixiang Zhu and Tianli Wang\*

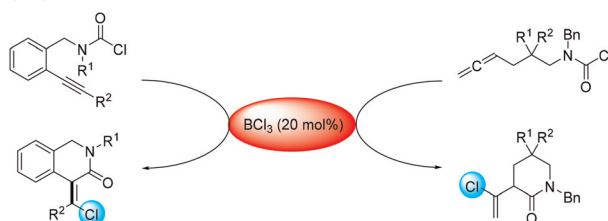
6672



### Catalytic atroposelective electrophilic amination of diaryl anilines and diaryl phenols for the synthesis of axially chiral diaryl compounds

Haihui Zhu, Long Cheng, Jie Wang, Zhengyu Han,\* Jianwei Sun and Hai Huang\*

6678



### $\text{BCl}_3$ catalyzed Z-selective intramolecular chlorocarbamylation of alkynes/allenes

Zhantao Yang, Linlin Chen, Yuhang Zhao, Qianhui Chen, Wanjun Zhao, Linfei Li, Boxuan Zhang, Hua Xie, Xiangtao Kong\* and Chun-Hua Yang\*

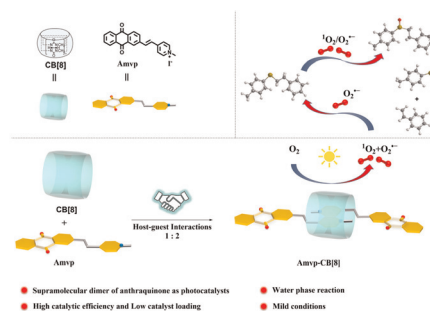


## RESEARCH ARTICLES

6684

### A supramolecular dimer strategy for enhancing the selective generation of sulfides and sulfoxides by visible-light induced photoredox thiol–ene cross-coupling reactions of anthraquinone

Fa-Dong Wang, Kai-Kai Niu, Shengsheng Yu, Hui Liu and Ling-Bao Xing\*



6694

### Access to tetrahydrocarbazoles via a photocatalyzed cascade decarboxylation/addition/cyclization reaction

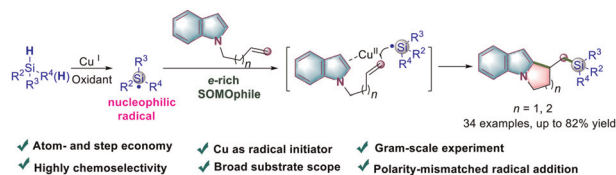
Shuai Han, Zhang Chen, Yu Guo, Jinjin Chen, Zhen Wang\* and Yao-Fu Zeng\*



6700

### A chemoselective radical cascade polarity-mismatched silylarylation of unactivated alkenes

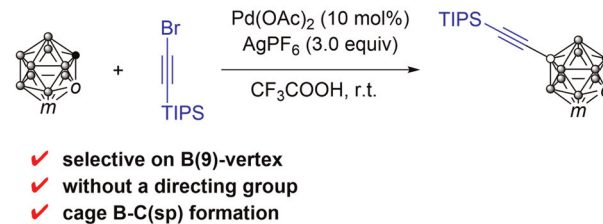
Liang Liu, Xiao Yang, Jinghui Tong, Huajie Zhu, Lu Ouyang, Renshi Luo\* and Jianhua Liao\*



6706

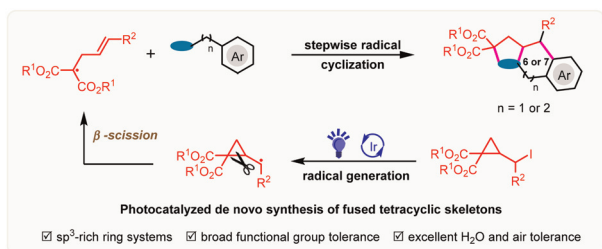
### Pd(II)-catalyzed B(9)-alkynylation of *o/m*-carboranes

Hao-Tian Zhang, Yan Gao, Yan-Na Ma\* and Xuenian Chen\*



## RESEARCH ARTICLES

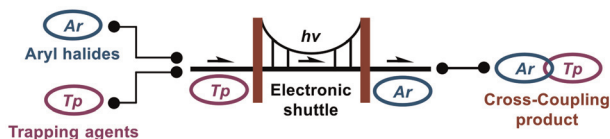
6712



### Photocatalyzed *de novo* synthesis of fused tetracyclic skeletons via stepwise formal [3 + 2]/[4 or 5 + 2] cycloadditions

Wenjing Guan, Jinlin Hang, Guanru Liu, Yaqi Qiao, Chengcheng Yuan, Lufang Liao, Xiaoqing Fan, Zheng Fang, Chengkou Liu\* and Kai Guo

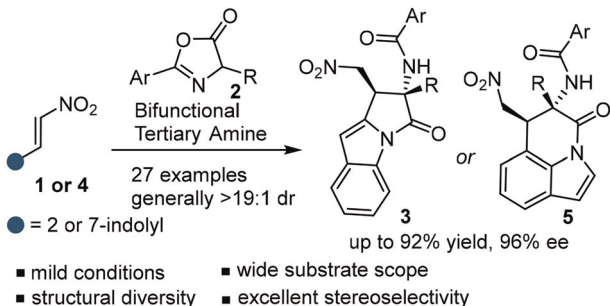
6718



### Photoinduced cross-coupling of aryl halides enabled by *n*-tetrabutylphosphonium phthalate

Chao Tian and Lei Shi\*

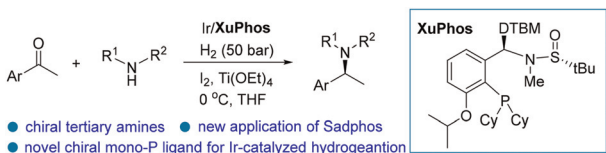
6728



### Asymmetric synthesis of pyrrolo[1,2-*a*]indoles via bifunctional tertiary amine catalyzed [3 + 2] annulation of 2-nitrovinylindoles with azlactones

Jiang Deng, Junyuan Yan, Wei Li, Xiaomei Li, Zhiming Li, Song Wu, Jiachen Xie, Zhouyu Wang, Shan Qian\* and Xiao-Long He\*

6735



### Ir/XuPhos-catalyzed direct asymmetric reductive amination of ketones with secondary amines

Zhou Luo, Tianxiang Fan, Jingyan Luo, Yuanyuan Liu\* and Junliang Zhang\*

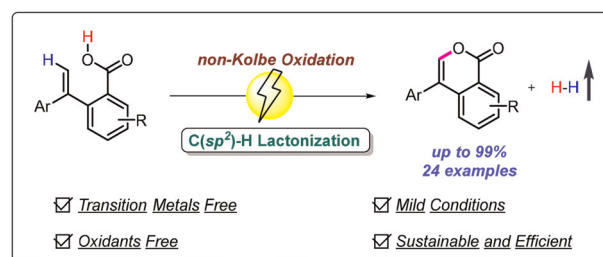


## RESEARCH ARTICLES

6742

### Non-Kolbe oxidation driven electrochemical C(sp<sup>2</sup>)-H lactonization towards the synthesis of isocoumarins

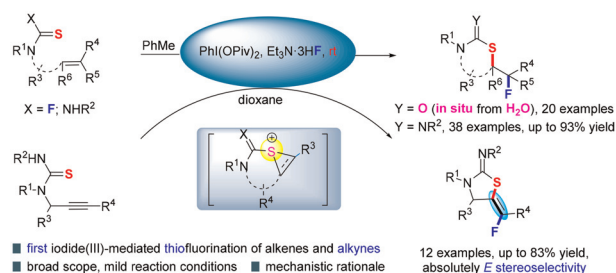
Chen Liu, Hongpeng Liu, Gaoyuan Zhang, Yunge Liu, Pei Liao, Yongqun Mei and Yunfei Zhang\*



6748

### Hypervalent iodide(III)-mediated thiofluorination of alkenes and alkynes from thioureas/thiocarbamoyl fluorides with water and a nucleophilic fluoride source

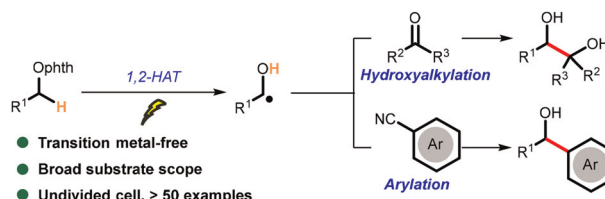
Junyi Zhou, Xiang Wang, Wenjun Tang and Liqin Jiang\*



6760

### Electrochemical 1,2-hydrogen atom transfer functionalizations of *N*-(benzyloxy)phthalimides

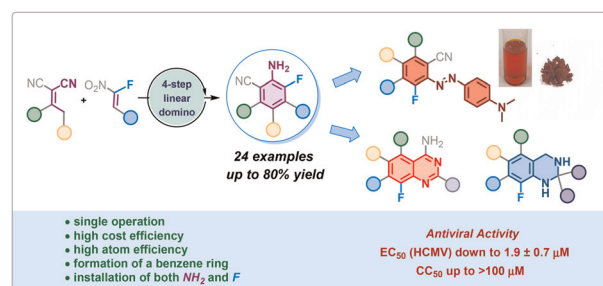
Xin Fu, Tingting Ran and Jie Liu\*



6768

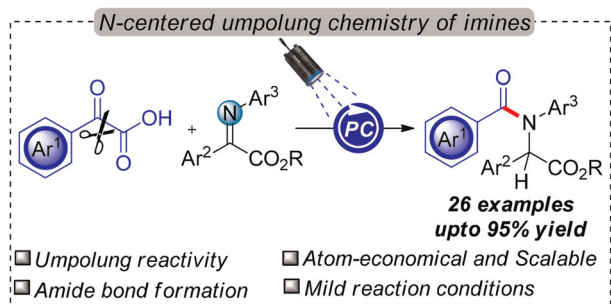
### A domino reaction strategy for facile and modular construction of synthetically challenging functionalized *ortho*-fluoroanilines

Benedikt W. Grau, Sascha Kohlbauer, Yungyeong Gu, Friedrich Hahn, Josephine Lösing, Christina Wangen, Maximilian Stangier, Lutz Ackermann, Manfred Marschall and Svetlana B. Tsogoeva\*



## RESEARCH ARTICLES

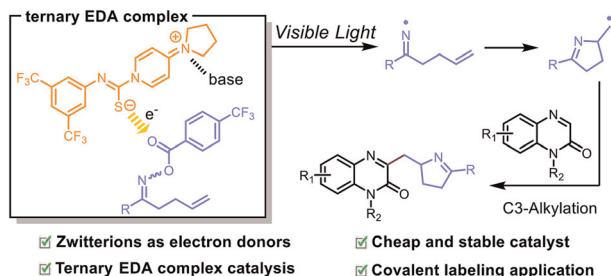
6778



### Exploring N-centered umpolung reactivity in photoredox-catalyzed amidation with an $\alpha$ -iminoester

Parag Mistry, Subhankar Das, Rik Patra and Indranil Chatterjee\*

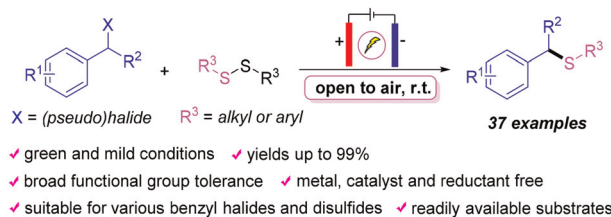
6784



### Zwitterions as catalytic electron donor species for visible light-induced photoactivation of oxime esters and direct C3-alkylation of quinoxalin-2(1H)-ones

Haichen Mao, Yuting Zhang, Hengrong Cao, Junbiao Chang\* and Bo Zhu\*

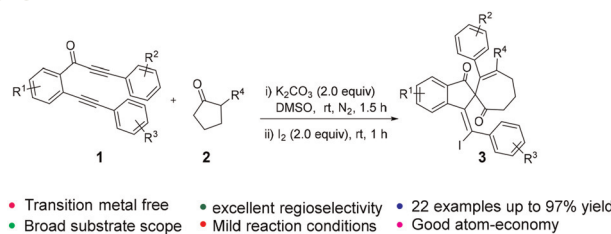
6790



### Electrochemically driven metal-free synthesis of benzylic thioethers via C-S cross-coupling

Ming-Qiu-Hao Fu, Yan-Hong He\* and Zhi Guan\*

6797



### Synthesis of [4.6] spirocarbocycles: a base-promoted ring-expansion and subsequent I<sub>2</sub>-mediated regioselective spirocyclization protocol

Nana Fei, Zongkang Wang, Peng He, Qiongwen Kang, Yan Wang, Chengyu Wang\* and Yanzhong Li\*

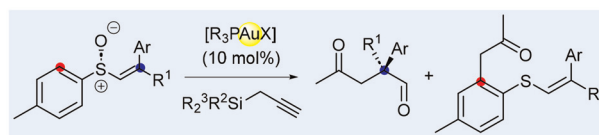


## RESEARCH ARTICLES

6804

### Mechanistic insights into the gold(I)-catalyzed [3,3]-sigmatropic rearrangement of sulfoniums for the formation of chiral 1,4-dicarbonyls or formal $\alpha$ -arylation of carbonyl compounds

Weiping Zhou, Ya-Qing Huang, Vincent Gandon\* and Arnaud Voituriez\*

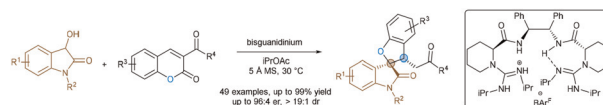


- Better understanding of the factors influencing this divergent reactivity
- Test of different substrates and propargyl silanes
- DFT calculations

6813

### Asymmetric construction of spirobenzofuran indolinones via a cascade reaction of 3-hydroxyoxindoles with coumarins

Yanji Song, Yuqiao Zhou, Zheng Tan, Ziliang Jiao, Xiaoming Feng and Xiaohua Liu\*

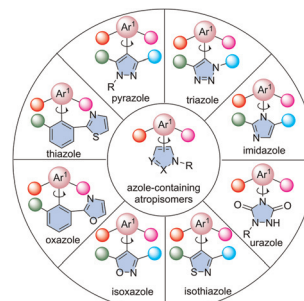


## REVIEWS

6819

### Recent advances in the catalytic asymmetric construction of axially chiral azole-based frameworks

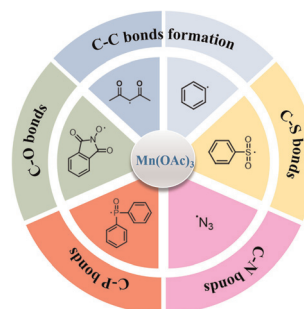
Weiwei Luo,\* Yu Zhang, Meijun Ming and Lin Zhang\*



6850

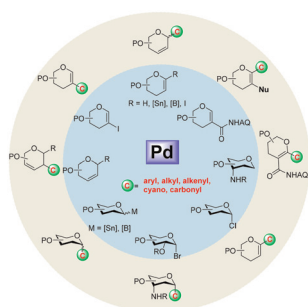
### Manganese(III) acetate in organic synthesis: a review of the past decade

Jian Wang, Yan Zhang, Ying Zhou, Xin Gu, Bingxu Han, Xuelu Ding\* and Shuai Liang\*



## REVIEWS

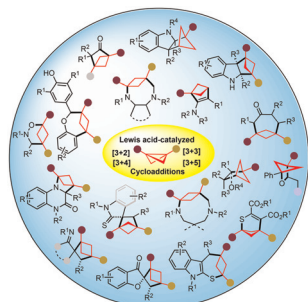
6918



### Synthesis of C-glycosides enabled by palladium-catalyzed glycosylation reactions

Wenli Tong, Jie-Ping Wan\* and Jianchao Liu\*

6942



### State-of-the-art strategies for Lewis acid-catalyzed strain-release cycloadditions of bicyclo[1.1.0]butanes (BCBs)

Xiang Liu,\* Jiawei He, Keyu Lin, Xingyue Wang and Hua Cao\*

