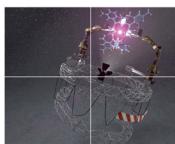


IN THIS ISSUE

ISSN 2052-4129 CODEN OCFRA8 12(7) 2135–2556 (2025)

Volume 12 Number 7 | April 2025



Cover

See Ángel L. Fuentes de Arriba, Juan R. Granja *et al.*, pp. 2149–2158.

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FRONTIERS

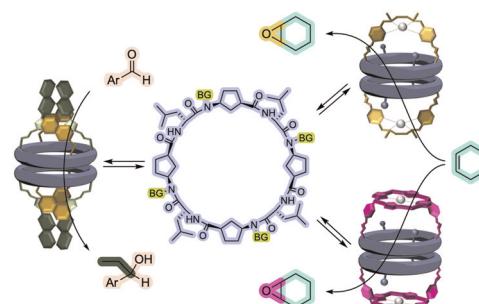
CCS CHINESE CHEMICAL SOCIETY RSC ROYAL SOCIETY OF CHEMISTRY rsc.li/frontiers-organic

RESEARCH ARTICLES

2149

Modular supramolecular capsules based on α,γ -cyclic peptide dimers for the development of confined catalysis

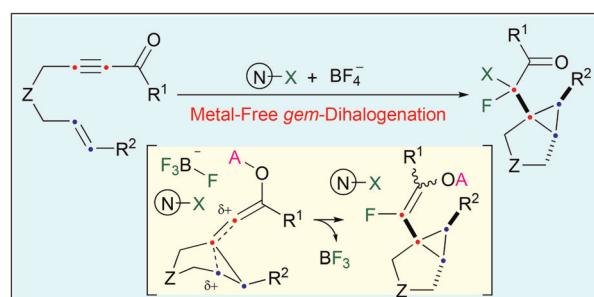
Ezequiel Troncoso Mondragón, Alberto Fuertes, Martín Calvelo, Ángel L. Fuentes de Arriba,* Manuel Amorín and Juan R. Granja*



2159

Cycloisomerization of 7-en-2-yn-1-ones to bicyclo[3.1.0]hexanes using electrophilic fluorination or chlorination agents

Yuki Yasuda, Daisuke Sato, Akira Tsubouchi and Akio Saito*



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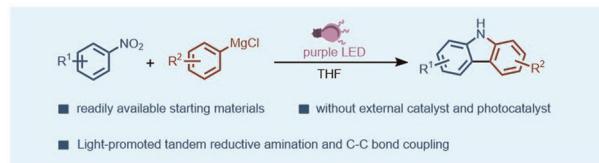
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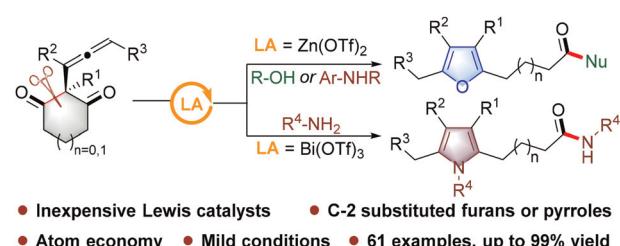
2165

Synthesis of carbazoles: light-promoted tandem coupling of nitroarenes with Grignard reagentsChen Yang, Ya-Fei Wan, Tong Sun, Gang Li,
Zhang-Jie Shi* and Dong Xue*

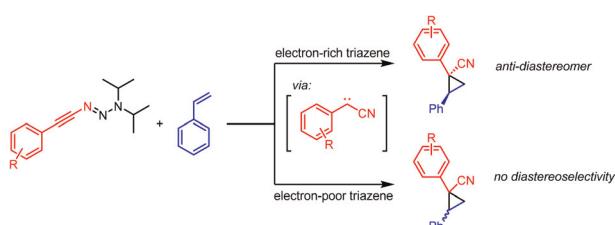
2173

Lewis acid-catalyzed divergent synthesis of polysubstituted furans and pyrroles

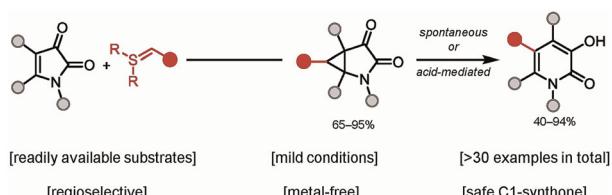
Chenguang Li, Tongxiang Cao* and Shifa Zhu*



2180

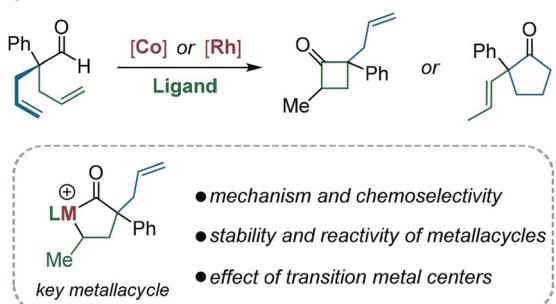
Scope and mechanistic insight into the chemistry of cyanocarbenes derived from alkynyl triazenes by UV irradiationMelina Maag, Linus Bjarne Dittmer, Elena Michel,
Alexandra V. Mackenroth, Martin C. Dietl,
Frank Rominger, Matthias Rudolph, Andreas Dreuw and
A. Stephen K. Hashmi*

2187

Cyclopropanation vs. single-carbon insertion of pyrrole-2,3-diones with sulfonium ylides: synthesis of functionalized 2-azabicyclo[3.1.0]hexanes and pyridine-2,3-dionesMaria M. Muranova, Andrey R. Galeev,
Andrey N. Maslivets and Maksim V. Dmitriev*

RESEARCH ARTICLES

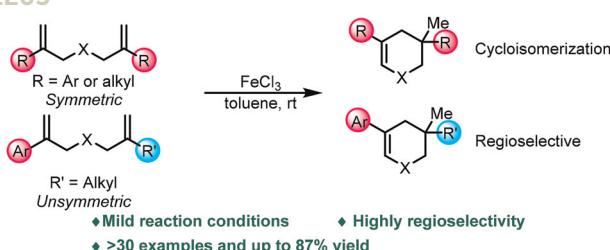
2194



Understanding the influence of metal centers on the mechanism and chemoselectivity of transition-metal-catalyzed cyclizations of dienyl aldehydes

Jian-Biao Liu,* Yan Wang, Hai-Yan Wang and Xiao-Jun Liu*

2205



FeCl₃ promoted cycloisomerization of 1,6-dienes

Zhongjian Du, Chenlei Ji, Xu Wang, Zhenyu Wang, Zhenguo Guo* and Yang'en You*

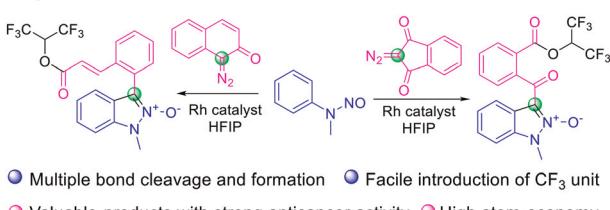
2212



Atom-controlled divergent synthesis of spiro and fused rings via base-catalyzed chemoselective annulation

Gang Chen, Guangjie Nie, Linxuan Li,* Jie Fu, Hui Yao, Nianyu Huang* and Nengzhong Wang*

2219



Divergent synthesis of functionalized indazole N-oxides with anticancer activity via the cascade reaction of N-nitrosoanilines with diazo compounds and HFIP

Yuqian Sun, Shengnan Yan, Kelin Wang, Bin Li, Chunhua Ma, Xinying Zhang* and Xuesen Fan*

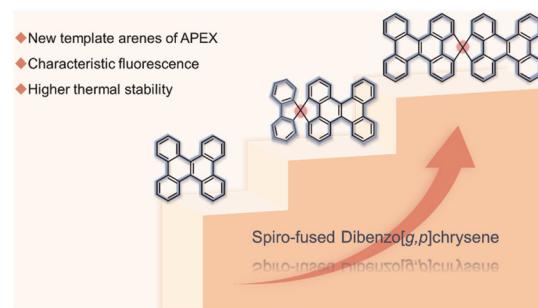


RESEARCH ARTICLES

2225

Spiro-fused dibenzo[*g,p*]chrysene: annulative π -extension (APEX) synthesis and properties

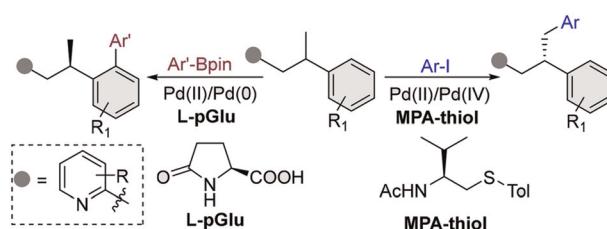
Kanghui Song, Yuying Zhang, Shuai Wu, Sha Yang, Shengchen Wei, Songhua Chen, Hideto Ito,* Kenichiro Itami* and Yuanming Li*



2232

Ligand-enabled enantio- and site-selective remote C–H arylation of 2-(2-phenethyl)pyridine derivatives

Dai-Yu Li, Jin-Ping Li, Shunsuke Yabu, Li-Sheng Wang, Hirofumi Sato, Masahiro Higashi,* Yoichiro Kuninobu* and Hong-Liang Li*



2242

Diastereoselective visible-light-induced radical cascade trifluoromethylation/sulfuration/cyclization of 1,6-enynes with S-aryl trifluoromethanesulfonothioate (TTSA)

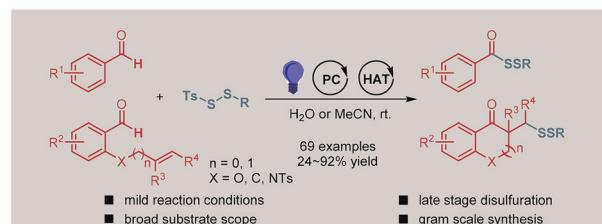
Yuhao Jiang, Jiapeng Sun, Qi Hu, Jianmin Huang, Yingming Song, Hua Cao* and Yue Yu*



2248

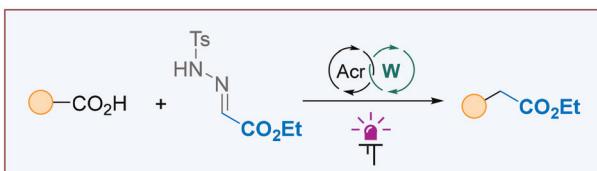
Photocatalytic selective disulfuration of aryl aldehydes and alkenyl aldehydes with dithiosulfonate as a bifunctional disulfur reagent and hydrogen atom acceptor

Jingchao Jiao, Juan Xu, Jingru Li, Hongru He, Runliang Yang, Xiaorui Ren, Qianwen Gao* and Xi Wang*



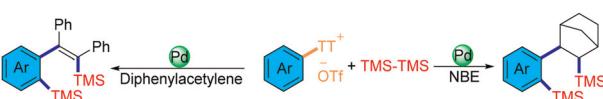
RESEARCH ARTICLES

2255

**Direct C1 homologation of carboxylic acids: free radical approach enabled by acridine catalysis**

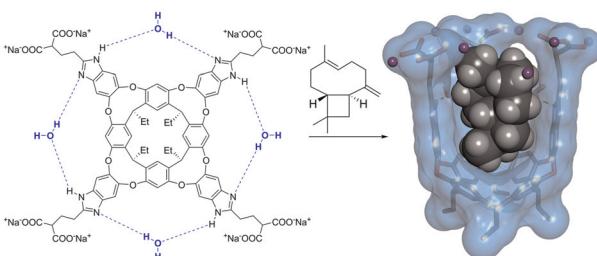
Zakhar M. Rubanov, Vitalij V. Levin and Alexander D. Dilman*

2260

**Palladium-catalyzed Catellani-type selective C–H silylation of aryl-TT salts**

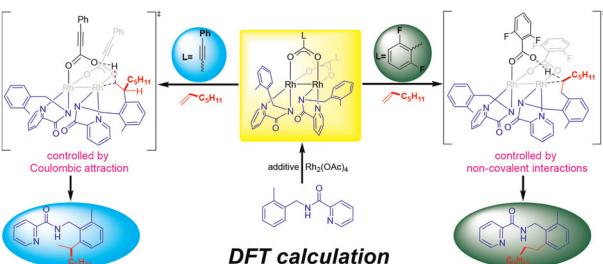
Ziyao Tang, Mangang Guan, Tianqiang Wang, Guojun Yu, Jiaze Qin, Jingfeng Lan and Rulong Yan*

2266

**A superior and accessible cavitand receptor for the binding of monoterpenes and sesquiterpenes in water**

Hugo Marchi Luciano, Ricard López-Coll, Rubén Álvarez-Yebra and Agustí Lledó*

2273

**The influence of an acid additive on linear and branch selectivity in the C–H alkylation of N-pyridinecarbonyl-protected 2-methylbenzylamine with 1-heptene catalyzed by $\text{Rh}_2(\text{OAc})_4$: a theoretical investigation**

Lingli Han, Fei Guan, Zifan Chen, Yaqian Xing, Zitong Meng, Kang Lv and Tao Liu*

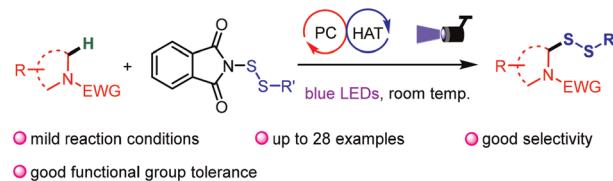


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2286

Visible-light induced direct C(sp³)–H bond disulfidation of saturated N-heterocycles through a hydrogen atom transfer (HAT) process

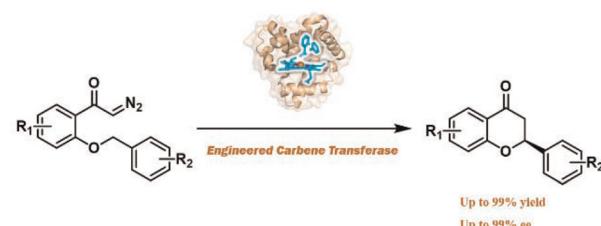
Junlei Wang,* Guocheng Gao, Chengcheng Shi, Han Gao, Ji Luo, Guofen Wei, Daohai Zhang, Hongqing Li, Tonghao Yang* and Binbin Huang*



2292

Stereoselective construction of chiral flavanones via enzymatic intramolecular C(sp³)–H activation

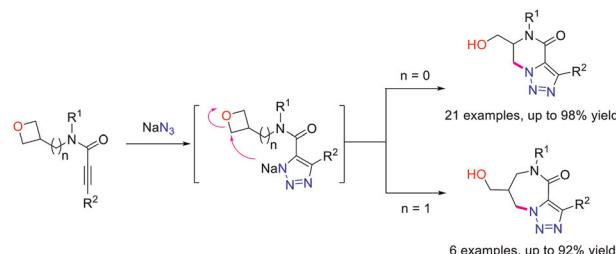
Hanzi Gao, Edgar Africano Camargo, Jude N. Ubi, Xiuyuan Duan, Guojun Zheng,* Shuaihua Gao* and Qipeng Yuan*



2299

A transition-metal-free azide–alkyne cycloaddition/oxetane ring opening cascade reaction for the construction of hydroxymethyl decorated triazole-fused piperazin-2-ones and [1,4]diazepin-4-ones

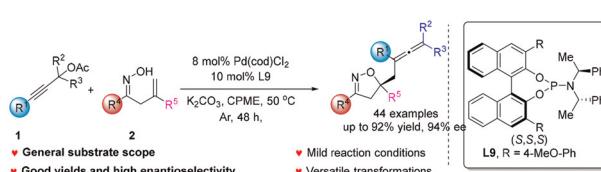
Cong Fu, Mingjin Xu, Qicai Ma, Wenjing Wang, Shanyue Li, Qingjie Zhao* and Wei Zhou*



2305

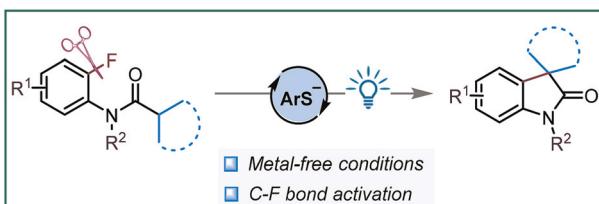
Enantioselective synthesis of isoxazolines bearing allenes by palladium-catalyzed carboetherification of β,γ -unsaturated ketoximes with propargylic acetates

Feifei Jin, Cangzhu Hu, Shuaijie Wu, Guodong Zhang, Ying Han, Chao-Guo Yan, Wenbo Li,* Chaoshen Zhang* and Lei Wang*



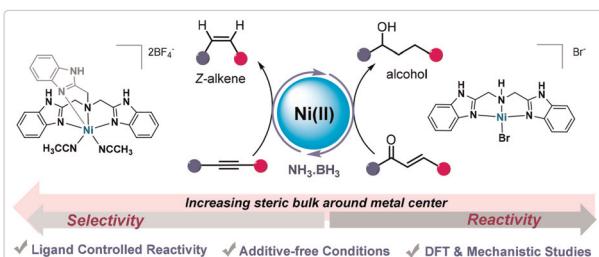
RESEARCH ARTICLES

2314

**Arenethiolate-catalyzed C_{Aryl}-F bond activation: synthesis of oxindoles**

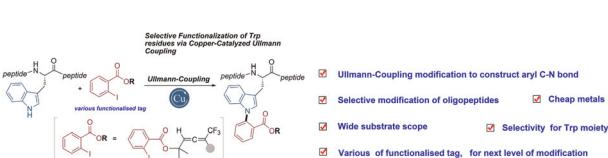
Shengyun Liu, Mingying Li, Wei Xiao* and Jie Wu*

2321

**Ligand-modulated phosphine-free Ni(II) complexes for Z-selective semi-transfer hydrogenation of alkynes and dual transfer hydrogenation of α,β-unsaturated ketones using ammonia borane**

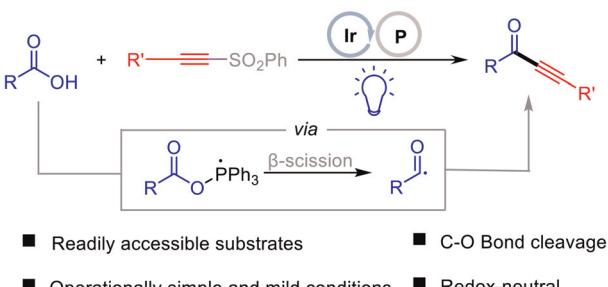
Tanmoy Kumar Ghosh, Anirban Sau, Divya Mahapatra and Sabuj Kundu*

2332

**Selective functionalization of Trp residues via copper-catalyzed Ullmann coupling**

Xinru Liang, Junjie Shi, Qiuju Zhong, Lai Li, Yutao Liu, Tong Sun, Junxi Liang, Xianying Shi, Gaoqiang Li and Mingyu Yang*

2340

**Photoredox catalytic phosphine-mediated deoxygenative alkynylation of carboxylic acids with alkynyl sulfones for alkynone synthesis**

Wen-Huan Tang, Li-Yuan Wu, Quan-Quan Zhou* and Jie-Ping Wan*



RESEARCH ARTICLES

2346

Water mediated synthesis of dialkylphosphine oxides from white phosphorus and *N*-(acyloxy) phthalimides

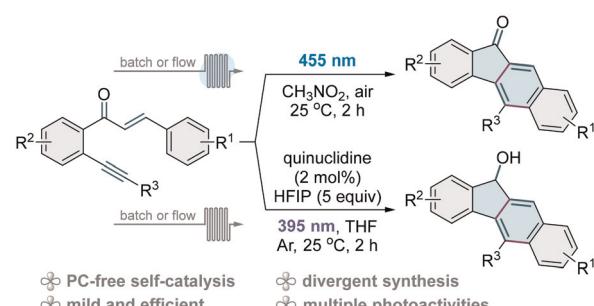
Guo Tang,* Xuanlin Zhu, Jiali He, Yan Liu and Yufen Zhao



2352

Self-photocatalysis with multiple activities: divergent synthesis of benzo[*b*]fluorenones and benzo[*b*]fluorenols from enone-ynes

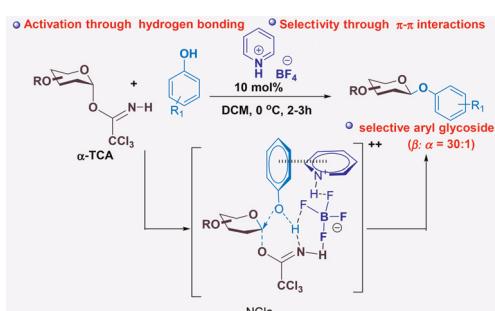
Jifu Shi, Qingyao Sun, YunLing Gao, Yongqin Hu, Weili Li, Binbin He, Shulin Gao,* Shaoguang Sun* and Deqiang Liang*



2362

Exploiting π and hydrogen bonding interactions of a strain-free pyridinium tetrafluoroborate salt for stereoselective synthesis of *O*-aryl glycosides

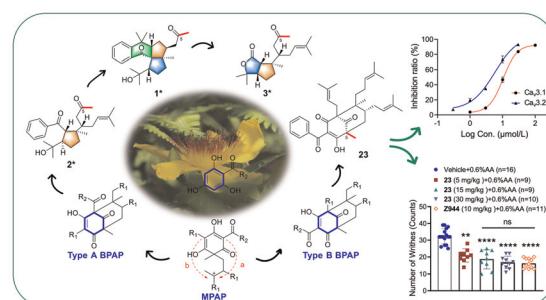
Anjali Aghi, Sankar Sau and Amit Kumar*



2375

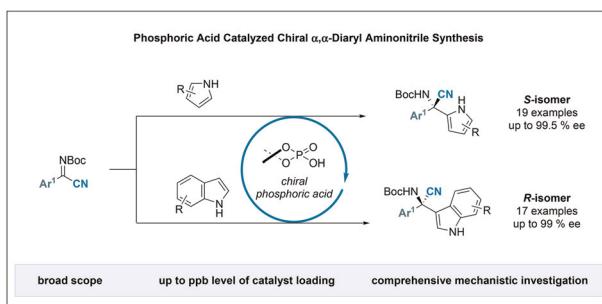
5-Methylated polyprenylated acylphloroglucinol derivatives as low-voltage-gated Ca^{2+} channel inhibitors

Ya-Li Hu, Ding Dong, Jian-Jun Zhao, Kun Hu, Ling-Mei Kong, Yun-Xia Hu, Xing-Ren Li, Song-Yu Li, Yin Nian* and Gang Xu*



RESEARCH ARTICLES

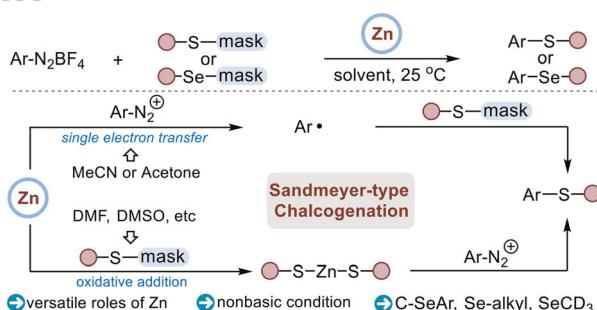
2382



Enantioselective modular synthesis of α -aryl- α -heteroaryl aminonitriles with parts per million organocatalyst loading: mechanistic investigation for stereochemical origins

Yusuke Oyamada, Kaito Ishikawa, Tsunayoshi Takehara, Takeyuki Suzuki and Shuichi Nakamura*

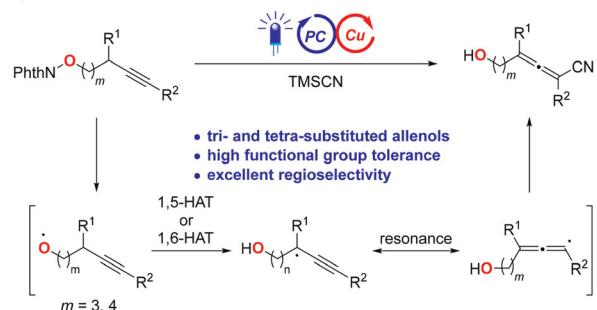
2393



Zn-promoted Sandmeyer-type reductive chalcogenation of (hetero)aryl diazonium salts

Qijin Fan, Yanchuang Zhao, Junhong Wang, Ying Bai, Shengbin Zhou* and Xinxin Shao*

2401



Photoredox copper-catalyzed regioselective syntheses of allenols via HAT-mediated propargyl radical generation

Wenya Li, Hao Yu* and Shengming Ma*

2409



Recyclable g-C₃N₄ catalyzed decarboxylative alkenylation of N-aryl glycines with vinyl sulfones under visible-light irradiation

Chengjie Guo, Guozhi Zhao, Yabiao Feng, Dong Chen, Teck-Peng Loh,* Dongping Wang* and Zhenhua Jia*

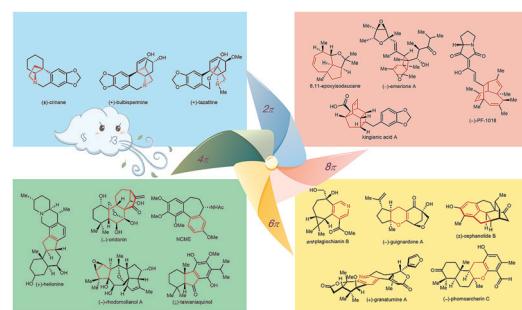


REVIEWS

2415

Recent advances on electrocyclic reactions in complex natural product synthesis: an update

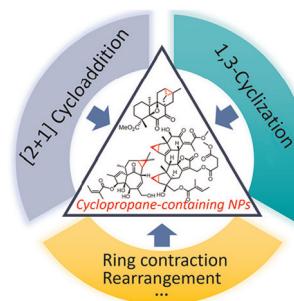
Ruyi Chen, Yanlin Liu and Hanfeng Ding*



2439

Total synthesis of cyclopropane-containing natural products: recent progress (2016–2024)

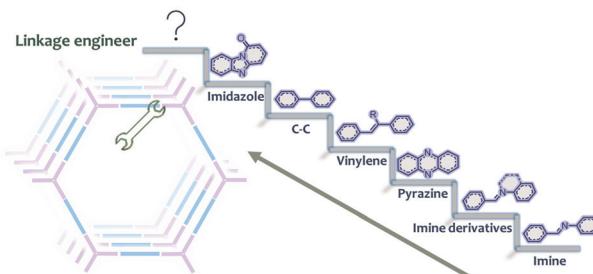
Neng Wang, Jin-Xin Zhao and Jian-Min Yue*



2457

Advances in synthetic strategies for two-dimensional conjugated polymers

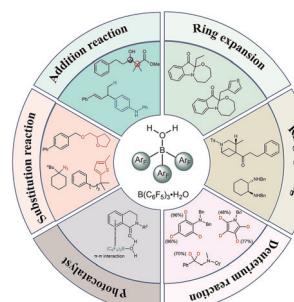
Ruyan Zhao, Guoqin Liu, Philomène Leonore Koko,
Mingchao Wang* and Xinliang Feng*



2481

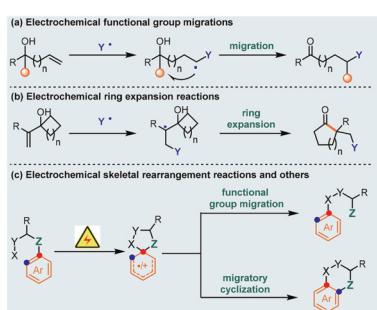
Organic reactions catalyzed by the Brønsted acid $B(C_6F_5)_3 \cdot H_2O$

Tianwei Liu



REVIEWS

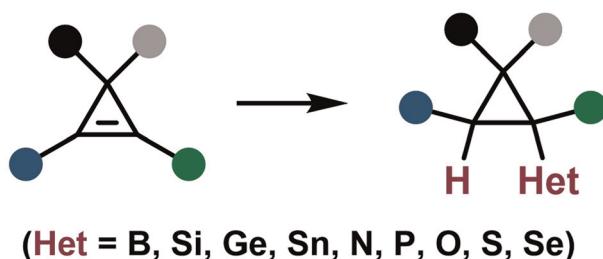
2499



Recent progress in electrochemical rearrangement reactions

Zhaojiang Shi,* Chao-Yan Wen, Li-Xue Yang, Jianan Li* and Xiaoxia Sun*

2525



Recent advances in hydrofunctionalisation of cyclopropenes via carbon–heteroatom bond formation

Jorge García-Lacuna, Gema Domínguez, Ángel Manu Martínez* and Javier Pérez-Castells*

CORRECTION

2552

Correction: A visible light-mediated three-component strategy based on the ring-opening of cyclic ethers with aryl diazoacetates and nucleophiles

Mateus L. Stivanin, Rafael D. C. Gallo, João Paulo M. Spadeto, Rodrigo A. Cormanich and Igor D. Jurberg*

