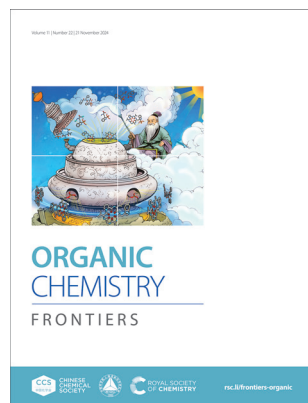


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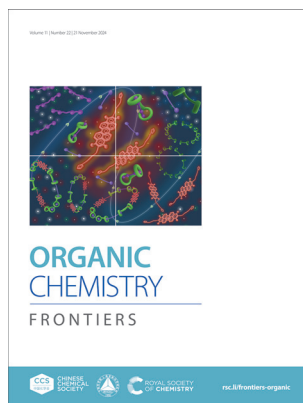
ISSN 2052-4129 CODEN OCFRA8 11(22) 6275-6590 (2024)



#### Cover

See Wenfang Xiong, Zhenyu Chen, Jinwu Zhao *et al.*, pp. 6287–6292.

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#### Inside cover

See Ilenia Pisagatti, Giuseppe Gattuso *et al.*, pp. 6293–6303.

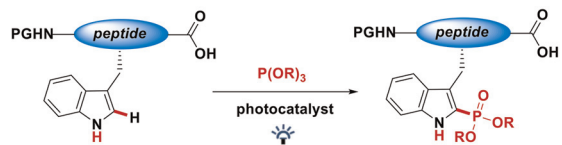
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### RESEARCH ARTICLES

6287

#### Visible-light mediated selective phosphonylation modification of tryptophan residues in oligopeptides

Wenfang Xiong,\* Junye He, Jinyao Liu, Peiru Chen, Shiqi Xu, Yipeng Liu, Shiting Chen, Yuanyuan You, Zhenyu Chen\* and Jinwu Zhao\*

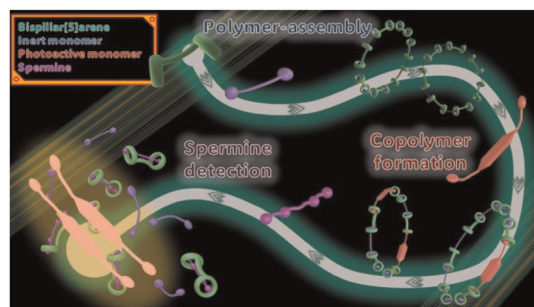


- Site-selective C-H phosphonylation
- Mild reaction conditions
- No directing groups
- Late-stage modification of natural peptides

6293

#### A pillar[5]arene-based three-component supramolecular copolymer for the fluorescence detection of spermine

Martina Mazzaferro, Daniele Crisafulli, Francesca Mancuso, Marco Milone, Fausto Puntoriero, Anna Irto, Salvatore Patanè, Valentina Greco, Alessandro Giuffrida, Ilenia Pisagatti,\* Anna Notti, Melchiorre F. Parisi and Giuseppe Gattuso\*



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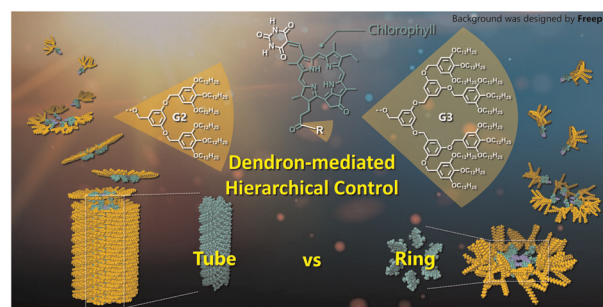
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## RESEARCH ARTICLES

6304

**Dendron-mediated control over self-assembly of chlorophyll rosettes into columnar vs. discrete aggregates**

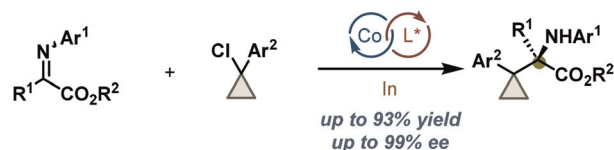
Ryo Kudo, Hiroki Hanayama,  
Balaraman Vedhanarayanan, Hitoshi Tamiaki,  
Nobuyuki Hara, Sarah E. Rogers, Martin J. Hollamby,  
Biplab Manna, Koji Harano and Shiki Yagai\*



6311

**Cobalt-catalyzed enantioselective reductive addition of ketimine with cyclopropyl chloride to construct chiral amino esters bearing cyclopropyl fragments**

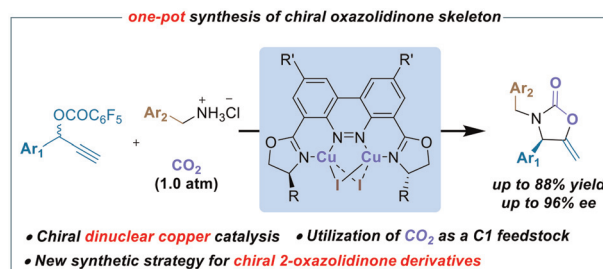
Jiangtao Hu, Tingting Xia, Xianqing Wu, Hongrui Feng,  
Jingping Qu and Yifeng Chen\*



6319

**Well-defined chiral dinuclear copper-catalyzed tandem asymmetric propargylic amination–carboxylative cyclization sequence toward chiral 2-oxazolidinone derivatives**

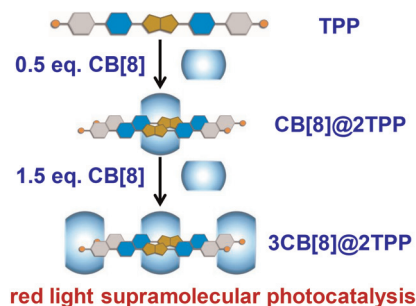
Yu Lan, Peng Liu, Zekai Fang, Lili Shao, Qilong Cai\* and  
Xiaoming Wang\*



6327

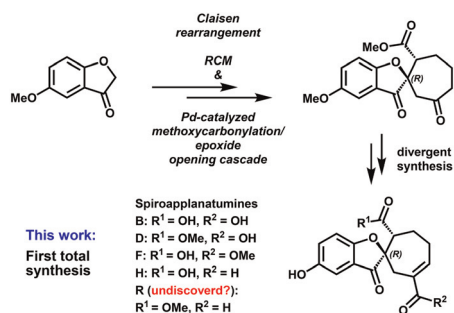
**A cucurbit[8]uril-mediated host–guest complex for red-light photocatalysis**

Weiyan Xu,\* Yinghao Du, He Ma, Xingchen Tang,  
Jiang-Fei Xu and Xi Zhang\*



## RESEARCH ARTICLES

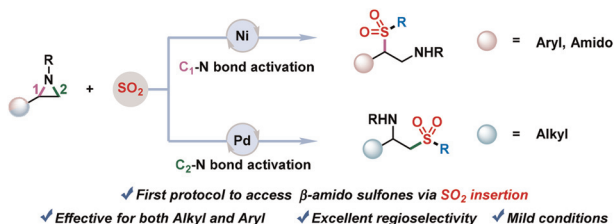
6333



### Total synthesis of spiro *Ganoderma* meroterpenoids spiroapplanatamines B, D, F, and H

Jia-Hao Zhang, Wen-Cai Luo, Wen-Tao Chen, Yu-Tao He\* and Ya-Jian Hu\*

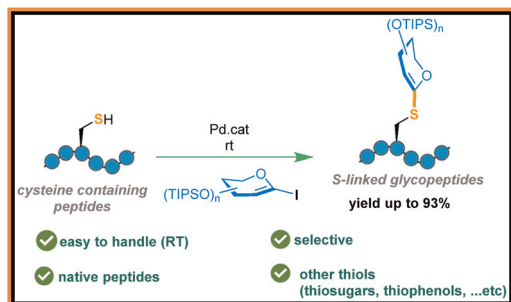
6340



### Transition-metal-catalyzed regioselective sulfonylation of aziridines for the synthesis of $\beta$ -amido sulfones

Qinqiong Zeng, Yujia Gong, Xiaochun He, Xuemei Zhang\* and Zhong Lian\*

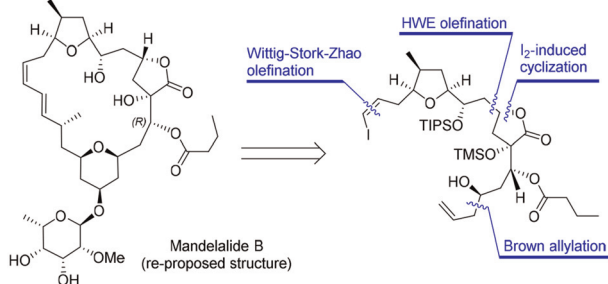
6347



### Pd-catalyzed S-glycosylation of cysteine-containing peptides at room temperature

Linhua Shen, Franck Le Bideau, Gong Chen and Samir Messaoudi\*

6353



### Towards the total synthesis of mandelalide B: construction of the tetrahydrofuran/ $\alpha$ -hydroxyl lactone fragment

Jia-Lei Yan, Jie Yu, Yingying Cheng, Mingze Yang, Zhengshuang Xu and Tao Ye\*

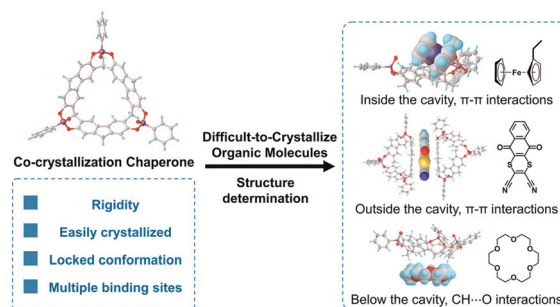


## RESEARCH ARTICLES

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## Structure determination of difficult-to-crystallize organic molecules by co-crystallization of a phosphorylated macrocycle

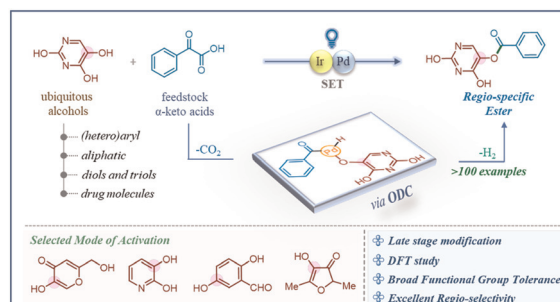
Heng Li, Zhijin Li, Juli Jiang,\* Chen Lin\* and Leyong Wang



6367

Iridium/palladium dual photocatalysis for oxidative decarboxylative esterification of alcohols using  $\alpha$ -keto acids

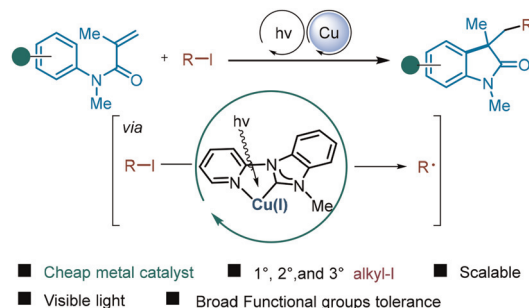
Subal Mondal, Soumya Mondal, Debabrata Halder, Siba P. Midya, Ankan Paul\* and Pradyut Ghosh\*



6380

## Visible-light excited copper activating unactivated alkyl iodides for radical addition/cyclization to access oxindole derivatives

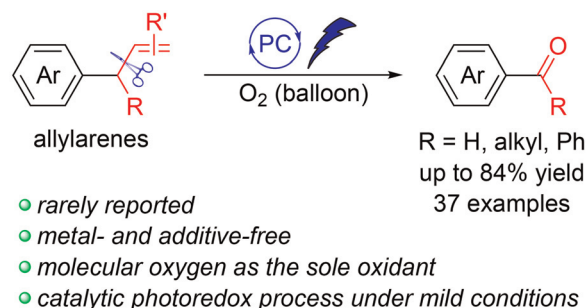
Hang Luo, Fangnian Yu and Luqing Lin\*



6385

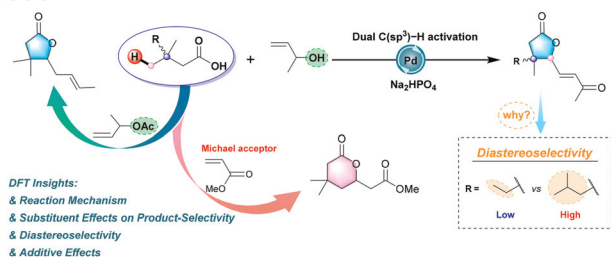
Visible light-induced aerobic photooxidative cleavage of  $\text{C}(\text{sp}^3)\text{-C}(\text{sp}^2)$   $\sigma$ -bonds of allylarenes

Jinyu Tang, Xi Zhao, Jinxuan Ni, Yanping Huo, Yang Gao, Xianwei Li, Yan Liu, Keiji Maruoka and Qian Chen\*



## RESEARCH ARTICLES

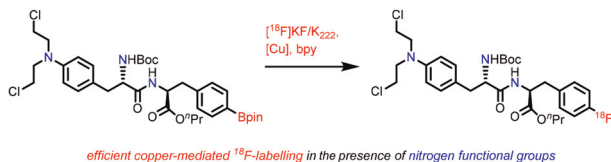
6393



### Theoretical insights into Pd-catalyzed dual $\gamma$ -1,1-C(sp<sup>3</sup>)-H activation of aliphatic carboxylic acids: mechanistic pathways, substituent influence on product selectivity, diastereoselectivity, and additive effects

Jiaoyang Liu, Li-juan Huang, Zeang Sun and Juan Li\*

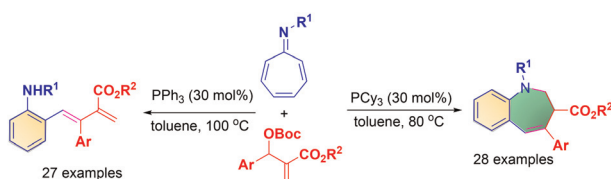
6411



### <sup>18</sup>F-labelling of nitrogen-containing aryl boronates – anti-cancer drug melflufen as a case study

Kevin Bajerke, Fredrik Lehmann, Gunnar Antoni and Kálmán J. Szabó\*

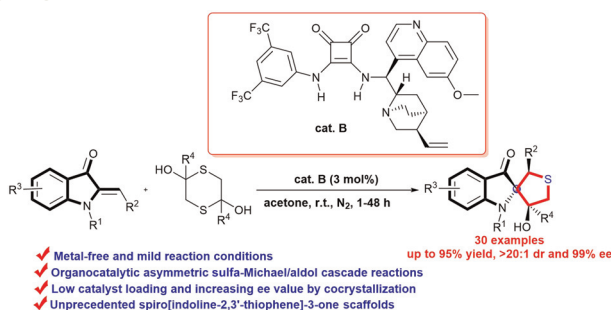
6418



### Phosphine-controlled divergent reactions of MBH-carbonates with azaheptafulvenes: access to *o*-anilyl diene and benzazepine derivatives

Wei Hao, Yiwen Zhang, Xiao Han, Zhen Wang\* and Weijun Yao\*

6426



### Chiral synthetic unprecedented spiro[indoline-2,3'-thiophen]-3-ones via an organocatalytic asymmetric sulfa-Michael/aldol cascade reaction

Mao Zhang, Xing-Hai Fei, Gui-Ping Yang, Cheng Lin, Wen-Jie Li, Ming-Liang Rao, Meng Zhou, Chong Zhao,\* Bin He\* and Yong-Long Zhao\*

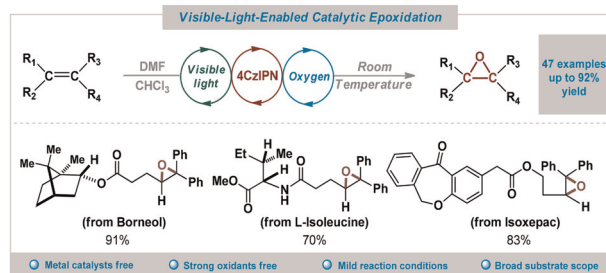


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## Visible-light-promoted catalytic epoxidation of alkenes under metal-free conditions

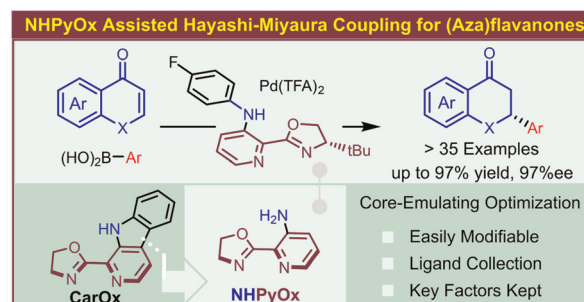
Dabao Tan, Xiaoyan Cai, Lele Zhang, Boyu Liu, Jianbin Zeng, Feiming Li, Zhixiong Cai, Mingqiang Huang, Xiaoping Chen and Shunyou Cai\*



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## Asymmetric synthesis of (aza)flavanones by the evolution of CarOx ligands

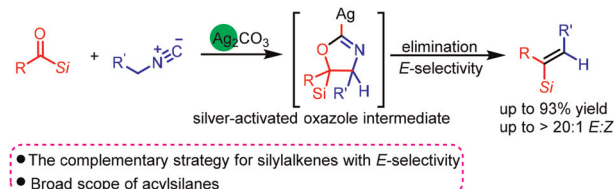
Juan Yang, Wenlong Kong, Mingxin Chang, Jixing Lai and Shengkun Li\*



6450

A general method for *E*-selective olefination of acylsilanes with isocyanides via silver catalysis

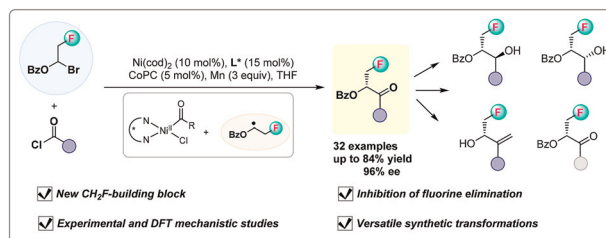
Xiu-Xia Liang, Dan-Ni Yang, Xiao-Hui Yan, Peng Wang\* and Man-Yi Han\*



6459

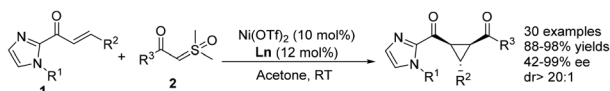
Nickel-catalysed enantioselective cross-electrophile coupling reaction with the retention of the  $\beta$ -fluorine atom

Xin-Yi Shi, Xueyuan Yan, Xiaodong Tang, Shi-Jing Zhai, Genping Huang, Jun-An Ma and Fa-Guang Zhang\*



## RESEARCH ARTICLES

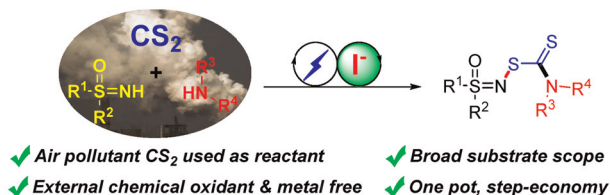
6470



### Design, synthesis and application of bipyridine-*N,N'*-dioxide catalysts in asymmetric synthesis of chiral cyclopropanes

Xiaoying Cao, Xue Tian, Minmin Liu and Shi-Wu Li\*

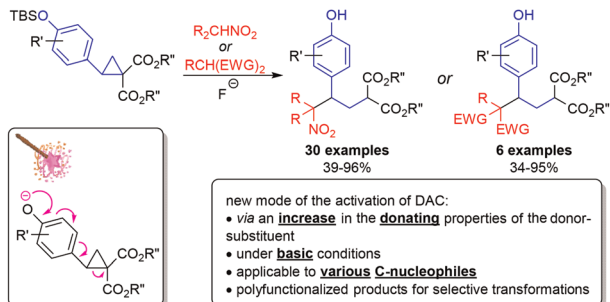
6477



### Electrochemical approach for upgrading the pollutant CS<sub>2</sub>: three-component N–H thio carbonylation of sulfoximines

Peng Qian,\* Wenjing Xiong, Qian Meng, Jinxiu Liu, Xiyuan Li and Liangquan Sheng\*

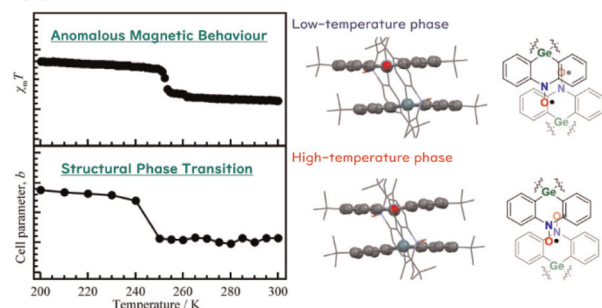
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### Activation of donor–acceptor cyclopropanes under basic conditions: ring opening of 2-(*p*-siloxyaryl)cyclopropane 1,1-dicarboxylates with nitro compounds and other C-nucleophiles

Yulia A. Antonova and Andrey A. Tabolin\*

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### Anomalous magnetic behaviour induced by a structural phase transition with anisotropic thermal expansion in a spirodiradical

Takuya Kanetomo,\* Daigo Matsunaga, Shinichi Ogawa and Masaya Enomoto\*



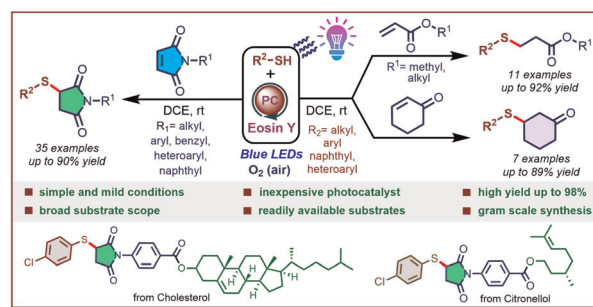


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## Sulfenylation of bioactive maleimides, acrylates and cyclohexenones under ambient organophotocatalysis

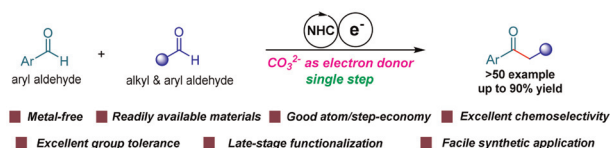
Debanjana Bag, Rajjakfur Rahaman,\* Anindya S. Manna, Subhasis Pal, Rajesh Nandi, Shobhon Aich, Narendra Nath Ghosh and Dilip K. Maiti\*



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Carbonate-assisted selectively deoxygenative cross-coupling reaction between aryl and aliphatic aldehydes: a straightforward route to access  $\alpha$ -alkylated aryl ketones

Yu Sun, Yi Wang and Zhijun Zuo\*

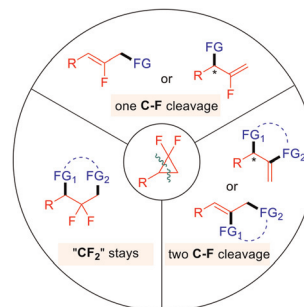


## REVIEWS

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Recent developments in the ring-opening transformations of *gem*-difluorocyclopropanes

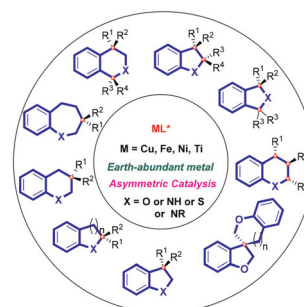
Leiyang Lv,\* Junqi Su and Zhiping Li



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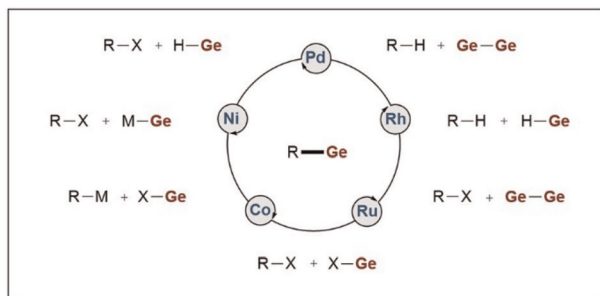
## Recent advances in asymmetric synthesis of chiral benzoheterocycles via Earth-abundant metal catalysis

Jinhui Cai,\* Wenting Zhang, Usman Muhammad,\* Weishuang Li\* and Yanjun Xie\*



## REVIEWS

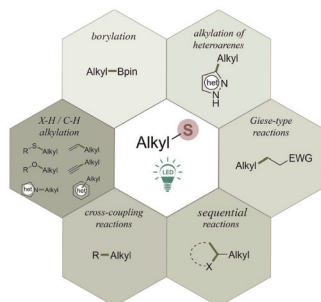
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### Transition-metal-catalyzed C–Ge coupling reactions

Jie Ke, Cadmus Du Chen, Li-Qing Ren, Bing Zu, Bin Li\* and Chuan He\*

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### Shining light on sulfonium salts and sulfur ylides: recent advances in alkylation under photoredox catalysis

Zhe Jin, Tingwei Yu, Hui Wang,\* Penghao Jia\* and You Huang\*

