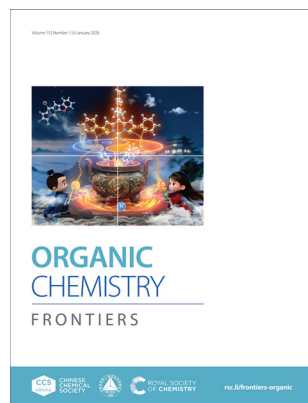


IN THIS ISSUE

ISSN 2052-4129 CODEN OCFRA8 13(1) 1-316 (2026)



Cover

See Xiangguang Li,
Yanhua Yang,
Wei Jiang *et al.*,
pp. 13–24.

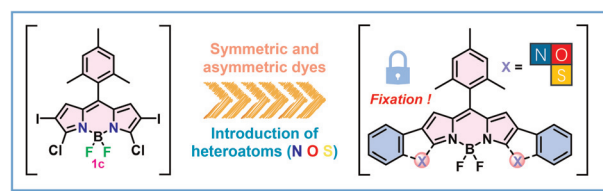
Image reproduced
by permission of
Xiangguang Li
from *Org. Chem. Front.*,
2026, **13**, 13.

RESEARCH ARTICLES

13

Benzoheterocyclic [b]-fused BODIPYs: synthesis and effects of N, O, and S on structure, photophysical properties, and aggregation

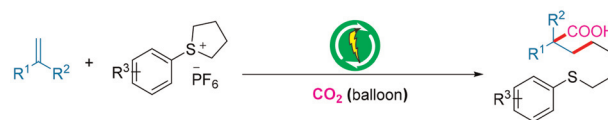
Limin He, Yanqing Li, Yongli Zhang, Luyan Tian, Yunxia Zhao, Xiaomao Zhou, Shulin Gao, Xiangguang Li,* Yanhua Yang,* Wei Jiang* and Zhaohui Wang



25

Electroreductive thiocarboxylation of alkenes with cyclosulfonium salts and CO₂: access to thioether acids

Yong-Fei Huang, Li-Jie Wang, Mu-Jiang Luo, Chaozhui Cheng* and Qiang Xiao*



- General: 38 examples, up to 79% yield
- Electricity as a green reductant
- Late-stage thiocarboxylation
- Wide functional group tolerance



Advance your career in science

with professional recognition that showcases
your **experience, expertise and dedication**

Stand out from the crowd

Prove your commitment
to attaining excellence in
your field

Gain the recognition you deserve

Achieve a professional
qualification that inspires
confidence and trust

Unlock your career potential

Apply for our professional
registers (RSci, RSciTech)
or chartered status
(CChem, CSci, CEnv)

Apply now

rsc.li/professional-development

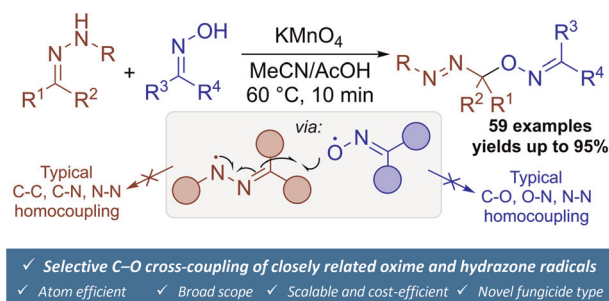


RESEARCH ARTICLES

31

Cross-dehydrogenative C–O coupling of oximes with hydrazones: synthesis of fungicidal azo-oxime ethers

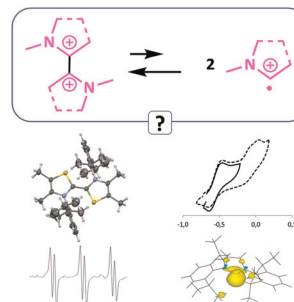
Alexander S. Budnikov, Mikhail I. Shevchenko, Igor B. Krylov,* Daniil Yu. Pechen, Anna L. Alekseenko, Alexey I. Ilvoaisky and Alexander O. Terent'ev*



54

Are N-heterocyclic carbene radical cations relevant intermediates in radical transformations?

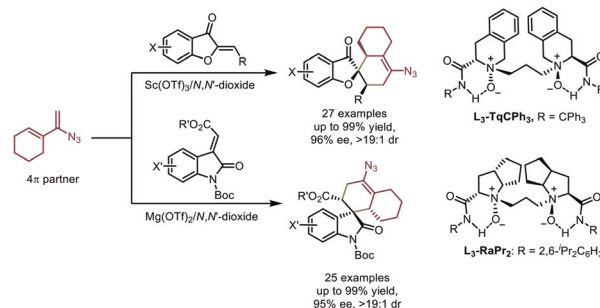
Preslav Smits, Ludivine Delfau, Sheima Bougoffa, Florian Molton, Jacques Pecaut, Julie Broggi, Eder Tomás-Mendivil* and David Martin*



64

Synthesis of chiral spiro-heterocyclic azides via asymmetric [4 + 2]-cycloaddition of conjugated vinyl azides

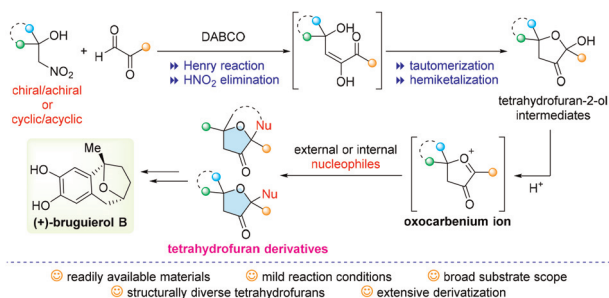
Yican Lu, Yinhe Qu, Bingqian Yang, Hailong Zhang, Weidi Cao* and Xiaoming Feng*



73

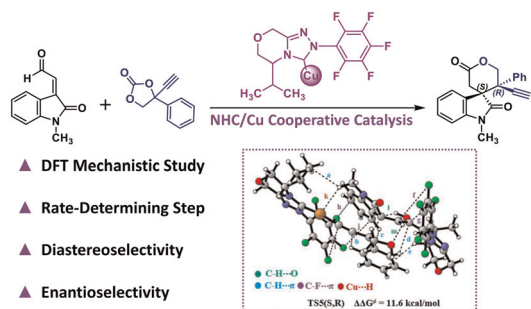
DABCO-promoted reaction sequence of β -nitro alcohols and α -oxoaldehydes: construction of diverse tetrahydrofurans and total synthesis of (+)-bruguierol B

Yu-Xia Lu, Xue-Jiao Lv and Yan-Kai Liu*



RESEARCH ARTICLES

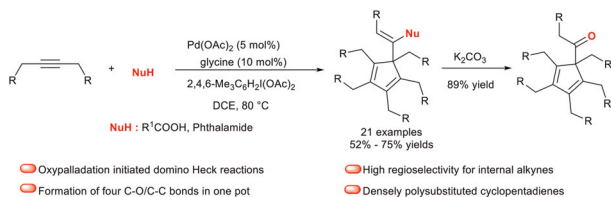
79



Mechanistic insights into NHC/Cu catalyzed asymmetric synthesis of spirooxindoles: origins of enantioselectivity and diastereoselectivity

Qin Ma, Shuqi Zhang, Qingshuang Zhang, Xing Yang, Lei Qin and Lili Zhao*

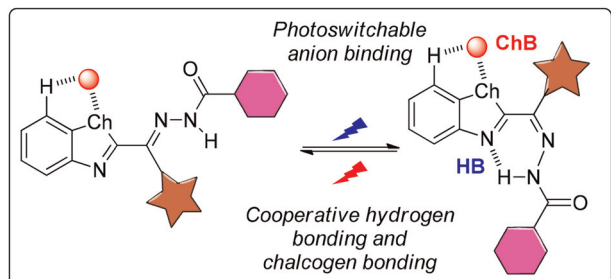
90



Synthesis of highly polysubstituted cyclopentadienes through an oxypalladation initiated domino Heck reaction of internal alkynes

Zhang-Wei Liu, Jie Zhao, Yu Zhao, Yu-Feng Liang, Zhi-Xin Wang,* Gui-Fa Su* and Dong-Liang Mo*

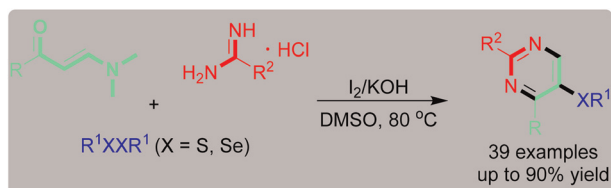
96



Photoswitchable anion recognition via synergy between chalcogen bonding and hydrogen bonding

Qinhua Rao, Hebo Ye,* Peng He and Lei You*

106



Chalcogen functionalized pyrimidine synthesis by three-component free radical chalcogenation and pyrimidine ring construction

Jingfeng Ye, Gengxin Li, Changfeng Wan and Jie-Ping Wan*

- ★ Domino pyrimidine ring constructions and C-H chalcogenation
- ★ Pyrimidine ring-based biaryl products, including atropisomers
- ★ High diversity from three substrates
- ★ Transition metal-free

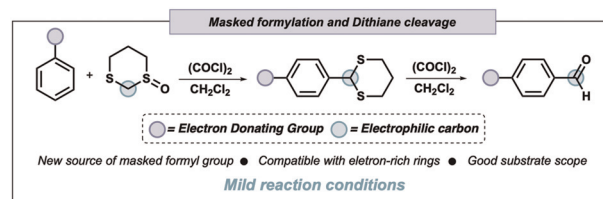


RESEARCH ARTICLES

112

Masked formylation of activated aromatics via dithianes and a mild, sustainable cleavage protocol

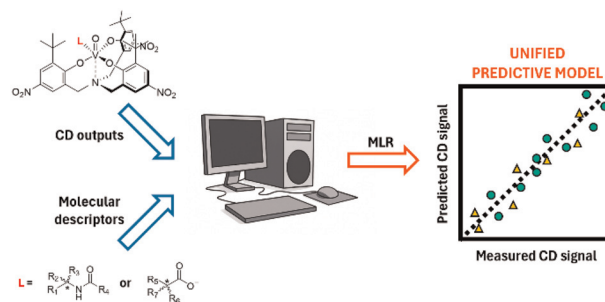
Julia Urbiña-Alvarez, Daniela Torres-Ruiz, Camilo Mahecha-Mahecha, Gabriel Hernandez-Abdallah, Mario Macías and Diego Gamba-Sánchez*



118

A unified predictive model for chiroptical sensing: a substrate-centric approach to predicting circular dichroism outputs across two chemically distinct organic classes

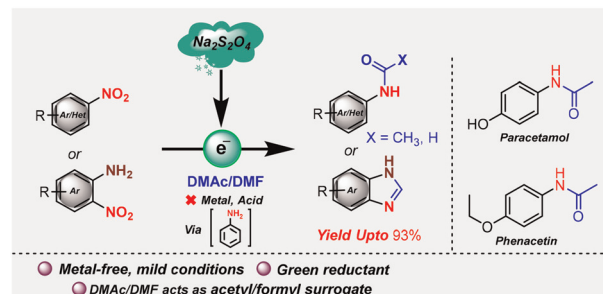
Lorenzo Cracco, Roberto Penasa, Paolo Zardi, Giulia Licini, Manuel Orlandi and Cristiano Zonta*



124

Sodium dithionite-mediated reductive N-acetylation/formylation of nitroarenes employing DMAc/DMF as acetyl/formyl surrogates

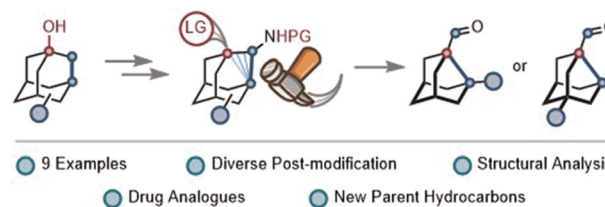
Amitava Hazra, Komal Mendhe and Joydev K. Laha*



130

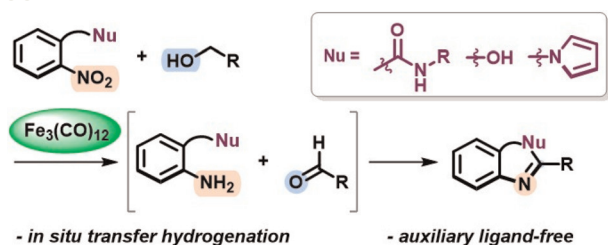
Synthesis of noradamantane building blocks

Matthew Todd, Ivana Císařová, Zdeněk Tošner and Radim Hrdina*



RESEARCH ARTICLES

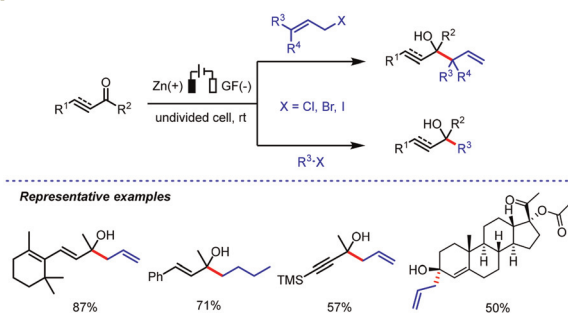
138



Ligand-free iron carbonyl catalyzed transfer hydrogenation strategy: synthesis of N-heterocycles

Junhwa Hong, Seok Beom Lee, Seung Hyun Choi, Jinwoo Lee, Honghui Lee, Joonseok Jang and Suckchang Hong*

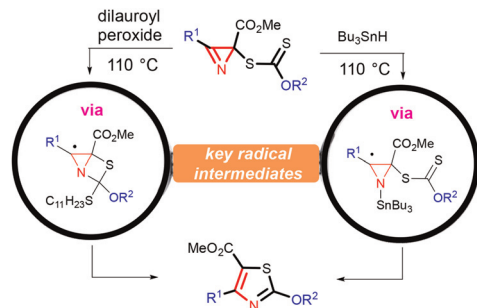
147



An electrochemical reductive allylation and alkylation of carbonyl groups in α,β -unsaturated aldehydes and ketones

Zhihong Qiu, Fan Wang, Hong-Ming Jin and Zhong-Quan Liu*

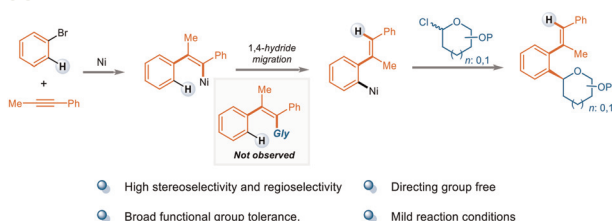
152



Synthesis of thiazoles by desulfurative cyclization/ring expansion cascade reaction of S-aziriny xanthates: two mechanistically distinct radical pathways

Dmitrii S. Vasilchenko, Anastasiya V. Agafonova, Alexander F. Khlebnikov, Nikolai V. Rostovskii and Mikhail S. Novikov*

160



Stereoselective synthesis of C-aryl glycosides via radical-enabled 1,4-Ni migration: glycosyl chlorides as coupling partners

Hu-Yi Li, Zhi-Jie Niu, Qiao Li, Xi Chen, Xiao-Ping Gong, Xue-Ya Gou, Jinhui Yang,* Xue-Yuan Liu* and Yong-Min Liang*

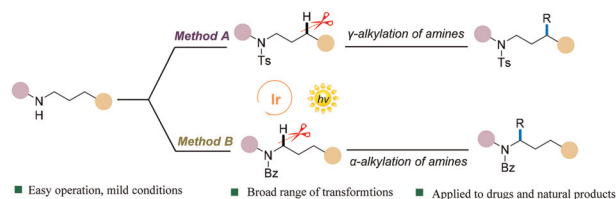


RESEARCH ARTICLES

168

Photo-induced selective α/γ -functionalization of aliphatic amines *via* intramolecular hydrogen atom transfer

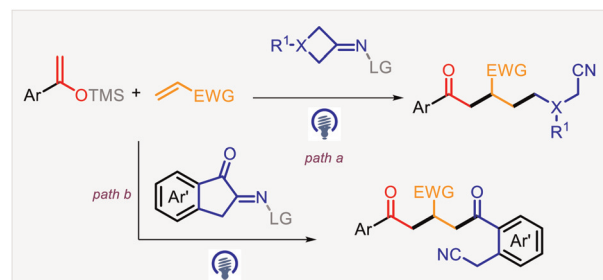
Zhuohua Li, Xiao Zhou, Pengwei Hu, Chao Yang, Lin Guo and Wujiong Xia*



175

Photoredox-catalyzed multicomponent 1,2-difunctionalization of activated alkenes with silyl enol ethers and oxime esters

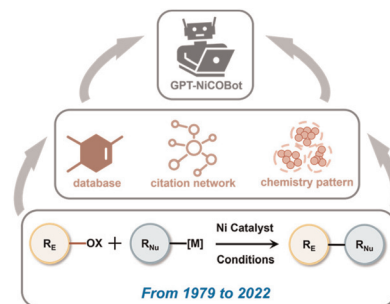
Ming-Xian Zhang, Yu Bao, Tao Wang, Shenghu Yan, Yue Zhang* and Jia-Yin Wang*



182

Unravelling the evolution of nickel-catalyzed C–O bond activation with data-driven strategies

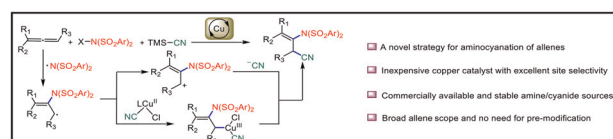
Jingyuan Zhu, Yizhou Wang, Imanuel Rava, Shihong Chen, Zhiyan Zou, Yong Huang,* Zhenyang Lin* and Haibin Su*



194

Copper-catalyzed radical aminocyanation of allenes

Sheng Du, Wei-Qian Fan, Jun-Qi Liu, Ying Tong, Dong-Qing Yang, Youren Dong,* Hailin Cai, Zhengyu Deng, Tianbo Liu* and Wen-Ting Wei*



RESEARCH ARTICLES

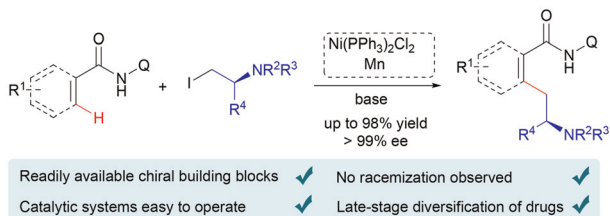
202



Photoredox-catalyzed three-component radical coupling of potassium alkyltrifluoroborates, DABSO and polyfluoroarenes

Yunliang Guo, Jiuli Xia, Kaixuan Chen, Kehan Jiao, Ying Dong, Guangfan Zheng,* Jiao Qu, Jiaqiong Sun,* Tao Xiong and Qian Zhang

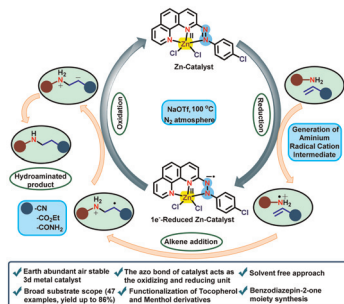
210



Nickel-catalyzed C(sp²)-H bond aminoalkylation of alkenes and arenes for the synthesis of δ -amino acid derivatives

Jie-Sheng Tian,* Rui-Qi Li, Duan-Yang Liu, Jie Tan, Yong-Xin Yang and Teck-Peng Loh

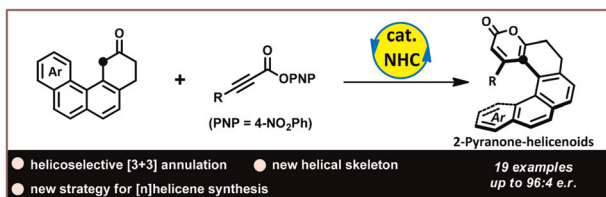
216



Ligand-centered redox-driven Zn(II)-catalyzed anti-Markovnikov hydroamination of activated alkenes with primary aromatic amines via aminium radical cations

Subhasree Pal, Santana Chakraborty, Afsana Pervin and Nanda D. Paul*

229



Helicoselective assembly of 2-pyranone-helicenoids via NHC-catalyzed [3 + 3] annulation

Jiahui Zhou, Shujie Ji, Zhipeng Li, Yuhang Liu, Yani Li and Jian Wang*

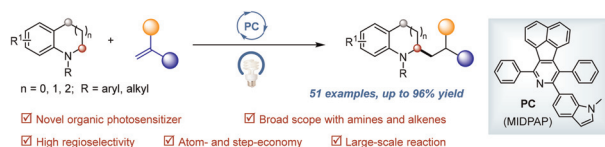


RESEARCH ARTICLES

235

Regioselective α -alkylation of benzo-fused cyclic amines via organic photoredox catalysis

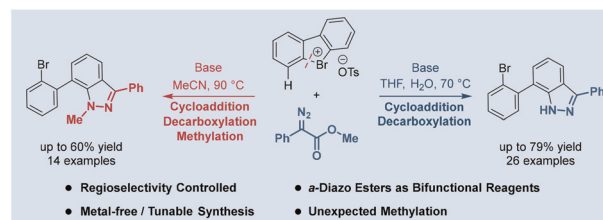
Ziwei Xia, Richang Wen, Chuang Lei, Lelin Zhou, Fuhong Xiao, Jinhui Cai,* Guo-Jun Deng* and Ya Chen*



244

Controllable synthesis of N-H or N-Me C7-substituted indazoles via a cascade reaction of α -diazo esters with aryne precursors

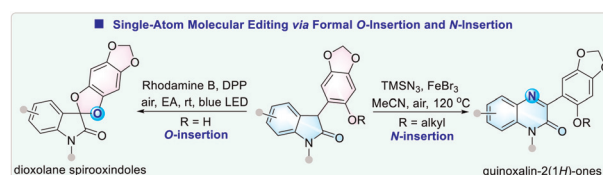
Jing-Yi Fan, Qiang Wang,* Si-Rui Jia, Yu-Xuan Zhang, Ming-Chuan Wang, Wan-Xuan Zhang,* Linxing Zhang,* Liang-Qiu Lu and Bin-Jie Li*



251

Molecular editing of 3-hydroxyphenyl oxindole derivatives via formal O-insertion and N-insertion: synthesis of dioxolane spirooxindoles and quinoxalin-2(1H)-ones

Yao-Bin Shen,* Jia-Wei Li, Peng Wang, Houchen Wang, Tiesheng Shi, Fangzhi Hu* and Shuai-Shuai Li*

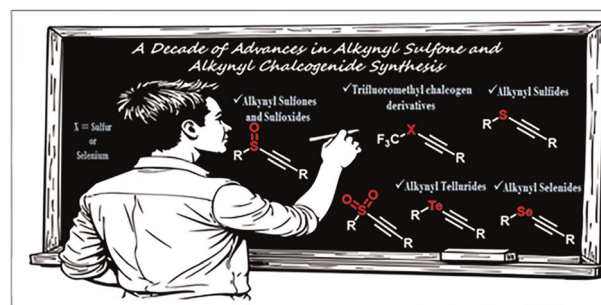


REVIEW

258

A decade of advances in alkynyl sulfone and alkynyl chalcogenide synthesis

Douglas de C. Vieira, Luiz H. Dapper, Rafael C. Brinkerhoff, Angelita M. Barcellos,* Alex F. C. Flores* and Gabriel P. da Costa*



CORRECTION

314

Correction: Bis-Fischer indole[3,2-*b*]carbazole modification of [10]cycloparaphenylenes: tuning optical properties through rigid substitution

Wanchun Duan, Dongming Chen, Dang Zheng, Shidong He, Wanqun Hu, Lvyuan Hao and Xin Xu*

