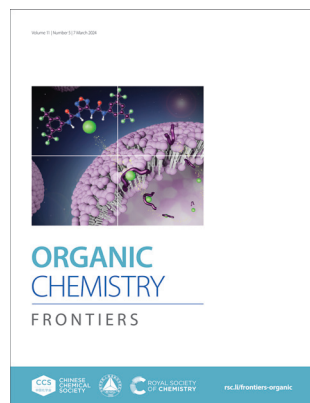


IN THIS ISSUE

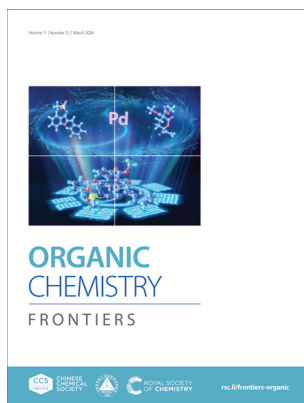
ISSN 2052-4129 CODEN OCFRA8 11(5) 1279–1642 (2024)



Cover

See Philip A. Gale *et al.*, pp. 1290–1298.

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Inside cover

See Yang-Zi Liu, Wei-Ping Deng *et al.*, pp. 1299–1304.

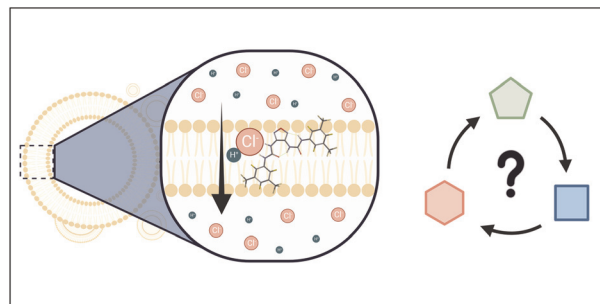
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RESEARCH ARTICLES

1290

Furazan bis-ureas: a heterocyclic scaffold for anion binding and transport

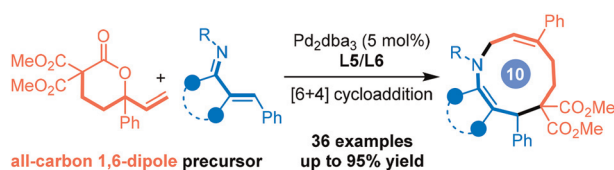
William G. Ryder, Emilie G. Wu, Lijun Chen, Mohamed Fares, Daniel A. McNaughton, Karen Tran, Chengzhong Yu and Philip A. Gale*



1299

Palladium-catalyzed [6 + 4] cycloaddition with π -allyl all-carbon 1,6-dipole for the synthesis of ten-membered heterocycles

Jun-Tao Chen, Na Lin, Linli Xu, Yi Wang, Xiaoyan Luo, Yang-Zi Liu* and Wei-Ping Deng*



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Elemental answers

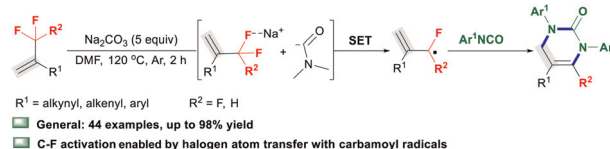


RESEARCH ARTICLES

1305

Radical-mediated [3 + 2 + 1] annulation of α -polyfluoromethyl alkenes with arylisocyanates enabled by C(sp³)–F activation

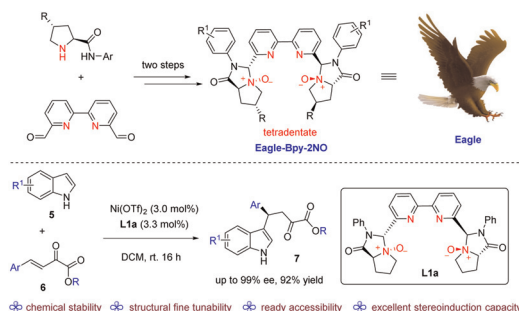
Yu-Zhong Yang, Qi Xue, Qing Sun,* Yang Li, Ming Hu,* Chong-Hui Xu* and Jin-Heng Li*



1314

Design of rigid chiral bipyridine-2NO tetradentate ligands: application in asymmetric catalysis

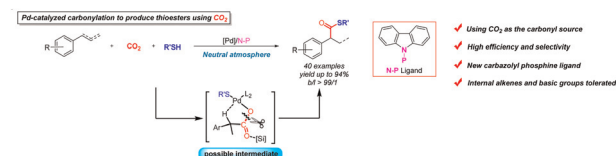
Yu-Heng Wang, Pan Hu, Xi-Rui Wang, Ke-Lan Xu, Qi-Lin Wang, Hui-Juan Wang and Xiong-Li Liu*



1322

Palladium-catalyzed thiocarbonylation of alkenes toward branched thioesters using CO₂

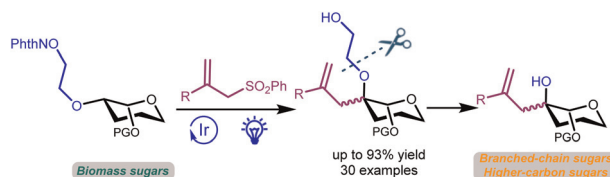
Huan Wang, Chen Li, Yudong Li, Jianbin Chen, Shaoli Liu and Yuehui Li*



1332

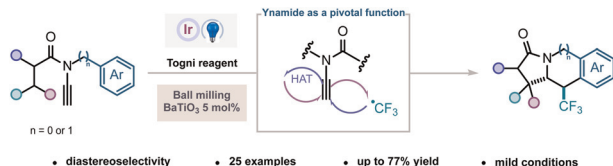
Synthesis of branched-chain sugars and higher-carbon sugars enabled by site-selective C–H alkylation relying on 1,5-hydrogen atom transfer of ethylenoxy radicals

Dongwei Li, Lingjun Wang, Jianjun Wang, Peng Wang, Ni Song,* Pengwei Chen* and Ming Li*



RESEARCH ARTICLES

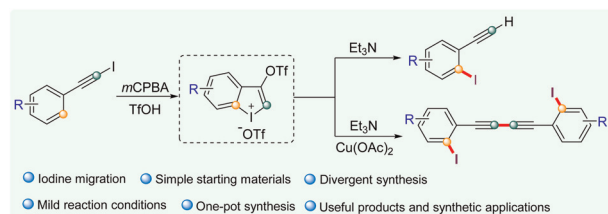
1341



Photoredox- and piezo-catalysed access to complex trifluoromethylated polycyclic structures from ynamides

Amal Lakhal, Maud Villeneuve, Laure Haberkorn, Jean-Marie Fourquez, Jeremy Forte, Geoffrey Gontard, Louis Fensterbank* and Cyril Ollivier*

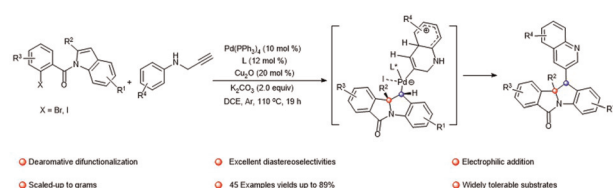
1350



Distal iodine migration of arylalkynes via cyclic monoaryliodonium salts

Kaitao Huang, Xin You, Bingling Luo, Shijun Wen* and Daqian Zhu*

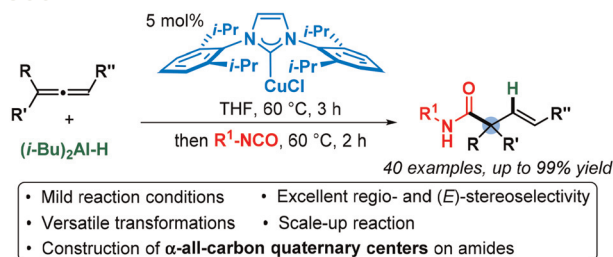
1357



Experimental and computational studies on the palladium-catalyzed intramolecular dearomatization, electrophilic addition, intermolecular coupling sequence

Qing-Hui Liu, Yue Ma, Hong-Yu Zhang, Yuecheng Zhang,* Jiquan Zhao, Xiaohui Cao,* Ya-Ping Han* and Yong-Min Liang

1366



Access to α -all-carbon quaternary amides through the hydroamidation of allenes using DIBAL-H and isocyanates

Kyeongmin Lee, Soohong Cho, Seun Lim and Yunmi Lee*

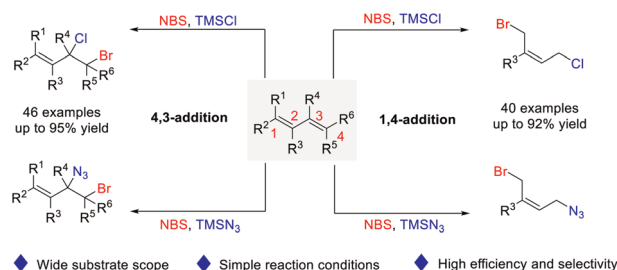


RESEARCH ARTICLES

1372

Highly regio- and stereoselective bromochlorination and bromoazidation of 1,3-dienes

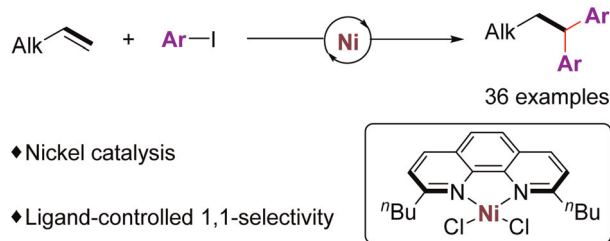
Wei-Wei Ma, Zi-Lu Wang, Jin-Bo Zhao and Yun-He Xu*



1382

Nickel-catalyzed reductive 1,1-diarylation of unactivated alkenes with aryl iodides

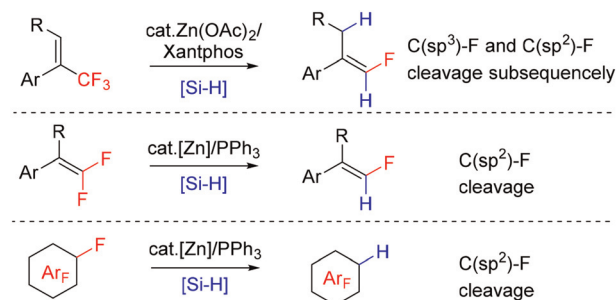
Zhengwen Wang, Zhou Jin and Bingwei Zhou*



1388

Stereoselective hydrodefluorination of CF₃-substituted alkenes and *gem*-difluoroalkenes by H⁻

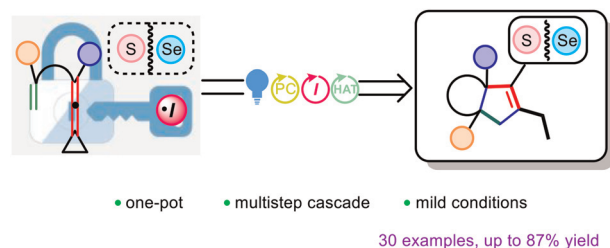
Dachang Bai,* Xin Li, Fen Wu and Junbiao Chang*



1395

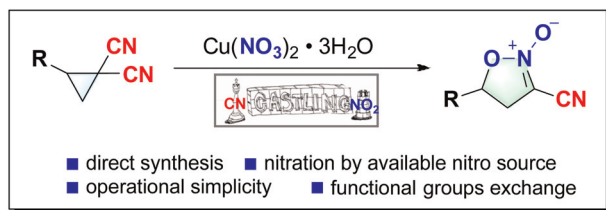
Iodine radical mediated cascade [3 + 2] carbocyclization of ene-vinylidenecyclopropanes with thiols and selenols via photoredox catalysis

Zhe Meng, Min Shi* and Yin Wei*



RESEARCH ARTICLES

1404



Copper nitrate-enabled ring expansion reaction of cyclopropanes: a direct approach to 3-cyano-isoxazoline *N*-oxides

Yong Deng, Zhenkun Yang, Yanze Li, Xinyao Li* and Bin Xu*

1412

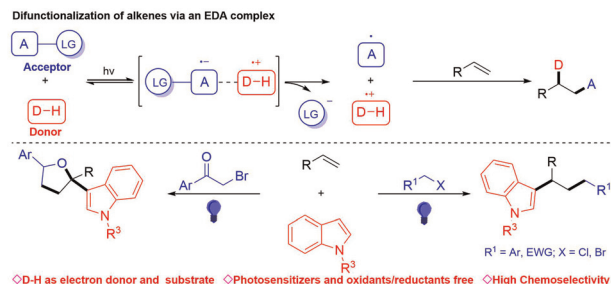
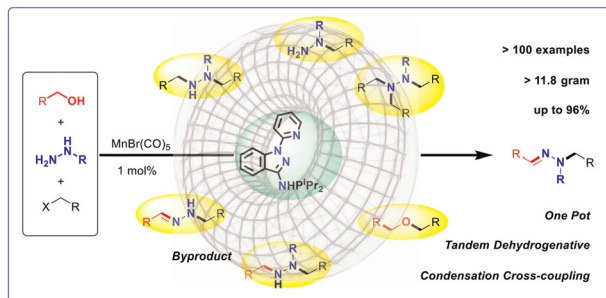


Photo-induced 1,2-alkylarylation/cyclization of alkenes, alkyl halides and *N*-alkylindoles via an EDA-complex

Tao Ju,* Min Ge, Li-Hang Ren, Ai-Ling Lu, Zhi-Hao Wang, Shi-Ji He, Jing Sun, Ying Han and Chao-Guo Yan*

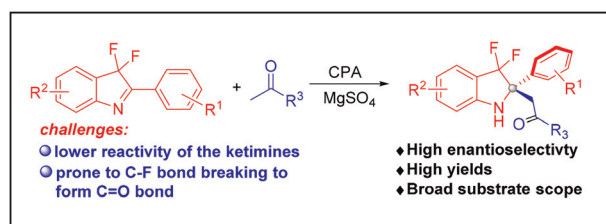
1420



Formation of ylidenehydrazines enabled by manganese-catalyzed acceptorless dehydrogenative coupling

Fangchao Wang, Ding Ding, Chunyan Zhang* and Guoying Zhang*

1430



Enantioselective construction of chiral *gem*-difluorinated C2-quaternary indoline via dual MgSO₄–CPA-catalyzed asymmetric Mannich reactions

Xin-Chun Wang, Xing-Pin Wei, Chang-Peng Zou, Tao Ma, Yonghui He,* Ganpeng Li* and Xiao-Jing Zhao*

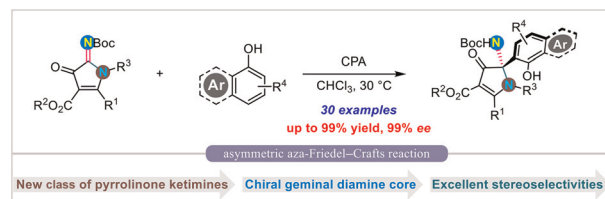


RESEARCH ARTICLES

1437

Chiral phosphoric acid-catalyzed enantioselective synthesis of functionalized pyrrolinones containing a geminal diamine core via an aza-Friedel–Crafts reaction of newly developed pyrrolinone ketimines

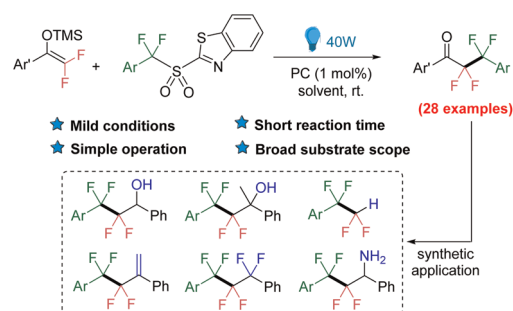
Tong Zhang, Zhen-Hua Wang,* Yong Li, Jian-Qiang Zhao, Yong You, Yan-Ping Zhang, Jun-Qing Yin and Wei-Cheng Yuan*



1444

Visible-light-promoted desulfonylative radical difluoroalkylation between difluoroenol silyl ethers and difluoroalkyl sulfones to construct functionalized aryltetrafluoroethane derivatives

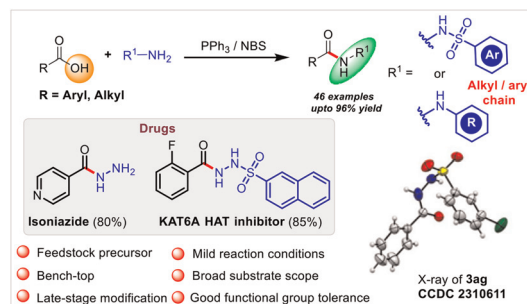
Miaomiao Mu, Xiaolei Zhu,* Jinshan Li, Manman Sun, Jianguo Yang, Guobo Huang, Lei Wang and Zhiming Wang*



1450

Direct access to hydrazides and amides from carboxylic acids via acyloxyphosphonium ion

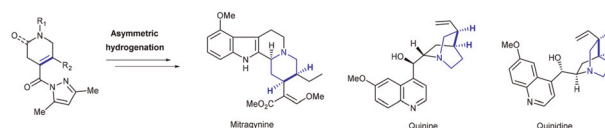
Aparna Tyagi and Chinmoy K. Hazra*



1456

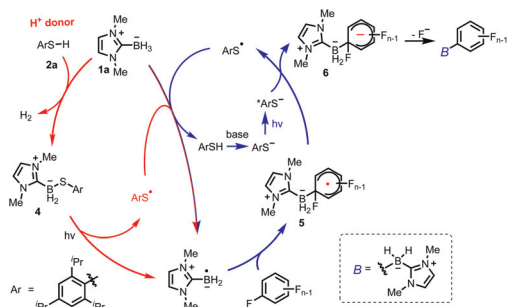
Enantioselective total syntheses of (–)-mitragynine, (–)-quinine and (+)-quinidine enabled by Ir-catalysed asymmetric hydrogenation of all-carbon tetrasubstituted cycloalkenes

Kai Zhang, Peng Cui, Miao Miao, Meiqi Zeng, Xu Wang, Minjie Zhang, Qifeng Chen, Hao Song,* Bowen Ke and Yong Qin*



RESEARCH ARTICLES

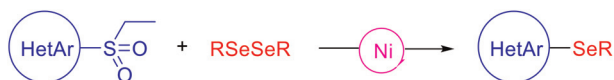
1462



A green and facile photochemical thiolate-catalyzed strategy for borylation of aryl fluorides with NHC-borane

Yu-Qi Miao, Qiao-Jing Pan, Jia-Xin Kang, Xusheng Dai, Zhenxing Liu* and Xuenian Chen*

1469

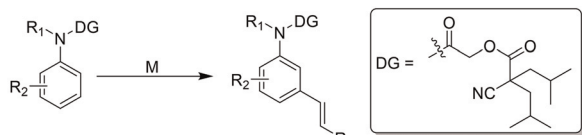


- Simple and practical conditions
- Broad substrate scope

Ni-catalyzed cross-coupling of heteroaryl sulfones and diselenides *via* deheteroaromatization and heteroaromatization: synthesis of heteroaryl selenides

Xin-Yu Liu, Yu-Xin Dou, Muhammad Hasan, Weidong Rao, Daopeng Shen, Shusu Shen and Shun-Yi Wang*

1473

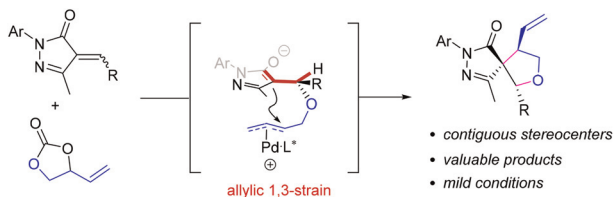


- Microwave irradiation conditions
- Easy installation/removable template
- Practical cost-economical template
- Short reaction time
- Good to excellent site-selectivity
- Diverse substrate scope
- Drug derivative

Palladium catalyzed remote-*meta*-C-H functionalization of aniline scaffolds

Dasari Srinivas and Gedu Satyanarayana*

1479



Asymmetric palladium-catalyzed decarboxylative [3 + 2] cycloaddition: straightforward construction of chiral spiro-heterocyclic scaffolds

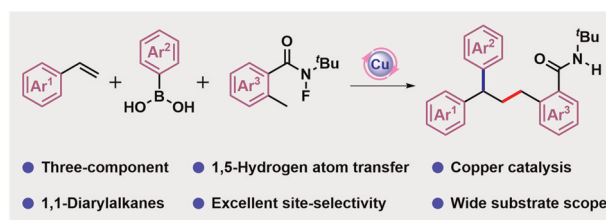
Ke Zhang, Pengyuan You, Sheng Zuo, Yuan Tao and Fen-er Chen*



1484

Rong Rui, Bin Wang, Xiao-Jing Xu, Zhe Zhang, Xi Chen
and Xue-Yuan Liu*

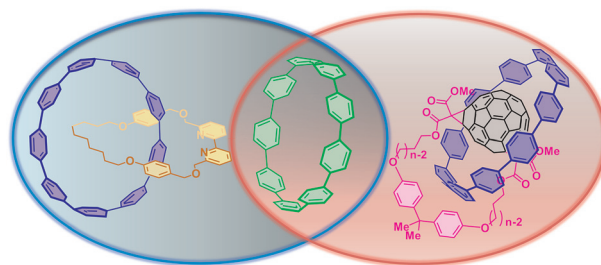
Rong Rui, Bin Wang, Xiao-Jing Xu, Zhe Zhang, Xi Chen
and Xue-Yuan Liu*



1490

Wei-Tao Xu and Wei Wang*

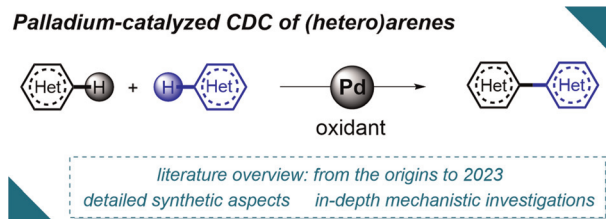
Wei-Tao Xu and Wei Wang*



1495

Gianluigi Albano*

Gianluigi Albano*



1623

Junjie Shi, Tong Sun and Mingyu Yang*

Junjie Shi, Tong Sun and Mingyu Yang*

