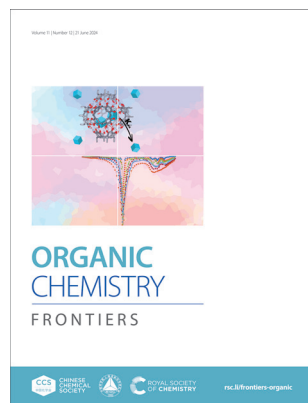


IN THIS ISSUE

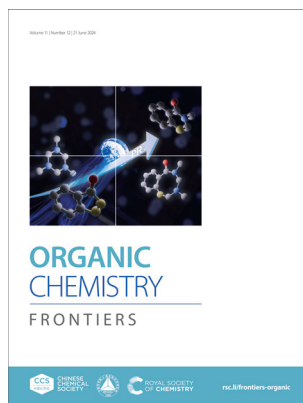
ISSN 2052-4129 CODEN OCFRA8 11(12) 3283–3504 (2024)



Cover

See Liat Avram, Yoram Cohen *et al.*, pp. 3294–3301.

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Inside cover

See Yao Zhou *et al.*, pp. 3302–3307.

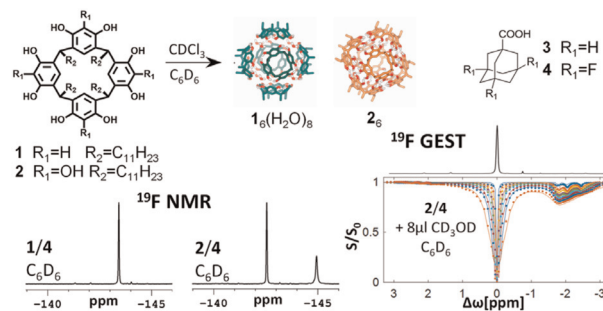
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RESEARCH ARTICLES

3294

Advanced ^{19}F -NMR studies shed new light on encapsulation of isosteric guests in the hexameric capsules of resorcin[4]arenes and pyrogallol[4]arenes

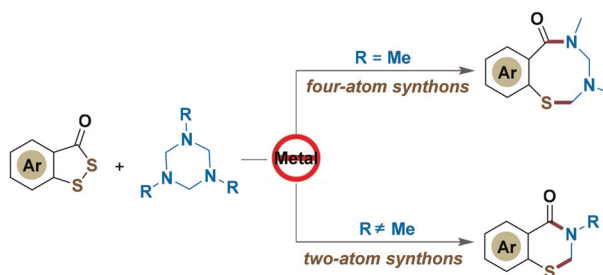
Sarit Slovak, Tamar Salem, Inbar Horin, Liat Avram* and Yoram Cohen*



3302

Substituent-controlled divergent cyclization reactions of benzo[*c*][1,2]dithiol-3-ones and hexahydro-1,3,5-triazines

Bohao Zhang, Sifan He, Na Dong, Antong Zhu, Haojie Duan, Dunjia Wang and Yao Zhou*



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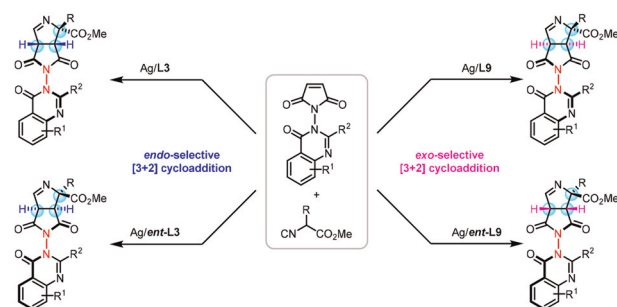
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RESEARCH ARTICLES

3308

Catalytic stereodivergent and simultaneous construction of axial and point chirality

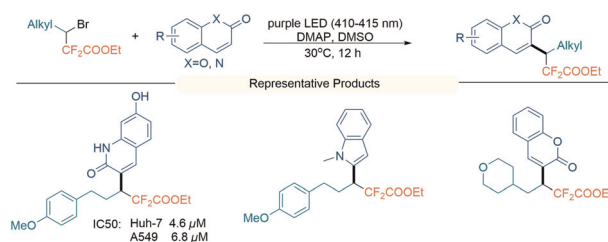
Wen-Tao Wang, Sen Zhang, Wenxuan Lin, Zhang-Hong Luo, Dan Hu, Fen Huang, Ruopeng Bai,* Yu Lan, Linghui Qian* and Jia-Yu Liao*



3320

Halogen-bond-promoted direct cross-coupling of ethyl 3-bromo-3-alkyl-2,2-difluoropropanoates with coumarins/quinolinones

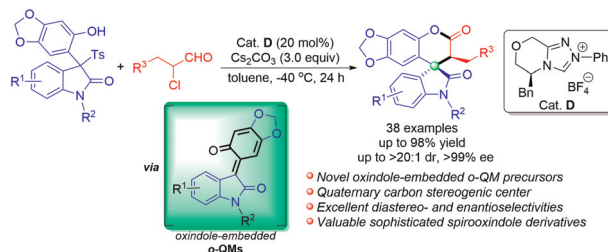
Guoliang Pu, Shi-Yuan Song, Jian Yang, Peng Guo, Jia Jia, Peijun Liu, Xuefei Li,* Ping Liu* and Chun-Yang He*



3326

NHC-catalyzed stereoselective synthesis of spirooxindole lactones from *in situ* generated oxindole-embedded *o*-quinone methides and aldehydes

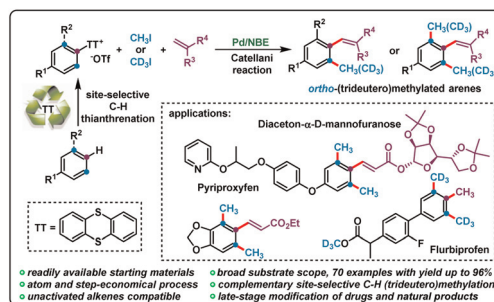
Zhengqiang Cao, Fang Hu, Yunpeng Chu, Jiaxue Pei and Xin-Ping Hui*



3333

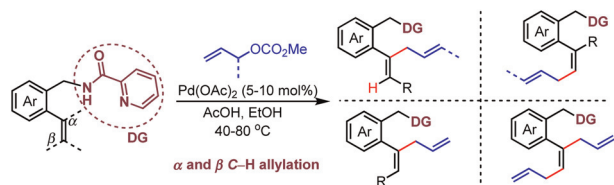
Catalytic *ortho* C–H methylation and trideuteromethylation of arylthianthrenium salts *via* the Catellani strategy

Chen Chen,* Xiao-Xu Zhang, Zi-Yi Wang, Chunjie Ni* and Bolin Zhu*



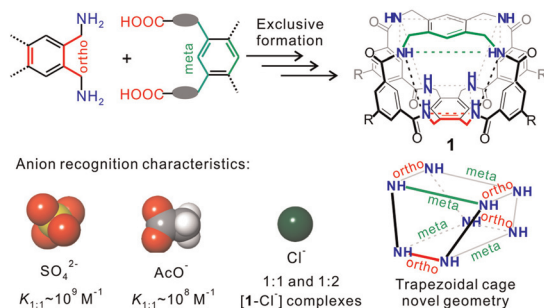
RESEARCH ARTICLES

3341

Palladium-catalysed α and β C-H allylation of aryl alkenes

Yilei Liao, Xiandie Zhang, Xiaoli Li, Xiuying Liu, Jiakai Chen, Chao Shen,* Rui He, Guofu Zhong* and Jian Zhang*

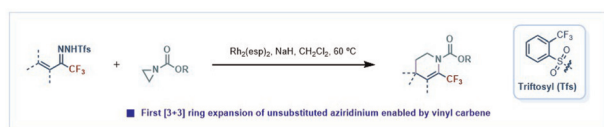
3348



Synthesis and anion recognition characteristics of a trapezoidal benzene cage

Caihong Mao, Ruiye Wu, Nana Chen, Hanliang Zheng, Yan Cai, Lichun Kong and Xiaobo Hu*

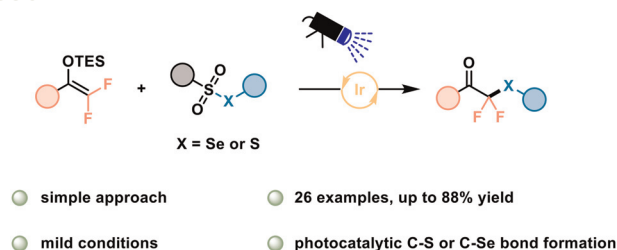
3358



Ring expansion of unsubstituted aziridinium ylides to trifluoromethylated dehydropiperidines

Jiaqi Tang, Tian Tian, Yingyu Wang, Dandan Wei, Yong Yang, Xinyu Wang, Paramasivam Sivaguru, Yongquan Ning,* Zhaohong Liu* and Valentine Nenajdenko*

3364

Visible-light-promoted synthesis of α, α -difluoro- β -keto-thio(seleno)ethers from thio(seleno)sulfonates and difluoroenoxy silanes

Shuang Yao, Fei Wang, Ying Chen, Weidong Rao, Shu-Su Shen, Daopeng Sheng and Shun-Yi Wang*

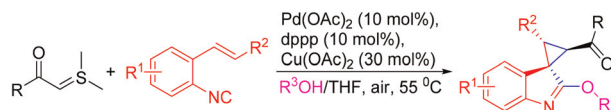


RESEARCH ARTICLES

3369

Palladium/copper-cocatalyzed three-component tandem cyclization of *o*-alkenyl arylisocyanides and sulfur ylides with alcohols: direct synthesis of spiro 3,3'-cyclopropyl oxindoles

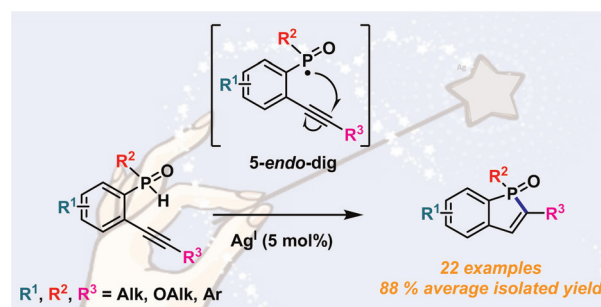
Yue Gong, Xue-Cen Xu, Zi-Xuan Yang and Yu-Long Zhao*



3376

Efficient synthesis of benzophosphole oxides via Ag-promoted radical cycloisomerization

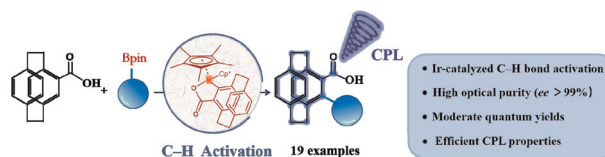
Liyao Ma, Sonia Mallet-Ladeira, Julien Monot, Blanca Martin-Vaca* and Didier Bourissou*



3384

Iridium(III)-catalyzed one-pot synthesis of planar chiral emissive materials through C–H activation

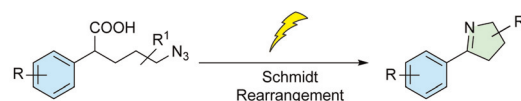
Wenjing Liu, Honghan Ji, Wenzeng Duan,* Huaiwei Wang, Yanmin Huo, Xianqiang Huang and Pengfei Duan*



3391

Electrocatalytic conversion of ω -azido carboxylic acids to 1-pyrrolines via a combined process of oxidative decarboxylation and intramolecular Schmidt rearrangement

Kai Yang, Rui Li* and Peiming Gu*

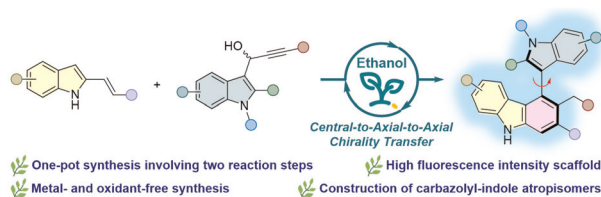


mild conditions metal- and oxidant-free simple operation undivided cell / under air



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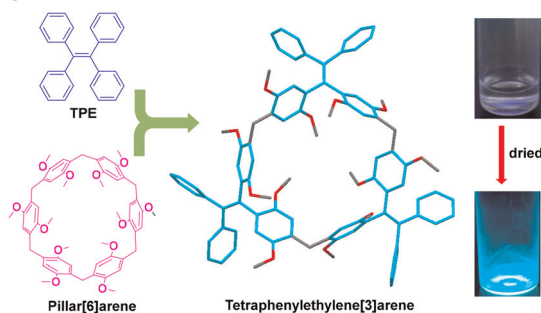
3397



One-pot and metal-free synthesis of atropisomeric carbazoyl-indoles by a facile [4 + 2]-benzannulation in ethanol and investigation of their photoluminescence property

Shuai-Jiang Liu, Xiao-Chen Liu, Sheng-Nan Wen, Bo Han, Wei Huang* and Qian Zhao*

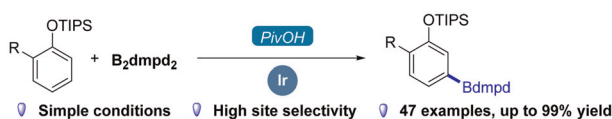
3404



Tetraphenylethylene[3]arene: synthesis, structure, and sensing of I⁻

Fei Zeng,* Lin-Li Tang, Wen-Hu Bao and Ying-Zi Tan

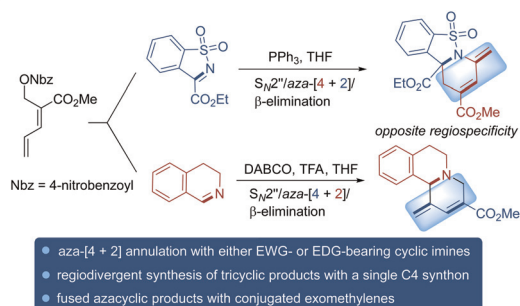
3409



Iridium-catalyzed meta-selective C–H borylation of phenol derivatives

Wenjie Ju, Du Gao, Min Liang, Shuxiong Han, Chuangchuang Liu and Yingsheng Zhao*

3415



Aza-[4 + 2] annulations of α -vinyl Morita–Baylis–Hillman adducts for regiodivergent synthesis of exomethylene-bearing azatricyclic compounds

Ye Liu, Chao-Xu Li, Chen Huang, Lei Zhu,* Guo-Yin Xiong, Yu-Chao Zhu, Shi-Lu Fan, Jian-Jun Dai and Hua Xiao*

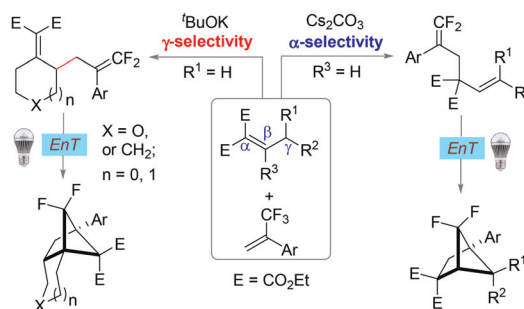


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3421

Regioselective difluoroallylation of alkylidene malonates with trifluoromethyl alkenes: synthesis of *gem*-difluoro-1,5-dienes and their [2 + 2] photocycloaddition

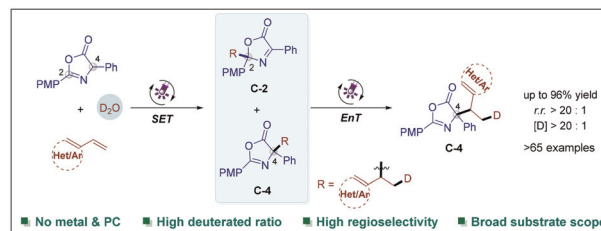
Weidi Zeng, Mingqiang Li, Shaofeng Wu, Ablimit Abdukade* and Lei Zhou*



3427

Visible-light-induced Markovnikov addition of olefin for construction of deuterated α -tertiary amino acid derivatives

Rui Chen, Cong Lu, Yujun Li and Ke Zheng*



3436

Rh-catalyzed asymmetric hydrogenation of allylic sulfones for synthesis of chiral β -ester sulfones

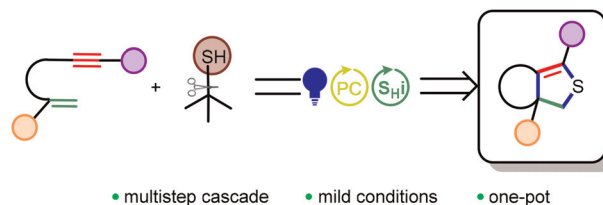
Xiaoxue Wu, Qianling Guo, Guofu Zi, Yuping Huang* and Guohua Hou*



3442

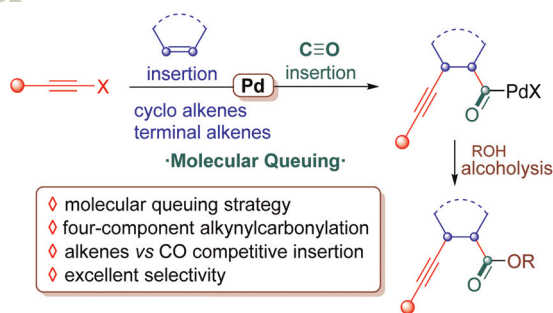
Photoredox-catalyzed cascade [2 + 2 + 1] cyclization of 1,6-enynes with thiols

Zhe Meng, Min Shi* and Yin Wei*



RESEARCH ARTICLES

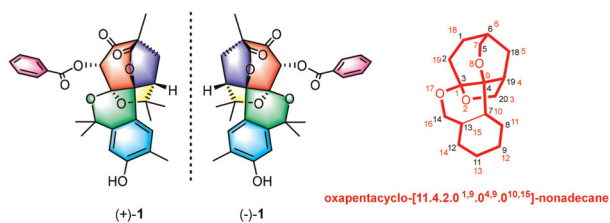
3451



Palladium-catalyzed multi-component Heck alkynylcarbonylation of unactivated alkenes for synthesis of β,γ -alkynoates

Xin Peng, Huanliang Hong, Li Wang, Lu Chen, Jinbao Peng, Yibiao Li* and Huanfeng Jiang*

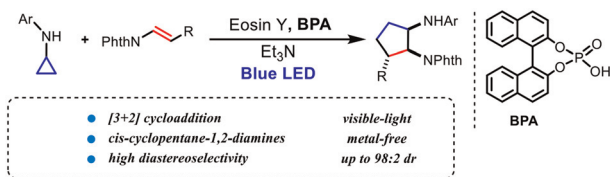
3459



(±)-Hypandrone A, a pair of polycyclic polyprenylated acylphloroglucinol enantiomers with a caged 7/6/5/6/6 pentacyclic skeleton from *Hypericum androsaemum*

Jiangchun Wei, Pingping Fan, Yahui Huang, Hanxiao Zeng, Rui Jiang, Zhengzhi Wu,* Yonghui Zhang* and Zhengxi Hu*

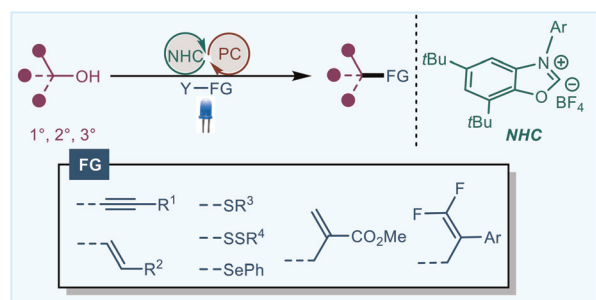
3465



Diastereoselective synthesis of *cis*-cyclopentane-1,2-diamine derivatives via organophotoredox-catalyzed [3 + 2] cycloadditions

Yang Xu, Yinong Wu and Xufeng Lin*

3471



Photoredox catalytic deoxygenative divergent functionalizations of alcohols assisted by N,O-heterocyclic carbenes

Qiuzhu Wang, Youye Tian, Dan Han, Wenjuan Xiao, Mengtao Ma and Binlin Zhao*

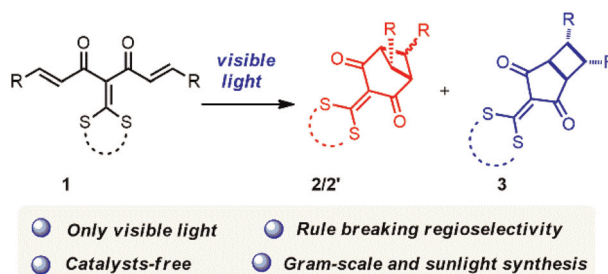


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3478

Visible-light-driven, catalyst-free intramolecular crossed and straight [2 + 2] cycloaddition

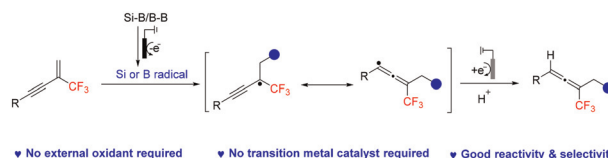
Yuan Sang, Xiaoxuan Zhou, Chen Jin, Ling Pan, Qun Liu, Haiyan Yuan* and Yifei Li*



3485

Electrochemically mediated synthesis of trifluoromethylallenes

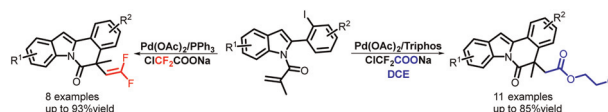
Jia-Lan Zhang, Jin-Xiu Xiong, Lu-Qi Fei, Fei-Hu Cui, Shu-Hui Li,* Hai-Tao Tang, Yan-Zhao Xie* and Ying-Ming Pan*



3491

Switching from *gem*-difluorovinylolation to carboxylation: ligand-enabled palladium-catalyzed Heck annulation of alkene-tethered aryl halides with sodium difluorochloroacetate

Yu Xia,* Wenqi Li, Minzhu Wei, Yonghong Zhang, Bin Wang, Shaofeng Wu and Chenjiang Liu*



3497

Visible light-induced sulfonylation with sulfinates as closed-shell radical acceptors

Dongyan Hu, Lei Shen, Su Su Htwe Chaw, Kangjiang Liang* and Chengfeng Xia*

