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See William D. G. Brittain, Benjamin R. Buckley, John S. Fossey *et al.*, pp. 3460–3466.

Artwork created by John S. Fossey from *Org. Chem. Front.*, 2023, **10**, 3460.

RESEARCH ARTICLES

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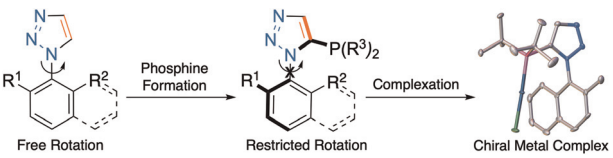
Synthesis of atropisomeric phosphino-triazoles and their corresponding gold(I) complexes

Yiming Zhao, Fernanda Meloni, Louise Male, Cécile S. Le Duff, William D. G. Brittain,* Benjamin R. Buckley* and John S. Fossey*



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Rational assembly of benzenoid rings in benzo[*ghi*] perylene yields a diversity of edge features with site-selective reactivity

David T. Hogan, Wen Zhou, Benjamin S. Gelfand and Todd C. Sutherland*

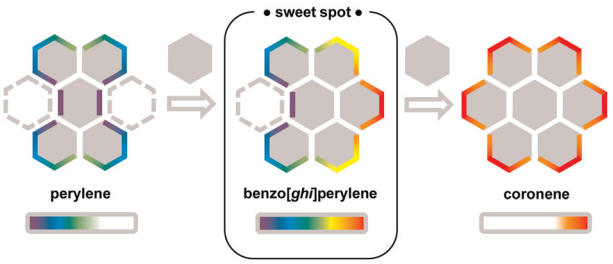

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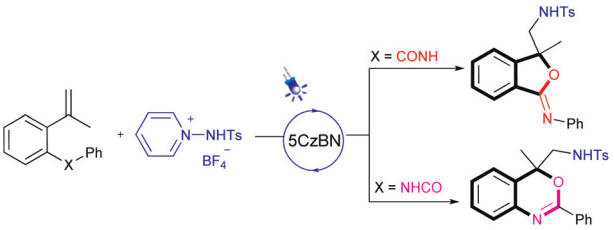
Photo-induced cyclization of olefinic amides towards sulfonamidylated iminoisobenzofurans and benzoxazines

Changduo Pan, Shipeng Luo, Yechun Wu, Jin-Tao Yu* and Chengjian Zhu*



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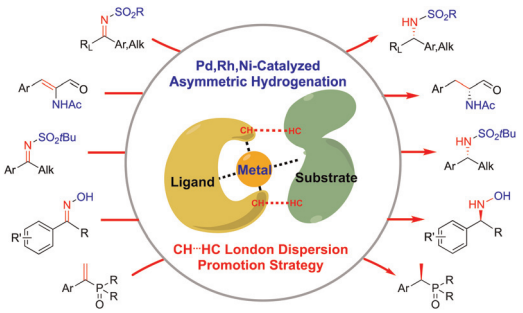
The role of attractive dispersion interaction in promoting the catalytic activity of asymmetric hydrogenation

Limin Yang,* Bo Li and K. N. Houk*



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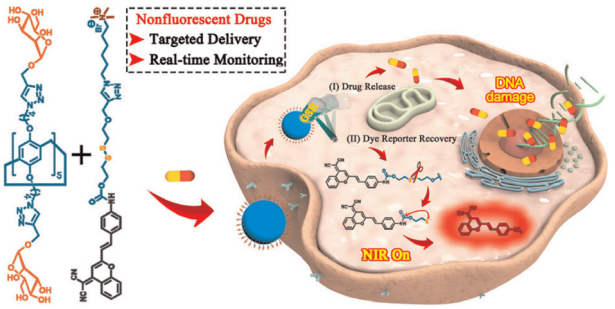
A mannose-functionalized pillar[5]arene-based supramolecular fluorescent probe for real-time monitoring of gemcitabine delivery to cancer cells

Shuang Chao, Pei Huang, Ziyan Shen, Yuxin Pei, Yinghua Lv,* Yuchao Lu* and Zhichao Pei*



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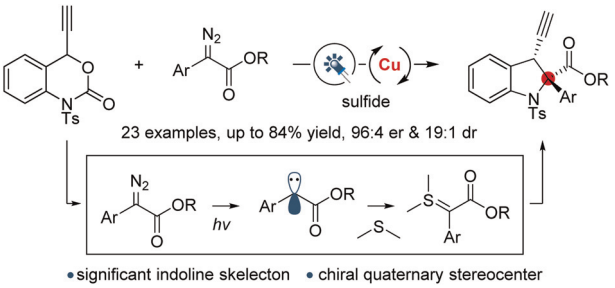
Photoinduced carbene transfer for copper-catalyzed asymmetric [4 + 1] cycloadditions: an entry to chiral indolines bearing quaternary stereocenters

Bao-Le Qu, Bin Shi, Lin He, Jun-Wei Shi, Wen-Jing Xiao and Liang-Qiu Lu*



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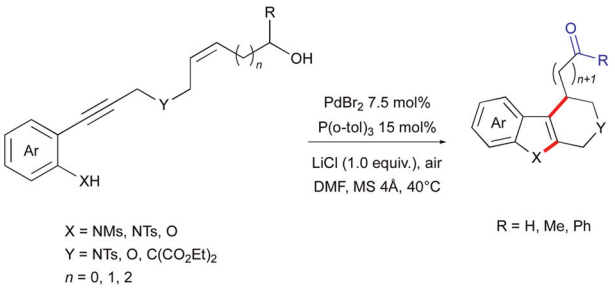

Palladium-catalyzed cascade cyclization/intramolecular redox-relay Heck arylation of alkenols: access to tetrahydro-β-carbolines from 2-(hydroxyalkenynyl)sulfonanilides

Tao Liu, Tuanli Yao,* Ruihua Guo* and Xiangyang Qin*

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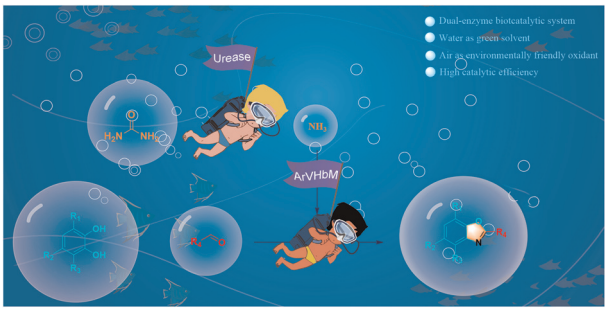
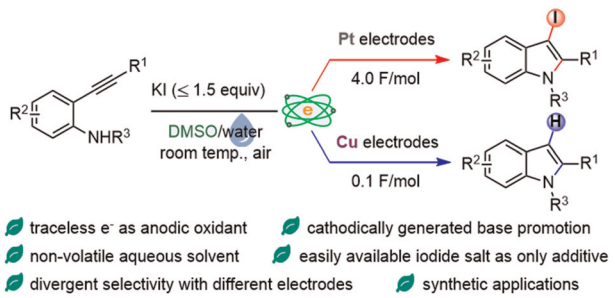


Novel dual-enzyme system for synthesis of 2-alkyl and 2-arylbenzoxazoles *via* aerobic oxidation

Fengxi Li, Yaning Xu, Yuelin Xu, Jinglin Ma, Hanqing Xie, Hengzheng Yang, Weiwei Han, Chunyu Wang, Zhengqiang Li* and Lei Wang*

3515



Divergent electrosynthesis of 3-iodoindoles and indoles from 2-ethynylanilines under ambient and aqueous conditions

Binbin Huang,* Guiling Chen, Haoxiang Zhang, Xinye Tang, Jiawei Yuan, Caicai Lu and Junlei Wang*

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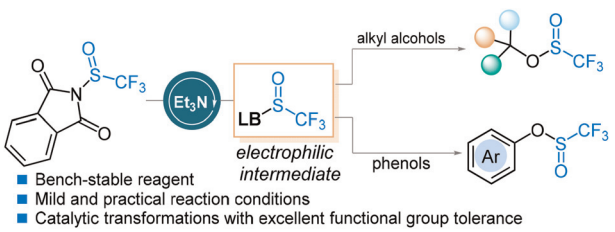

Lewis base-catalyzed trifluoromethylsulfinylation of alcohols and phenols: modular synthesis of trifluoromethanesulfinate esters

Wen Liu, Shuya Xing, Shao-Fei Ni, Cheng Ma, Qiujin Fan, Zhiyong Ye, Yanchuang Zhao, Ting Ouyang, Ying Bai* and Xinxin Shao

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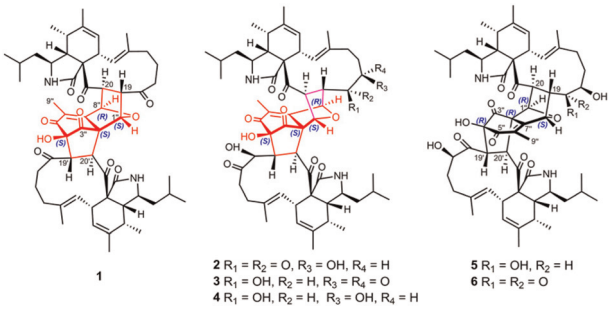
Amichalasines F–J: cytochalasan heterotrimers with mirror-imaged core structures from *Aspergillus micronesiensis*

Zhaodi Wu, Xiaotian Zhang, Qin Li, Qingyi Tong, Jing Yang, Chunmei Chen,* Hucheng Zhu* and Yonghui Zhang*



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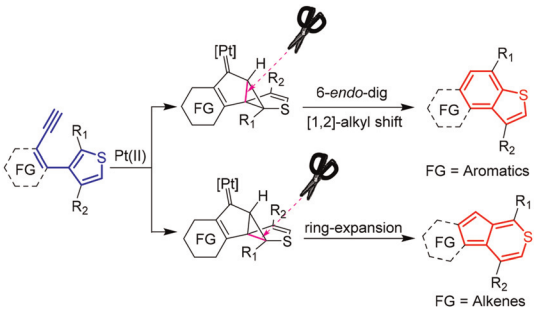
Selective 6-*endo*-*dig* and ring-expansion cycloisomerizations of *ortho*-disubstituted thiophenes bearing 1-en-3-yne moieties

Yingjian Ren, Zhanglang Zhou, Weinan Chen, Si Liu, Min Wang and Gang Zhou*



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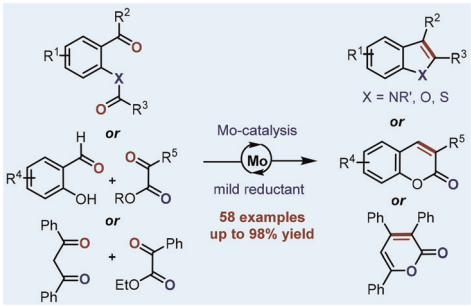
Molybdenum-catalyzed carbonyl–carbonyl olefination reaction for heterocycle syntheses

Yuan-Qing Dong, Xiao-Nan Shi, Li-Ya Cao, Jin Bai and Chun-Xiang Zhuo*



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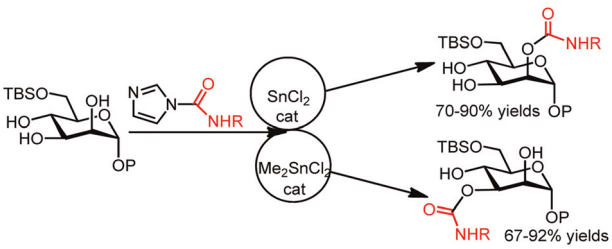
Site-selective carbamoylation of carbohydrates catalyzed by $SnCl_2/Me_2SnCl_2$ leading to complementary selectivity

Yang-Fan Guo, Tao Luo and Hai Dong*



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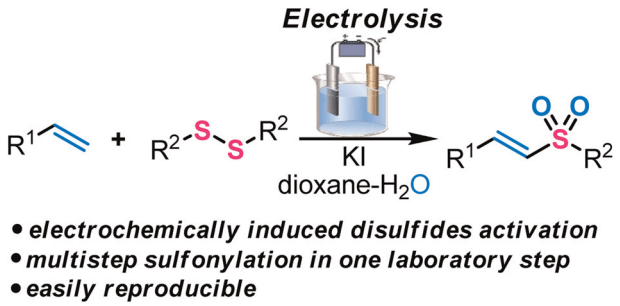

Disulfides as versatile starting reagents: effective sulfonylation of alkenes with disulfides under electrochemical conditions

Olga M. Mulina, Mikhail M. Doronin, Liang-Nian He and Alexander O. Terent'ev*

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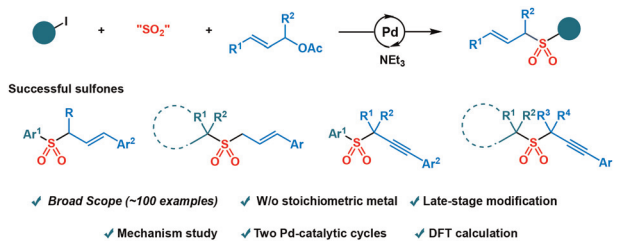

A palladium-catalyzed cross-electrophile coupling reaction involving sulfur dioxide for the direct synthesis of diversely functionalized sulfones

Baojian Xiong, Jinyu Zhang, Ting Wang, Xuemei Zhang, Gui-juan Cheng* and Zhong Lian*

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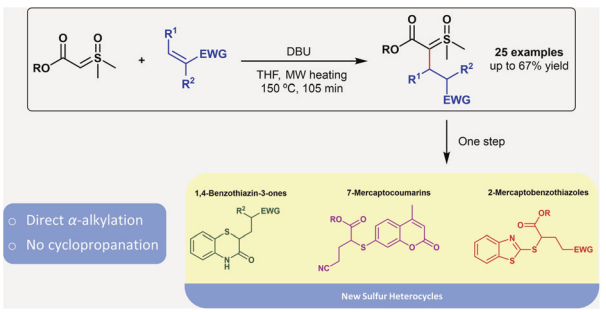

The α-alkylation of carbonyl sulfoxonium ylides: studies and applications in the synthesis of new sulfur heterocycles

Matheus P. de Jesus, Radell Echemendía and Antonio C. B. Burtoloso*

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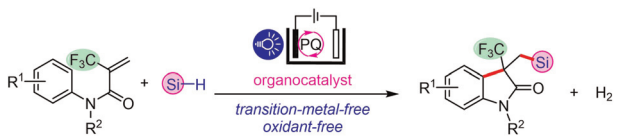

Organophotoelectrochemical silylation cyclization for the synthesis of silylated 3-CF_3-2-oxindoles

Qinhui Wan, Chen-Yin Huang, Zhong-Wei Hou,* Huajiang Jiang and Lei Wang*

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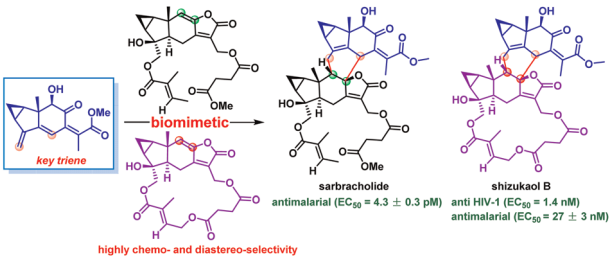
Asymmetric total syntheses of sarbracholide and shizukaol B

Ganxing Huang, Zhengsong Huang, Xianjian Ma, Zhihu Feng, Fengxia Yuan, Song Qin, Shaomin Fu* and Bo Liu*



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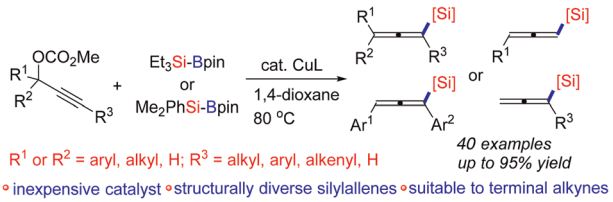
Copper-catalyzed silylation of propargyl carbonates: a general entry to allenylsilanes

He Zhang, Linjuan Jiang, Mei Yang and Yuanhong Liu*



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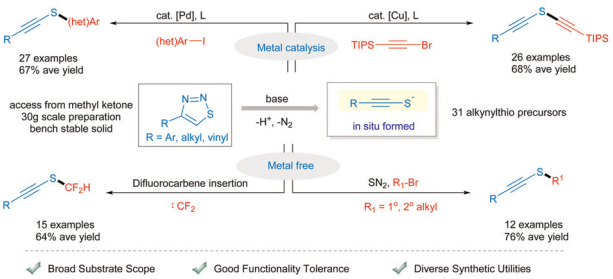
Alkyne/thio umpolung tactic replacement: synthesis of alkynyl sulfides *via* capturing the *in situ* formed alkynylthiolate anion

Donghui Xing, Mengxia Feng, Yuzhen Zheng, Bin Huang, Huanfeng Jiang and Liangbin Huang*



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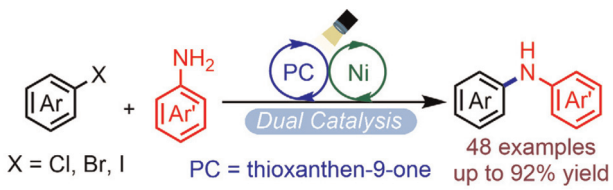
Visible-light-initiated nickel-catalyzed amination of aryl halides using thioxanthen-9-one as a photocatalyst

Da-Liang Zhu, Jie Li, David James Young, Yanqing Wang* and Hong-Xi Li*



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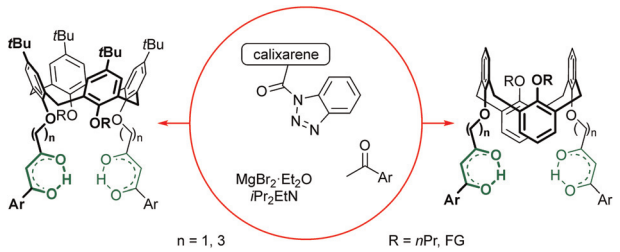

Enriching calixarene functionality with 1,3-diketone groups

Maria Sakovich, Daria Sokolova, Ivan Alekseev, Ivan Lentin, Alexander Gorbunov, Maria Malakhova, Ivan Ershov, Rustem Zairov, Ilia Korniltsev, Sergey Podyachev, Stanislav Bezzubov, Vladimir Kovalev and Ivan Vatsouro*

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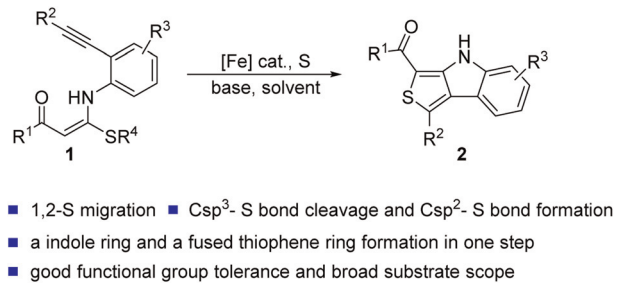

Fe/S cluster catalyzed cascade cyclization of *N,S*-1,6-enynes for the synthesis of thieno[3,4-*b*] indoles

Zhuqing Liu, Shaobin Sun and Jiang Lou*

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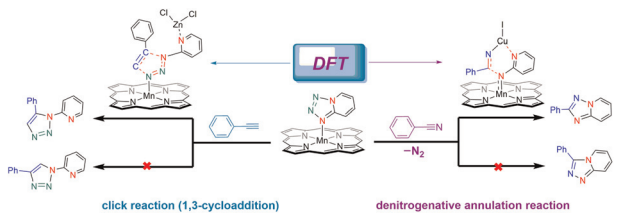

Mechanisms and origin of regioselectivity for manganese-catalyzed denitrogenative annulation and click reactions

Guanghui Song, Wei Rong, Yongyin Liu and Juan Li*

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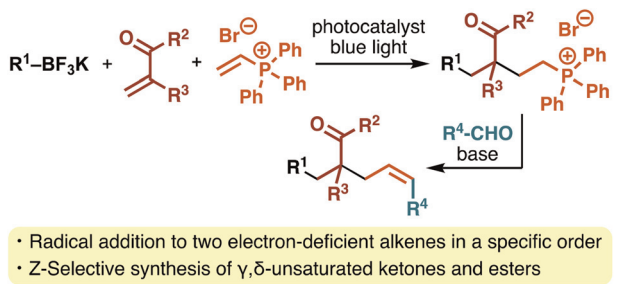

Sequence-selective three-component reactions of alkyltrifluoroborates with α,β-unsaturated carbonyl compounds and vinylphosphonium salts

Masaki Yoshida, Masaya Sawamura* and Yusuke Masuda*

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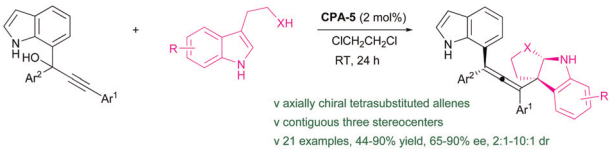
Organocatalytic enantioselective reaction of tertiary α-(7-indolyl)methanols with tryptamines

Zhibin Yue, Boming Shen, Jie Cao, Xuling Chen, Fang Fang, Pengfei Li,* Peiyuan Yu* and Wenjun Li*



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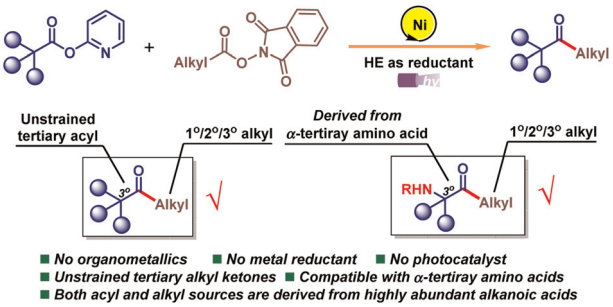
Photoinduced nickel-catalyzed reductive acyl cross-coupling: facile access to all carbon quaternary aliphatic ketones

Yukun Chen, Xiaoxiang Xi and Weiming Yuan*

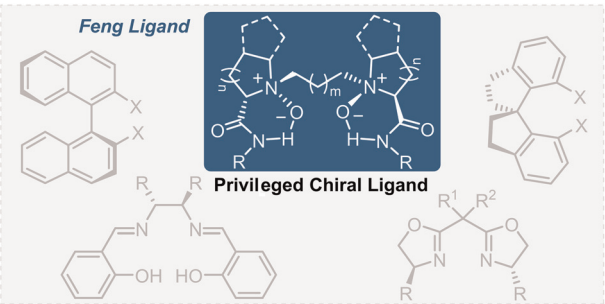


HIGHLIGHT

3676

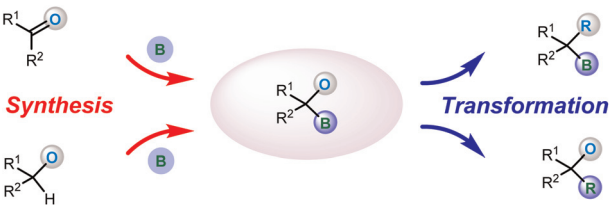
Feng chiral *N*,*N*′-dioxide ligands: uniqueness and impacts

Dian-Feng Chen and Liu-Zhu Gong*



REVIEW

3684

Recent advances in the chemistry of α-oxylboronate reagents

Nanquan Jiang, Du Chen and Chao Liu*