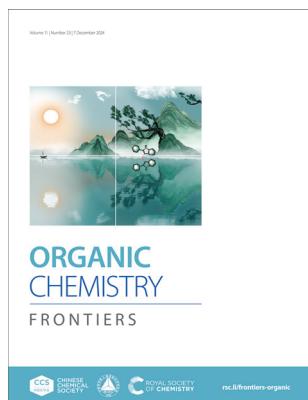


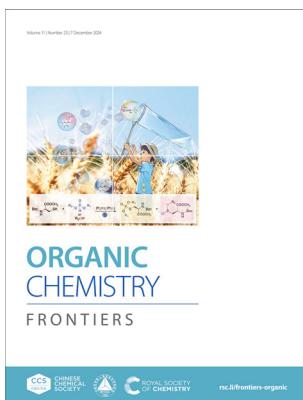
IN THIS ISSUE

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

**Cover**

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

Image reproduced
by permission of
Xuan Ding from
Org. Chem. Front.,
2024, **11**, 6603.

**Inside cover**

See Yue Weng et al.,
pp. 6609–6616.

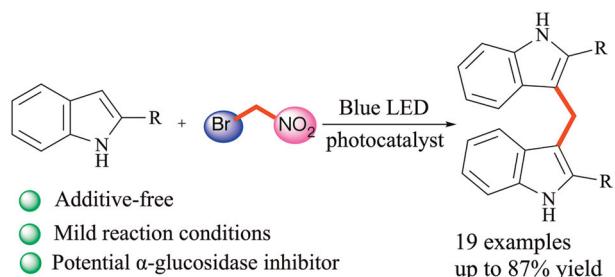
Image reproduced
by permission of
Yue Weng from
Org. Chem. Front.,
2024, **11**, 6609.

RESEARCH ARTICLES

6603

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

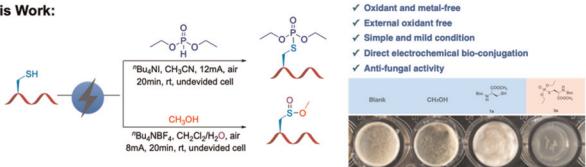
Xuan Ding,* Wei Zhang, Yi-Wei Huang, Yi-hang Li,
Jing Su, Yana Lv, Shifang Liu, Yi Yuan and Guang Li*



6609

Electrochemical diversification of cysteine derivatives and cysteine-containing peptides to phosphorothioates and sulfonates

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

This Work:

GOLD
OPEN
ACCESS

EES Solar

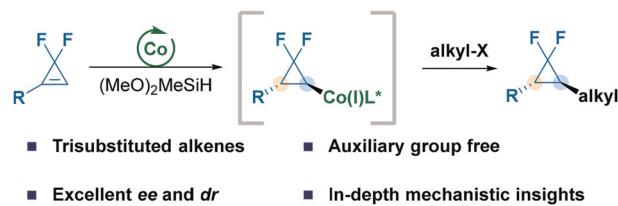
Exceptional research on solar
energy and photovoltaics

Part of the EES family

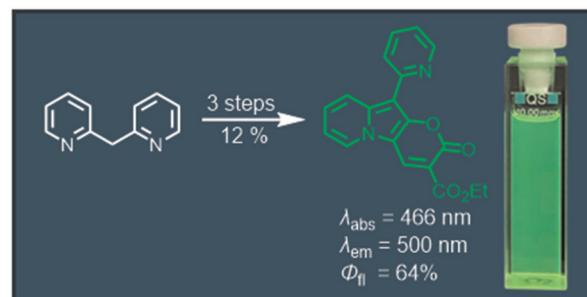
Join
in | Publish with us
rsc.li/EESSolar

RESEARCH ARTICLES

6617

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

6627

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

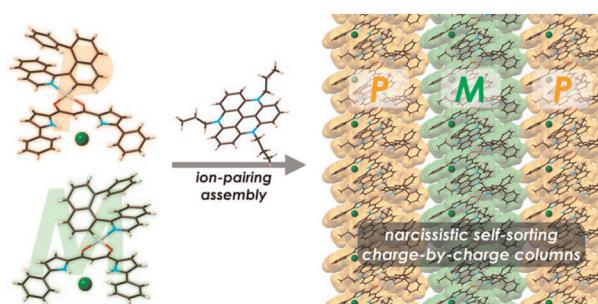
6642

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

Indraneel Debnath, Tirupati Roy and Kingsuk Mahata*

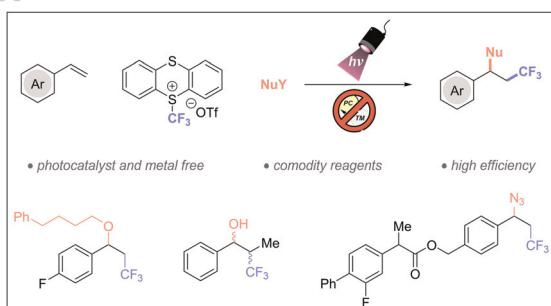


6651

Ion-pairing assemblies of anion-responsive helical Pt^{II} complexesYohei Haketa, Maho Kawami, Wataru Ota, Tohru Sato
and Hiromitsu Maeda*

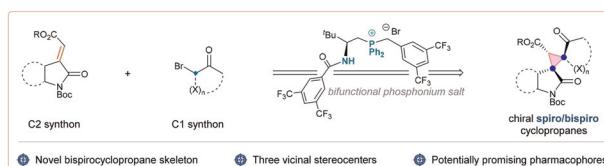
RESEARCH ARTICLES

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**

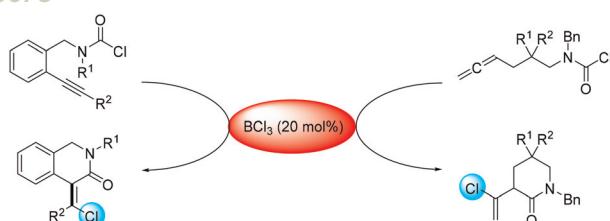
Xiaojun Yu, Fan Wang, Juan Du, Jian-Ping Tan, Jianke Pan, Lixiang Zhu and Tianli Wang*

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

 **BCl_3 catalyzed Z-selective intramolecular chlorocarbonylation 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*

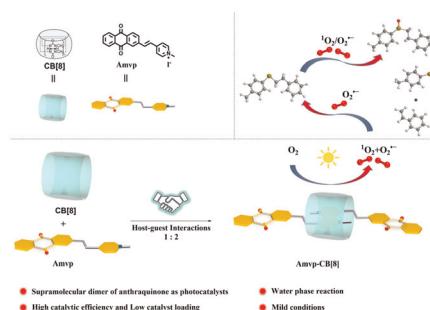


RESEARCH ARTICLES

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

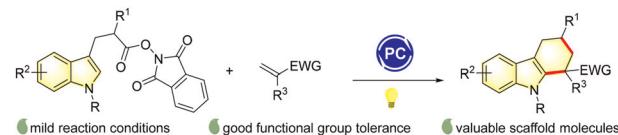
Fa-Dong Wang, Kai-Kai Niu, Shengsheng Yu, Hui Liu and Ling-Bao Xing*



6694

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

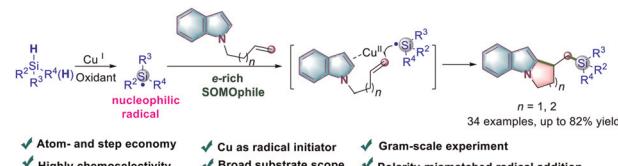
Shuai Han, Zhang Chen, Yu Guo, Jinjin Chen, Zhen Wang* and Yao-Fu Zeng*



6700

A chemoselective radical cascade polarity-mismatched silylarylation of unactivated alkenes

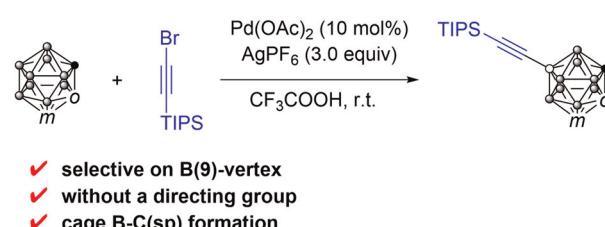
Liang Liu, Xiao Yang, Jinghui Tong, Huajie Zhu, Lu Ouyang, Renshi Luo* and Jianhua Liao*



6706

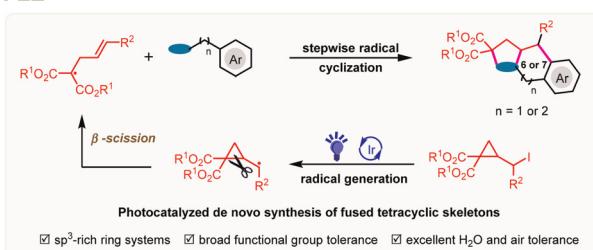
Pd(II)-catalyzed B(9)-alkynylation of o/m-carboranes

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



RESEARCH ARTICLES

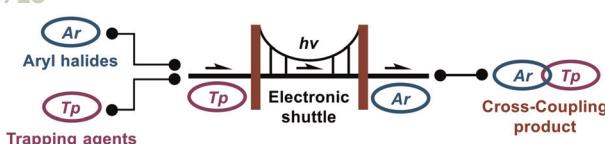
6712



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

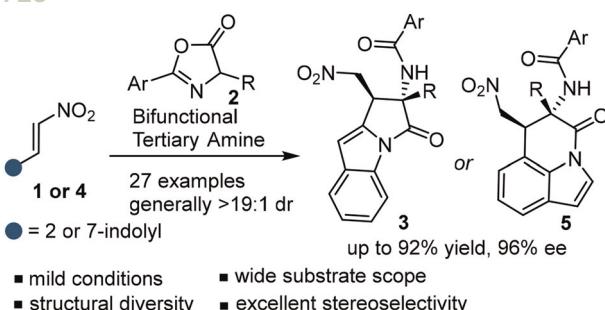
6718



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

Chao Tian and Lei Shi*

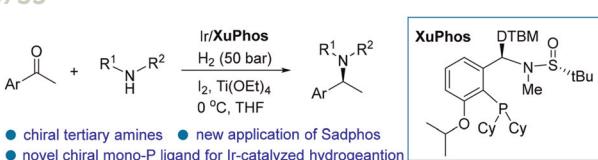
6728



Asymmetric synthesis of pyrrolo[1,2-a]indoles via bifunctional tertiary amine catalyzed [3 + 2] annulation of 2-nitrovinyllindoles 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

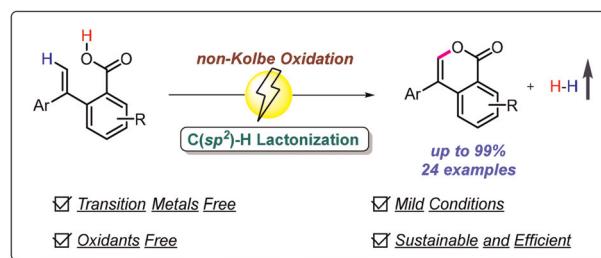
Zhou Luo, Tianxiang Fan, Jingyan Luo, Yuanyuan Liu* and Junliang Zhang*

RESEARCH ARTICLES

6742

Non-Kolbe oxidation driven electrochemical C(sp²)–H lactonization towards the synthesis of isocoumarins

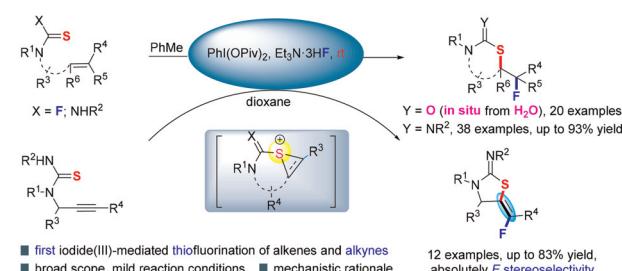
Chen Liu, Hongpeng Liu, Gaoyuan Zhang, Yunge Liu, Pei Liao, Yongqun Mei and Yunfei Zhang*



6748

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

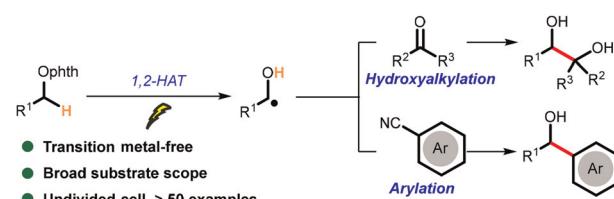
Junyi Zhou, Xiang Wang, Wenjun Tang and Liqin Jiang*



6760

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

Xin Fu, Tingting Ran and Jie Liu*



6768

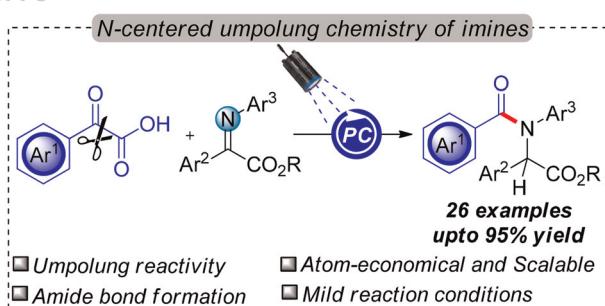
A domino reaction strategy for facile and modular construction of synthetically challenging functionalized ortho-fluoroanilines

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



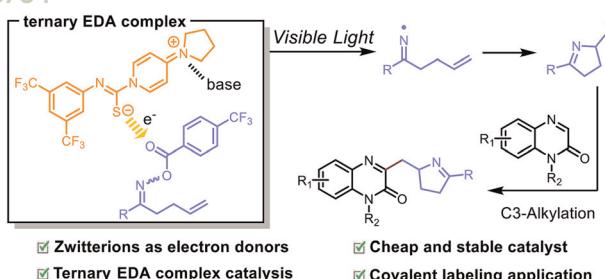
RESEARCH ARTICLES

6778

Exploring N-centered umpolung reactivity in photoredox-catalyzed amidation with an α -iminoester

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

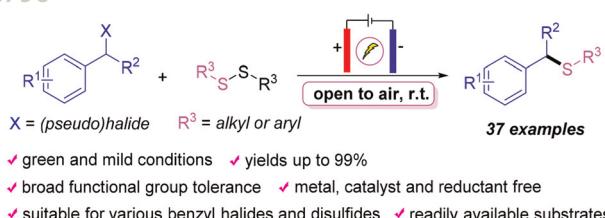
6784



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*

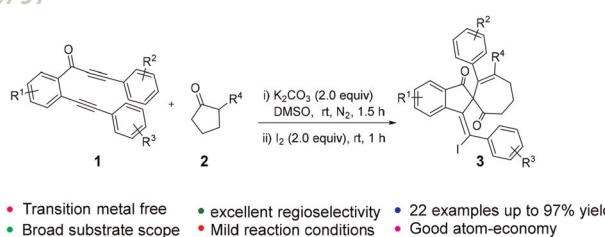
6790



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 I₂-mediated regioselective spirocyclization protocol

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

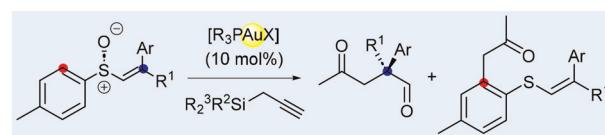


RESEARCH ARTICLES

6804

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

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

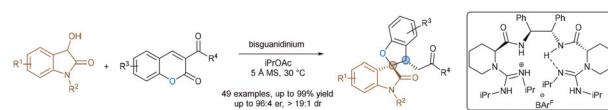


- Better understanding of the factors influencing this divergent reactivity
- Test of different substrates and propargyl silanes
- DFT calculations

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*

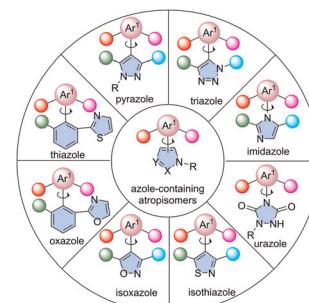


REVIEWS

6819

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

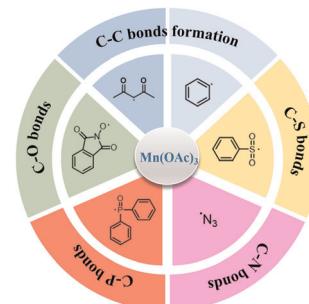
Weiwei Luo,* Yu Zhang, Meijun Ming and Lin Zhang*



6850

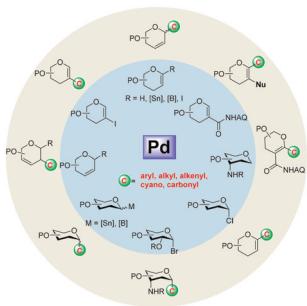
Manganese(III) acetate in organic synthesis: a review of the past decade

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



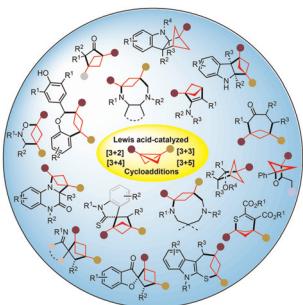
REVIEWS

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*

