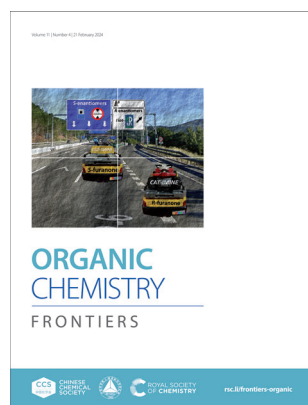


IN THIS ISSUE

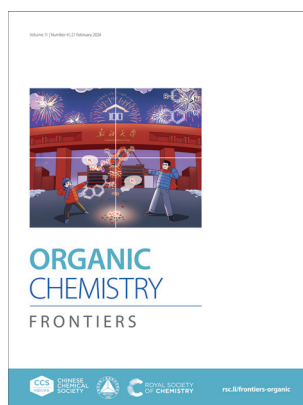
ISSN 2052-4129 CODEN OCFRA8 11(4) 1017-1278 (2024)



Cover

See Alberto Fraile, José Alemán *et al.*, pp. 1028–1038.

Image reproduced by permission of Alberto Fraile from *Org. Chem. Front.*, 2024, **11**, 1028.



Inside cover

See Chenjiang Liu, Yonghong Zhang *et al.*, pp. 1050–1056.

Image reproduced by permission of Yonghong Zhang from *Org. Chem. Front.*, 2024, **11**, 1050.

RESEARCH ARTICLES

1028

Intramolecular hydrogen bond activation for kinetic resolution of furanone derivatives by an organocatalyzed [3 + 2] asymmetric cycloaddition

Miguel A. Valle-Amores, Claudia Feberero, Ana Martin-Somer, Sergio Díaz-Tendero, Andrew D. Smith, Alberto Fraile* and José Alemán*

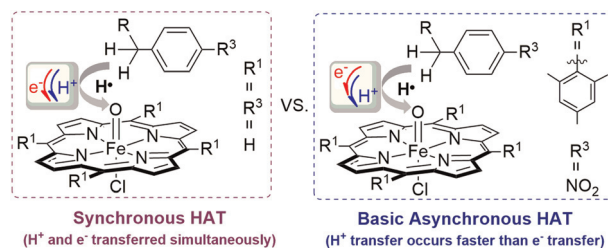


- Effective KR: *s* values up to 618
- High enantiocontrol
- Five contiguous stereogenic centers
- Mild conditions and operational simplicity

1039

Synchronous and basic asynchronous hydrogen-atom abstraction of benzylic substrates by high-valent iron–oxo porphyrin species

Xiahe Chen, Yun-Fang Yang* and Yuanbin She*



Industrial Chemistry & Materials

GOLD
OPEN
ACCESS

Focus on industrial chemistry
Advance material innovations
Highlight interdisciplinary feature

Innovative.
Interdisciplinary.
Problem solving

APCs currently waived

Learn more about ICM
Submit your high-quality article

 [@IndChemMater](https://www.facebook.com/IndChemMater)

 [@IndChemMater](https://twitter.com/IndChemMater)

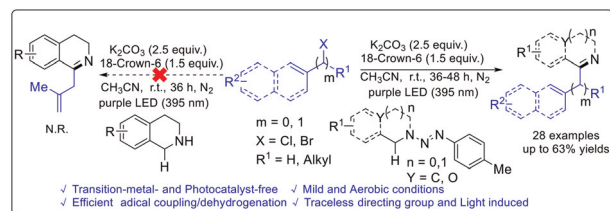
rsc.li/icm

RESEARCH ARTICLES

1050

A photo-driven traceless group directed electron-donor-acceptor (EDA) complex initiated radical coupling/dehydrogenation tandem reaction: access to 1-allyl/benzyl-3,4-dihydroisoquinoline

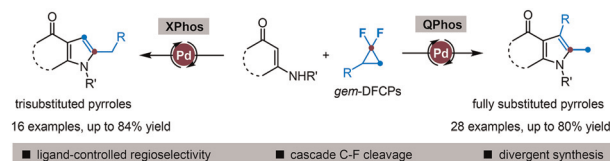
Tao Zhang, Xinxin Ren, Bin Wang, Weiwei Jin, Yu Xia, Shaofeng Wu, Chenjiang Liu* and Yonghong Zhang*



1057

Ligand-controlled regioselective cascade C–C/C–F cleavage/annulation of *gem*-DFCPs: a divergent synthesis of pyrroles

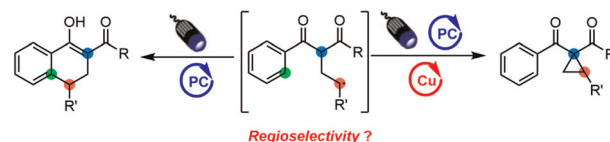
Tian-Shu Wu, Yong-Jiu Hao, Zhong-Jian Cai* and Shun-Jun Ji*



1062

Photoredox/copper-catalyzed formal cyclopropanation of olefins

Li-Xin Li,* Jie Zhao, Chen-Rui Li, Gaolei Sun, Xu Guo, Han-Wei Li, Baikun Qiao,* Zhonghua Li, Kai Hu and Zhenqiang Zhang*



1069

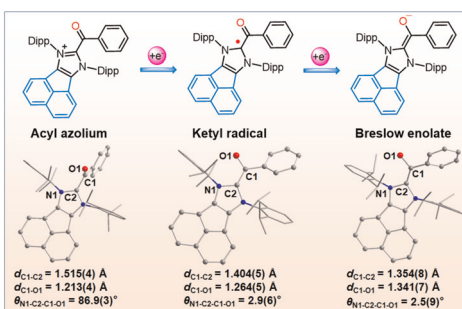
Palladium-catalyzed radical arylation of *N*-hydroxyphthalimides with triphenyl phosphites as an unusual arylating agent via C(sp²)–O bond cleavage

Hafiz Noor, Pan Gao, Jiandong Guo, Shuwei Zhang, Xiaodong Jia and Yu Yuan*



RESEARCH ARTICLES

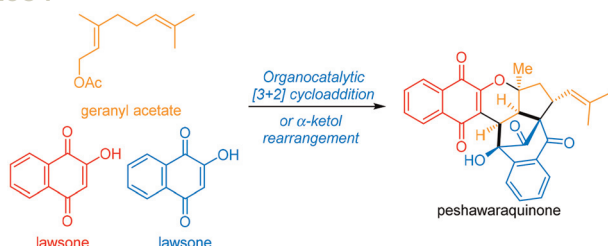
1076



Isolation and characterization of an annelated N-heterocyclic carbene stabilized Breslow enolate

Xin Li, Yan-Yan Ren, Can Chen, Li-Ying Sun and Ying-Feng Han*

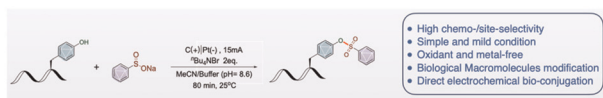
1084



Total synthesis of peshawaraquinone through late-stage [3 + 2] cycloaddition or α -ketol rearrangement

Huihui Guo, Li Ren, Xueli Sang, Xuena Lu, Tian Li, Wenming Zhou, Abdur Rauf and Hong-Dong Hao*

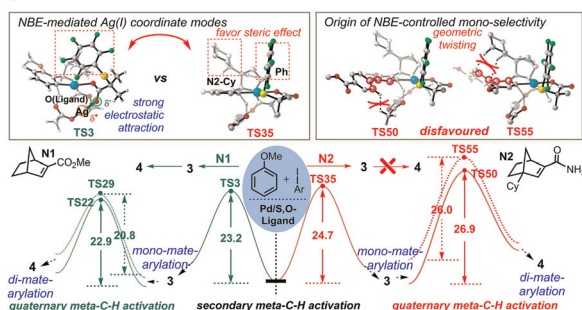
1090



Electro-induced O–S bonding reaction targeting biological macromolecules

Shuqiang Jiang, Longyu Xiao, Li Pan, Qiaoyu Huang, Fujin Huo, Meng Gao, Cuifen Lu, Pan Wu* and Yue Weng*

1097



Origin of norbornene-mediated selective meta-C–H arylation of anisole derivatives overcoming the "ortho constraint" in Pd/S₂O₂-ligand catalysis

Sheng-Nan Liu, Yang-Yang Xing, Wen-Juan Wang,* Qiong Wang, Chong Yang, Jian-Biao Liu, Fang Huang and De-Zhan Chen*

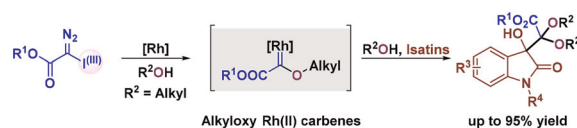


RESEARCH ARTICLES

1106

Rhodium-catalyzed formal four-component reaction with hypervalent iodine diazoesters, alcohols, and isatins for the synthesis of multi-functionalized oxindoles

Jie Tang, Xiaoyan Yang, Gejun Niu, Tianyuan Zhang, Wenhao Hu* and Yu Qian*

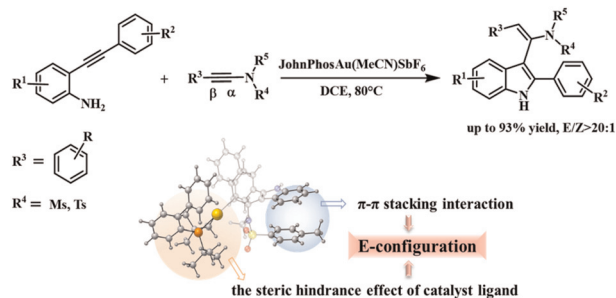


- ✓ Multi-component Reactions with Rh carbenoids
- ✓ High yield & Broad substrate scope
- ✓ Alkyloxy donor/acceptor Rh carbenes
- ✓ Hydroxy indolin derivatives

1112

A gold-catalyzed cyclization/nucleophilic addition reaction of *o*-alkynylanilines with ynamides: stereoselective synthesis of 3-vinylindoles

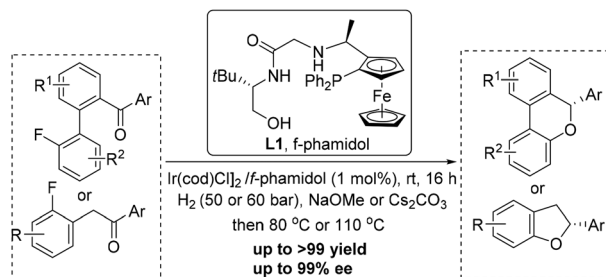
Wenyi Luo, Qiaolong Chen, Xiaoyu Mo, Jun Jiang* and Peng Xie*



1118

Facile and practical access to chiral benzofused oxa-heterocycles via an asymmetric hydrogenation and intramolecular S_NAr cascade

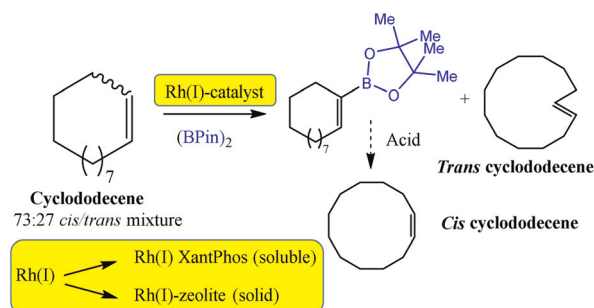
Fangyuan Wang, Ting Wu, Bin Lu, Jianchao Yu, Renwei Xiao, Boxuan Yi, Xumu Zhang and Gen-Qiang Chen*



1124

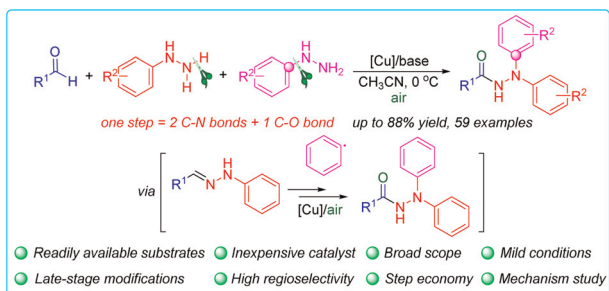
Cyclododecene isomeric separation by (supported) rhodium(I)-catalysed selective dehydrogenative borylation reaction

Amravati S. Singh and Antonio Leyva-Pérez*



RESEARCH ARTICLES

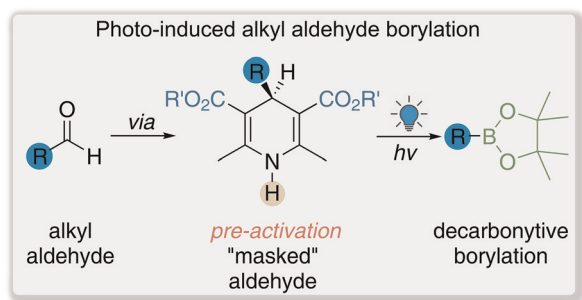
1132



An aerobic copper-catalyzed multi-component reaction strategy for N',N' -diaryl acylhydrazine synthesis: reactions and mechanism

Lei Deng, Wei Guo,* Xiaojuan Yang, Lvyin Zheng, Yingying Wu, Beining Yang, Yihan Wang and Deliang Chen*

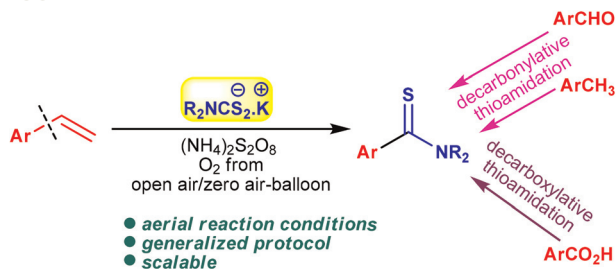
1140



Photoinduced decarbonylative borylation of alkyl aldehydes through 4-alkyl-1,4-dihydropyridines

Chang Lian, Jianning Zhang and Fanyang Mo*

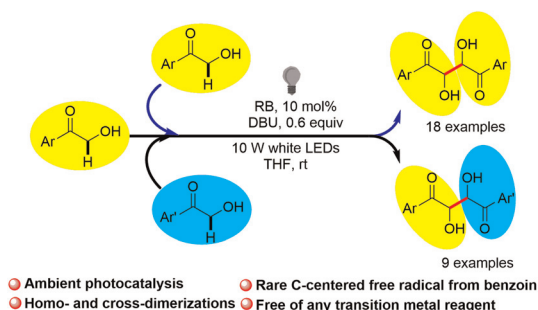
1150



Dithiocarbamate mediated thioamidation via C-C single bond cleavage of styrene: study of the protocol in decarbonylative and decarboxylative thioamidations

Debabrata Patra and Amit Saha*

1157



Metal-free photocatalyzed homo- and cross-dimerizations of α -hydroxyl ketones via dual C(sp³)-H functionalization: synthesis of 2,3-dihydroxyl-1,4-butanediones

Zhouyong Wang, Enrong Tang, Quanquan Zhou* and Jie-Ping Wan*

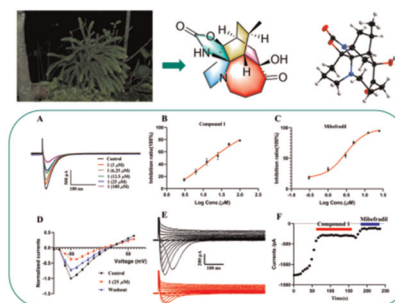


RESEARCH ARTICLES

1163

Obscurinin A, a unique *Lycopodium* alkaloid possessing an 8/6/6/6/5 pentacyclic system isolated from *Lycopodium obscurum* L.

Bei-Bei Gao, Wen-Yan Li, Shuai Jiang and Qin-Shi Zhao*



1169

Catalyst-free photoinduced radical sulfonation/cyclization of unactivated alkenes toward sulfone-containing quinazolinones

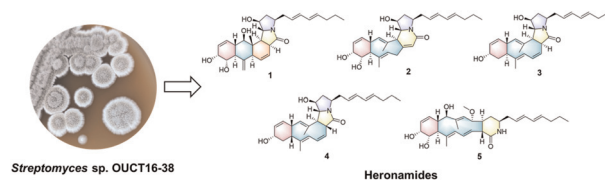
Si-Yuan Chen, Ying-Shan Wang, Xian Han, Zhen-Dong Zhang, Zhi-Kai Li, Dong-Liang Lu and Shaoyu Li*



1175

Heronamides with unreported skeletons from deep-sea *Streptomyces*: discovery and biosynthesis

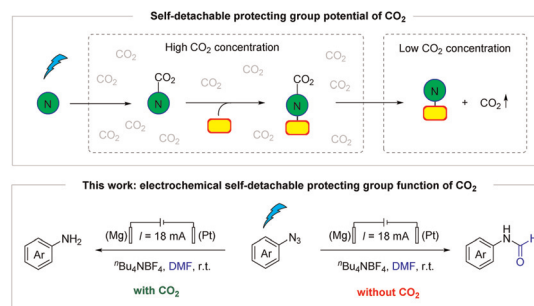
Yi Zhao, Hu Chen, Lianguang Yue, Yun Dong, Di Su, Jingyi Lyu, Wenli Li and Huayue Li*



1184

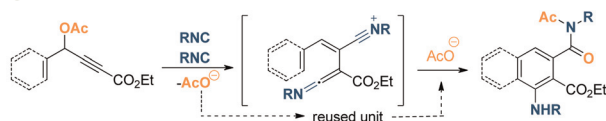
Self-detachable protecting group function of CO₂ in the electrochemical reduction of aryl azides

Yuhang Fan, Zhanshuo Zhang and Yulei Zhao*



RESEARCH ARTICLES

1192

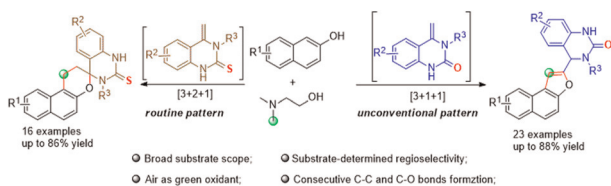


- reaction with bimolecular isocyanides
- excellent atom economy
- metal-free
- new synthesis for multi-functionalized aryl amine
- broad isocyanide scope

An aminobenzannulation reaction of a propargylic ester and isocyanides to access multi-functionalized aryl amine derivatives

Zihan Ni, Jie Hu, Kun Yin,* Tianfang Chen, Xiangning Li, Lei Cui,* Chunju Li and Jian Li*

1198

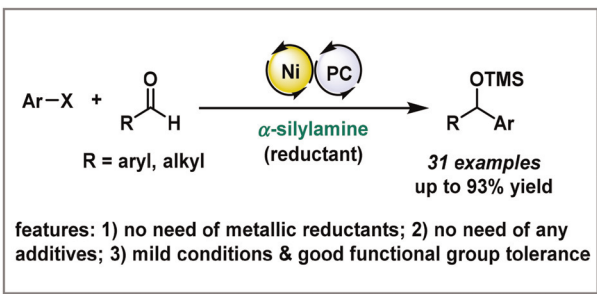


- Broad substrate scope;
- Air as green oxidant;
- Substrate-determined regioselectivity;
- Consecutive C-C and C-O bonds formation;

Copper-catalyzed divergent construction of naphthofurans and benzochromanes from 2-naphthols, 4-methylene-quinazolin(thi)ones, and *N,N*-dimethylethanolamine

Meiqi Geng, Jinqiang Kuang,* Weiwei Fang, Xuqiong Xiao and Yongmin Ma*

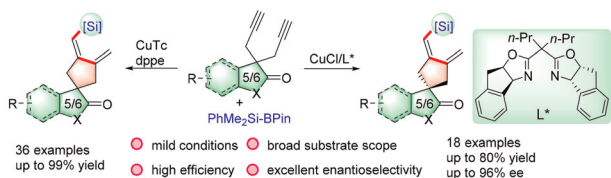
1205



Nickel/photoredox dual-catalyzed reductive cross-coupling of aryl halides and aldehydes

Junjie Liu, Yukun Chen, Hongping Zhao and Weiming Yuan*

1211



- mild conditions
- broad substrate scope
- high efficiency
- excellent enantioselectivity

Copper-catalyzed desymmetric silylative-cyclization of 1,6-diynes for synthesis of spirocyclic compounds

Cui-Cui Shan, Zi-Lu Wang and Yun-He Xu*

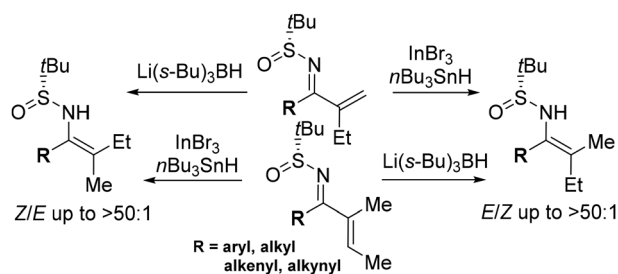


RESEARCH ARTICLES

1218

Stereodivergent conjugate reduction of α -substituted α,β -unsaturated *N*-sulfinyl ketimines: flexible access to challenging acyclic β,β -disubstituted enesulfonamides

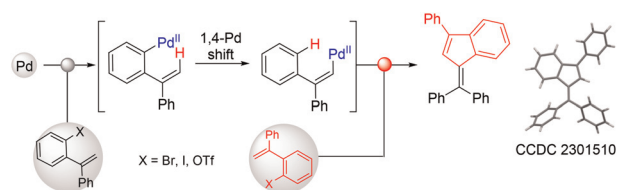
Nuermaimaiti Yisimayili, Tao Liu, Teng-Zhao Xiong and Chong-Dao Lu*



1225

Rapid synthesis of benzofulvenes from α -bromodiarylethylenes based on a 1,4-palladium shift strategy

Abdur Rahim, Shuming Zhan, Biqiong Hong,* Longhui Duan and Zhenhua Gu*

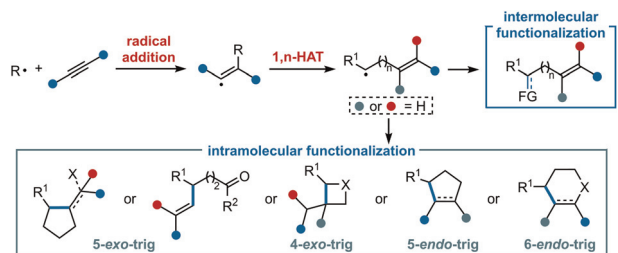


REVIEWS

1232

Recent advances in hydrogen atom transfer induced $C(\text{sp}^3)\text{-H}$ functionalizations initiated by radical addition to alkynes

Yulu Zhou, Zhenyu Gu, Yuwei Hong, Huiqin Chen, Jinmin Luo, Hanliang Zheng* and Gangguo Zhu*



1251

Catalyst-free photoarylation reactions promoted by visible light

Felipe C. Braga, Guilherme M. Martins, Marcelo S. Franco, Luiz P. A. Belli, Kleber T. de Oliveira* and Francisco F. de Assis*

