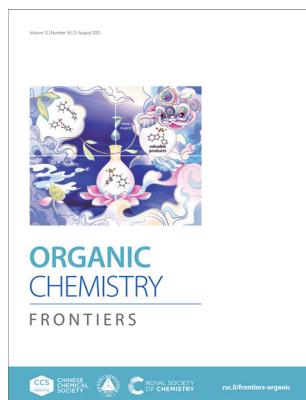


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ISSN 2052-4129 CODEN OCFRA8 12(16) 4401–4688 (2025)



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See Zhen-Jiang Liu,
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Volume 12 Number 16 | 21 August 2025

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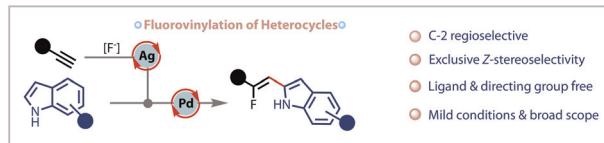
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RESEARCH ARTICLES

4410

Palladium-catalysed regio- and stereo-controlled C-2 β -fluorovinylation of indoles

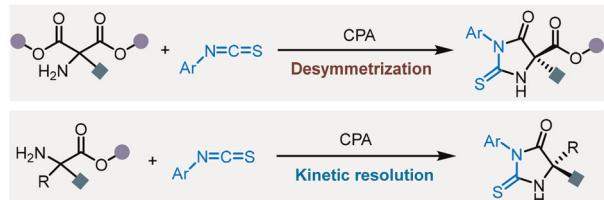
Atul K. Chaturvedi and Alastair J. J. Lennox*



4417

Enantioselective catalytic Urech hydantoin synthesis

Wen-Ya Zheng, Zi-Qi Wang, Xing-Zi Li, Zhuo-Chen Li, Hua Wu,* Abulikemu Abudu Rexit* and Yu-Ping He*



✓ 1st Enantioselective Urech synthesis ✓ Desymmetrization and kinetic resolution
✓ Alkyl group tolerated ✓ DKR process involved ✓ Aza-quaternary stereocenters



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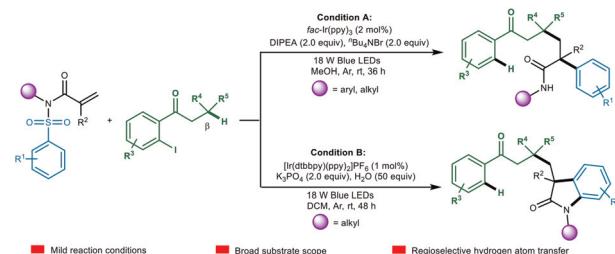
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RESEARCH ARTICLES

4424

A photocatalytic hydrogen atom transfer and aryl migration strategy for the arylalkylation of activated alkenes with 1-(*o*-iodoaryl)-alkan-1-ones

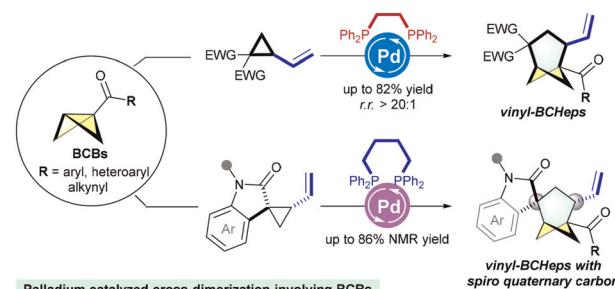
Yan-Lin Chu, Liang Zeng, Shuang Wu,* Jie Yang, Ming Hu* and Jin-Heng Li*



4430

Palladium-catalyzed double strain-release ($3+3$) cycloaddition for the synthesis of vinylbicyclo[3.1.1]heptanes

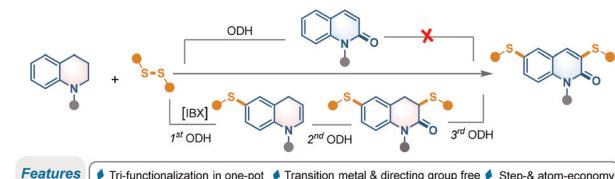
Xin-Yu Gao, Yuanjiu Xiao, Xuan Zhan, Yu-Jie Li, Kun-Ju Wang and Jian-Jun Feng*



4439

Hypervalent iodine-mediated one-pot synthesis of C3,6-dithioquinolin-2-ones

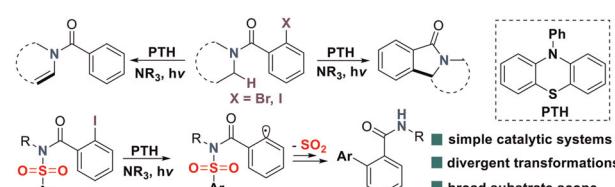
Yukun Xie, Xiaodan Meng, Chenrui Liu, Xiaoxiang Zhang, Zhuan Zhang and Taoyuan Liang*



4445

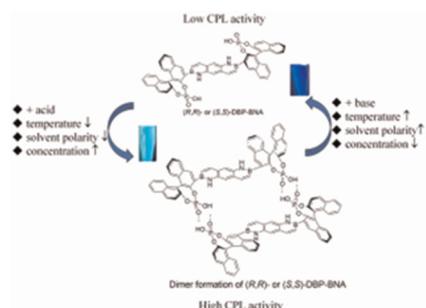
Organic photoredox catalyst induced divergent transformations of *o*-halogenated benzamides

Sa Li, Xuning Li, Ji-Pan Yu* and Xiao-Feng Xia*



RESEARCH ARTICLES

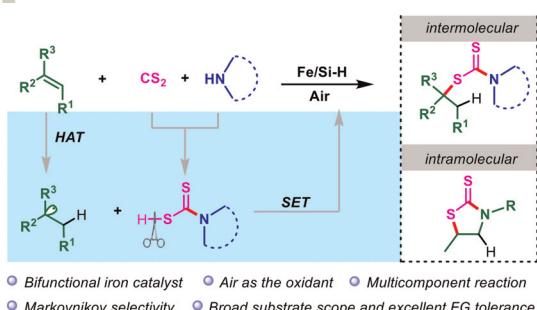
4452



CPL-tunable BN-embedded supramolecular macrocycles

Yu-Chi Dai, Yun-Tao Ding, Jin-Lin Qing, Wei-Ning Zhang, Zhi-Qiang Zhang, Xuefeng Zhu, Jing-Jing Cao,* Chun-Lin Sun, Xiao-Ping Cao* and Hao-Li Zhang*

4462



Bifunctional iron-mediated multicomponent Markovnikov-selective radical hydrothiolation of alkenes

Yi-Nuo Wang, Hongyu Jia, Lan Yao, Yu Chen, Han-Le Liu, Fengbing Liang, Dexin Feng* and Da-Zhen Xu*

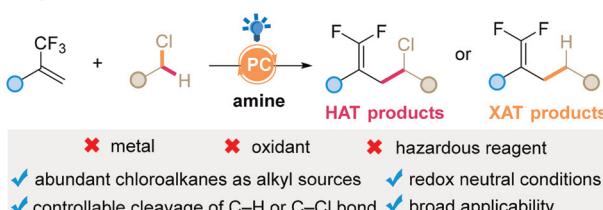
4469



Accessing chiral sulfones with an all-carbon quaternary stereocenter via photoinduced asymmetric Truce–Smiles rearrangement and radical sulfur dioxide insertion

Chenxin Wang, Wei Xiao* and Jie Wu*

4476



Controllable atom transfer enables photoredox-catalyzed defluorinative alkylation of trifluoromethyl alkenes with polychloroalkanes

Mu-Xiang Chen, Xin-Lu Fan, Zi-Yan Wang, Yi-Long Zhu, Xuefei Zhao,* Zhenhua Jia* and Xu-Hong Hu*

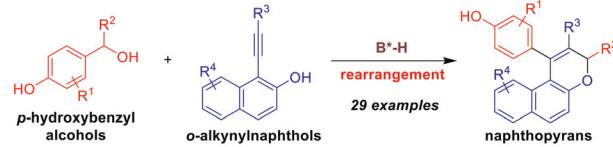


RESEARCH ARTICLES

4485

Catalytic rearrangement reaction of *p*-hydroxybenzyl alcohols with *o*-alkynylnaphthalols for synthesis of naphthopyrans

Ping Wu, Chun-Dong Huang, Ye-Hui Ding, Yun-Xuan Chen, Jia-Hao Ji, Shao-Fei Ni,* Yu Peng* and Wei Tan*

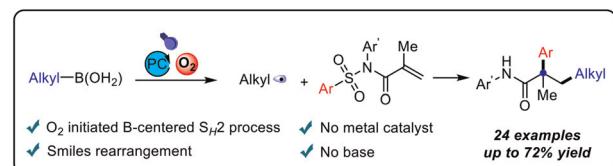
**Significance:**

- The first catalytic rearrangement reaction of *p*-hydroxybenzyl alcohols
- A novel strategy for the synthesis of naphthopyrans under mild conditions

4493

Photo-induced energy transfer mediated O₂-initiated deboronative generation of alkyl radicals from alkyl boronic acids and its application in radical Smiles rearrangement

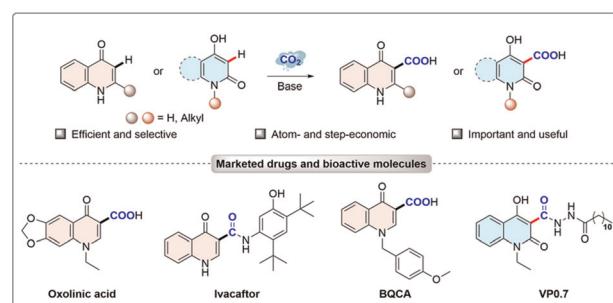
Jinpeng Wu, Yongsheng Tian, Xue Zhao, Shuai Liu,* Liang Xu* and Huanhuan Song*



4499

Carboxylation of C(sp²)-H bonds in quinolone derivatives with CO₂: facile synthesis of quinolone carboxylic acids

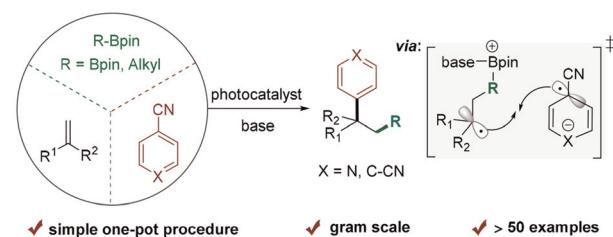
Changfu Li, Wei Zhang, Yunyi Xu, Yang Su, Tian-Yu Gao, Jian-Heng Ye, Lei Song* and Da-Gang Yu*



4506

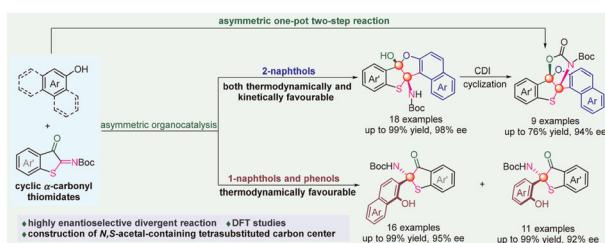
Photocatalytic three-component 1,2-boroarylation and carbopyridylation of alkene

Jia Cao,* Baobao Ji, Zhixiang Wang, Ruijuan Wang and Liuzhou Gao*



RESEARCH ARTICLES

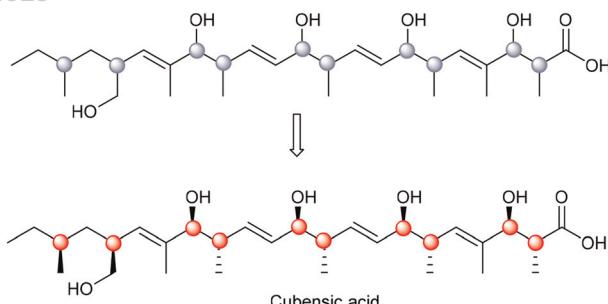
4514



Catalytic enantioselective divergent reaction of thioimidates with naphthols: construction of *N,S*-acetal-containing tetrasubstituted carbon centers

Qiao-Qiao Peng, Xing Yang, Xi-Sha Xue, Juan Liao, Lei Yang, Yong You, Zhen-Hua Wang, Lili Zhao,* Wei-Cheng Yuan* and Jian-Qiang Zhao*

4525



Total synthesis and stereochemical assignment of cubensis acid

Yangyang Jiang, Junyang Liu* and Tao Ye*

REVIEWS

4530

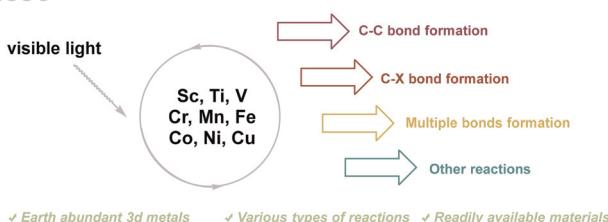
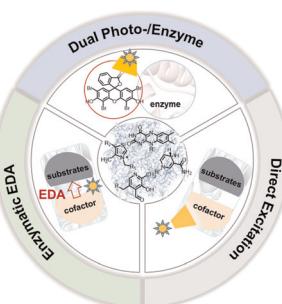


Photo and earth-abundant metal dual catalysis in organic synthesis

Guannan Li, Tongtong Li, Lifeng Luo, Yan Tan and Zhan Lu*

4608



Recent advances in repurposing natural enzymes for new-to-nature asymmetric photobioretransformations

Fulu Liu, Xichao Peng, Jinhai Yu and Xiaoqiang Huang*

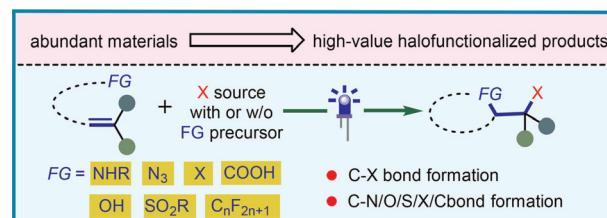


REVIEWS

4635

Visible light-mediated halofunctionalization of alkenes for the synthesis of vicinally functionalized organohalides

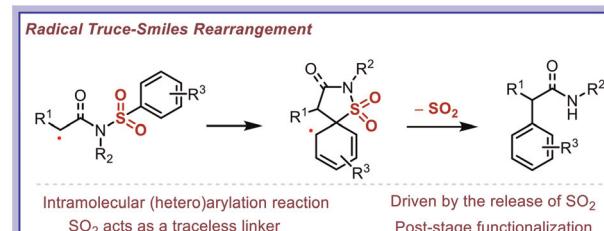
Kanta Pajujantaro, Ying Chen and Gong-Qing Liu*



4666

Advancements and perspectives toward radical Truce–Smiles-type rearrangement

Yuxi Wang, Xinyao Zhang, Kexin Kong and Chao Shu*



CORRECTION

4685

Correction: HBF₄-mediated direct alcoholysis of amides under mild conditions

Shi-Zheng Liu, Wen-Heng Liu, Yaotai Deng, Qiang Li,* Ming-Yu Dou, Yu Cui* and Jian-Min Dou*