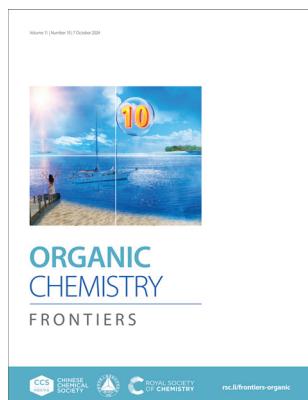


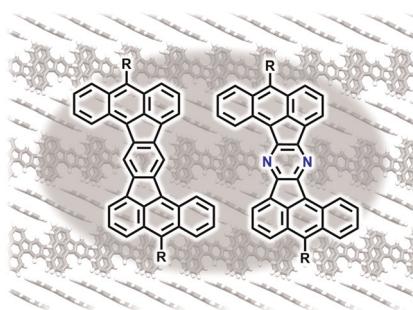
## IN THIS ISSUE

ISSN 2052-4129 CODEN OCFRA8 11(19) 5327–5672 (2024)

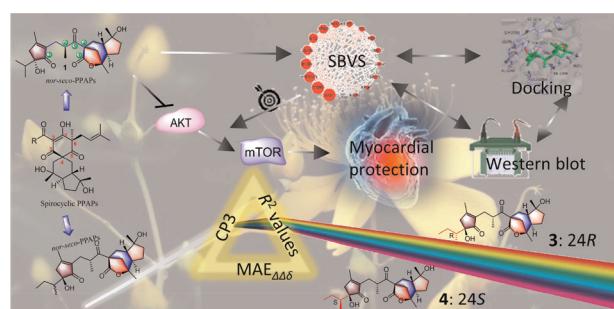
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2024, **11**, 5573.

## RESEARCH ARTICLES

5340

**Z-shaped polycyclic aromatic hydrocarbons with embedded five-membered rings and their application in organic thin-film transistors**Sven M. Elbert, Evelin Bolgert, Owen T. A. Paine,  
Farhad Ghalami, Wen-Shan Zhang, Ute Zschieschang,  
Frank Rominger, Dennis Popp, Hagen Klauk,  
Marcus Elstner and Michael Mastalerz\*

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**Unprecedented nor-seco-polycyclic  
polyprenylated acylphloroglucinols counteract  
myocardial cell injury via activation of the  
Akt/mTOR signaling pathway**Jiangchun Wei, Pingping Fan, Xingpiao Jin, Xinpeng Li,  
Zhiyue Li, Xuanluan Chen, Hanxiao Zeng, Zhengzhi Wu,\*  
Yonghui Zhang\* and Zhengxi Hu\*

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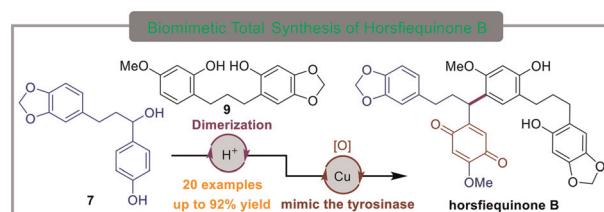
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**Biomimetic total synthesis of Horsfieldinone B enabled by a Friedel–Crafts alkylation (FCA)-type non-homodimerization**

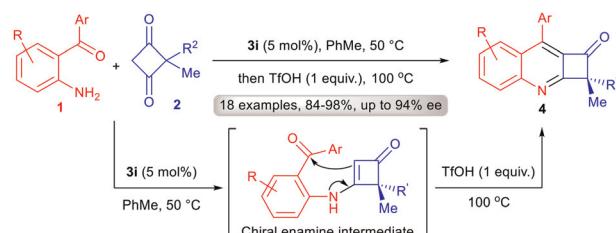
Lumin Li, Ruiling Liu, Rui Yang, Hanwei Li, Ya Liu, Rui Zhan, Wen-Jing Wang, Li-Dong Shao\* and Dashan Li\*



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**Catalytic asymmetric Friedländer condensation to construct cyclobutanone-fused quinolines with a quaternary stereogenic centre**

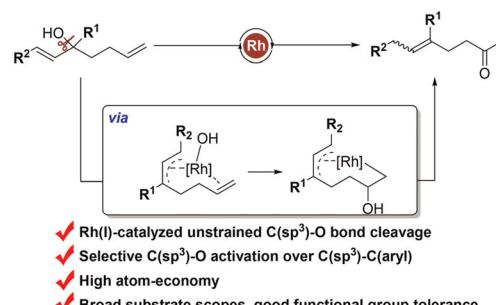
Li-E. Wang, Si Zhang, Ruo-Shi Jin, Yi-Yuan Peng, Qiu-Ping Ding and Xing-Ping Zeng\*



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**Rhodium-catalyzed 1,4-hydroxyl migration of alkenyl alcohols**

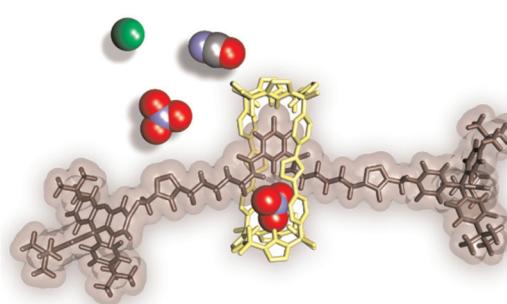
Xue Zhang, Jiang-Min Yan, Jia-Ning Zhang, Si-Qi Xiong, Cheng Liang, Qing-Hua Li\* and Tang-Lin Liu\*



5374

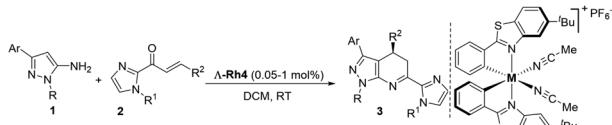
**Selective binding of nitrate by a neutral bis(calix[4]pyrrole) [2]rotaxane**

Yifan Li, Ricardo Molina-Muriel, Gemma Aragay\* and Pablo Ballester\*



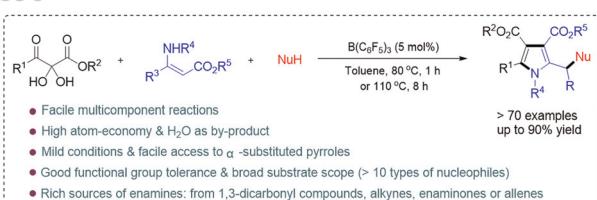
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**Asymmetric synthesis of 1*H*-pyrazolo[3,4-*b*]pyridine analogues catalyzed by chiral-at-metal Rh(III) complexes**

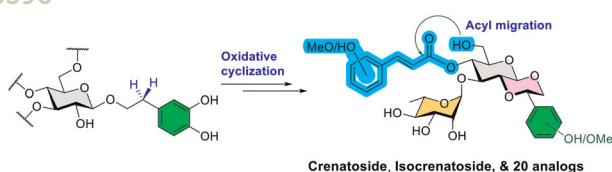
Xiang Ji, Shijie Zhu, Yongsheng Li,\* Zhifei Zhao and Shi-Wu Li\*

5390

**Facile synthesis of 5α-functionalized pyrroles via multicomponent reactions of vicinal tricarbonyl compounds, enamines, and nucleophiles**

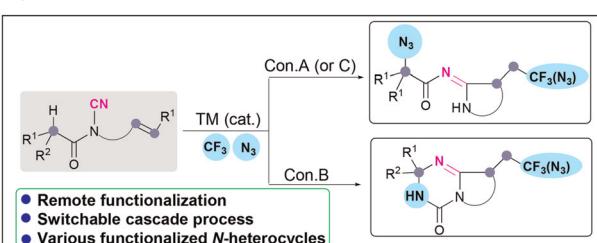
Hua-li Wan, Zhao-ping Shi and Qiang Sha\*

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**Bio-inspired synthesis and bioactivities of phenylethanoid glycoside crenatosides**

Qingqing Shi, Haotian Li, Tao Yang, Luyao Qi, Wei Tang,\* Peng Xu\* and Biao Yu\*

5401

**Transition metal-promoted switchable cascade processes: diverse synthesis of *N*-containing compounds through a remote trifluoromethylazidation/1,*n*-acyl migration sequence**

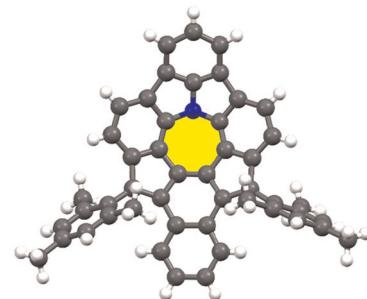
Ji-Ming Xi, Yan-Xin Zhang, Zhong-Lin Wei and Wei-Wei Liao\*

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**A nitrogen-doped bowl-shaped molecule containing a central heptagonal ring**

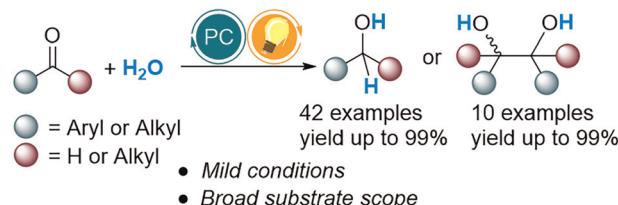
Tian Liu, Weifan Wang and Gang Zhang\*



5415

**Photoinduced catalytical reduction of carbonyl compounds using water as a hydrogen source**

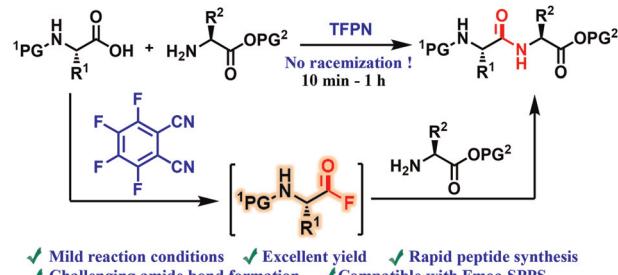
Shenhao Chen and Chanjuan Xi\*



5422

**TFPN-mediated racemization/epimerization-free amide and peptide bond formation**

Jinhua Yang,\* Dou Zhang, Yajing Chang, Bo Zhang, Peng Shen, Chunyu Han\* and Junfeng Zhao\*



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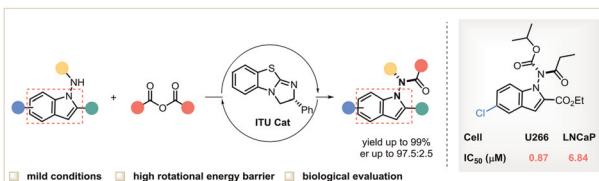
**Visible light-induced aerobic oxidation of an alkene catalyzed by thiobenzoic acid in water**

Wenjing Li,\* Chunye Liu, Lingling Liang, Jian Zhang and Yanqing Miao



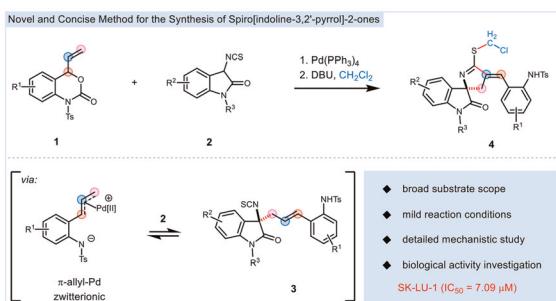
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**Asymmetric synthesis of acyclic N–N axially chiral indole compounds *via* catalytic N-acylation reaction**

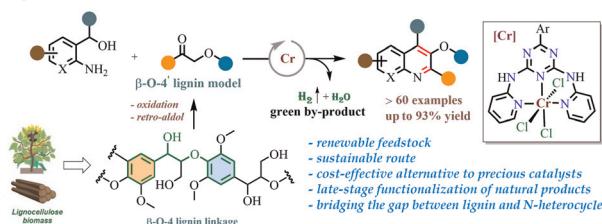
Zilu Huang, Yunyi Xu, Wei Lin, Rui Qian, Wei Zhang\* and Xin Li\*

5443

**Direct synthesis of spirooxindoles enabled by palladium-catalyzed allylic alkylation and DBU-mediated cyclization: concept, scope and applications**

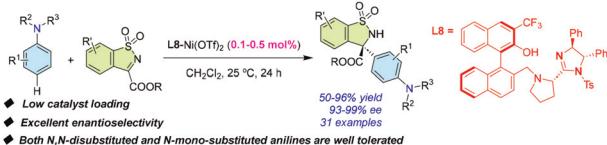
Fen Tan, Xiao-Yu He, Qiao-Qiao Zhou, Ya-Qiong Zhang,\* Man Deng, Qing-Qing Yang\* and You-Quan Zou\*

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**Chromium-catalysed selective synthesis of 3-oxo and 3-amino quinolines using β-O-4' lignin models or α-amino ketones**

Priyanka Adhikari, Asish Borah and Animesh Das\*

5462

**Enantioselective aza-Friedel–Crafts alkylation of aniline derivatives with cyclic N-sulfonyl α-ketiminoesters: the effect of catalyst confinement and the rationale behind the high enantioselectivity**

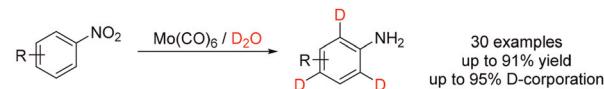
Jiahui Li, Shibo Yu, Lei He, Tianxu Yu, Leipeng Xue, Chao Yao\* and Yue-Ming Li\*

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**Molybdenum-mediated reductive deuteration of nitroarenes with D<sub>2</sub>O: synthesis of *ortho*- and *para*-deuterated anilines**

Jin-Liang Lu, Jing-Tong Deng, Ming Lang\* and Jin-Bao Peng\*

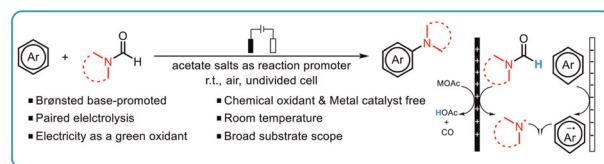


◆ reductive deuteration of nitroarenes   ▲ D<sub>2</sub>O as cheap and safe D-source  
▼ high selectivities, high D-incorporation   ♦ functional group compatible

5479

**Paired electrolysis enables weak Brønsted base-promoted amination of arenes with N,N-dialkyl formamides as the amine source**

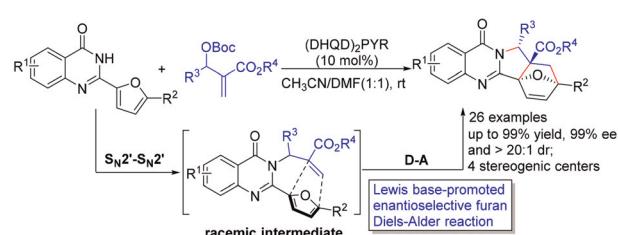
Xiao-Xia Ye, Min Liu, Shi-Yan Wang, Jin-Ming Zheng, Yi-Fei Li, Meng-Xiao Yan, Xiao-Dong Hu, Yan-Shu Luo,\* You-Yun Zeng, Yun-Rui Cai\* and Ren-Hao Li\*



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**Unveiling the role of Lewis bases in cascade furan Diels–Alder cycloadditions: asymmetric synthesis of polycyclic quinazolinones**

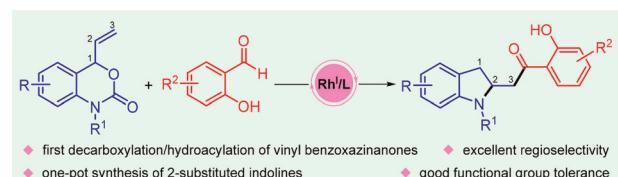
Yuhan Li, Dongyi Zhang, Zhonglin Wei, Zhuoqi Zhang, Jinbao Xiang\* and Lianyou Zheng\*



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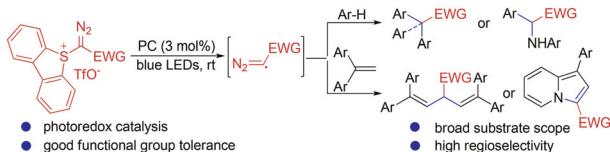
**Regioselective construction of 2-substituted indolines enabled by a rhodium-catalyzed decarboxylation–hydroacylation sequence**

Jun Zhao, Wen-Jing Yang, Yuan-Yi Lu, Yu Teng, Shi-Chao Lu\* and Hong-Shuang Li\*



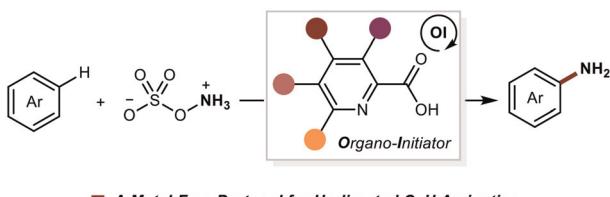
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**A visible light-induced photoredox-catalyzed assembly-point di/trifunctionalization of diazomethyl radicals**

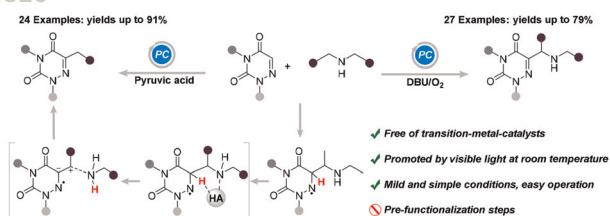
Xue-Cen Xu, Yuan Sang, Ming Yang, Bo-Wen He, Yi-Chong Zhang, Hai-Yan Yuan\* and Yu-Long Zhao\*

5511

**Organo-initiator enabled undirected C–H amination of arenes**

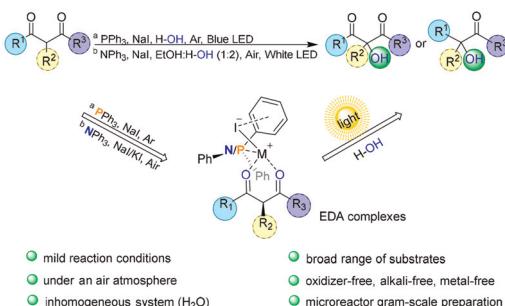
Zongxing Hu, Yanhui Bai and Honghui Lei\*

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**Pyruvic acid or DBU/O<sub>2</sub> guided organophotoredox-catalyzed direct C–H alkylation/α-aminoalkylation of 1,2,4-triazine-3,5(2H,4H)-diones with amines**

Zhao-Nan Cai, Xiaohui Cao,\* Hong-Yu Zhang,\* Yuecheng Zhang\* and Jiquan Zhao

5524

**Visible-light-driven α-hydroxylation of β-dicarbonyl compounds mediated by NaI/NPh<sub>3</sub> or NaI/PPh<sub>3</sub> in water**

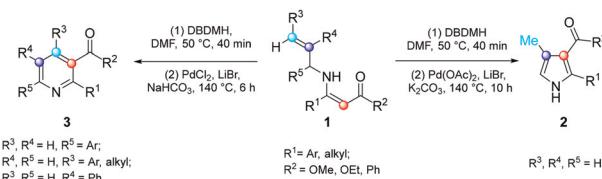
Yan Wang, Zhongjie Wang, Hui Luo, Guohui Wang, Zhendong Shi, Yinfeng Ma, Jianglong Wu, Dianjun Li\* and Jinhui Yang\*

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**Tandem site-selective bromination and highly regioselective Heck reaction of *N*-allyl enaminones: chemodivergent synthesis of polysubstituted pyrroles and pyridines**

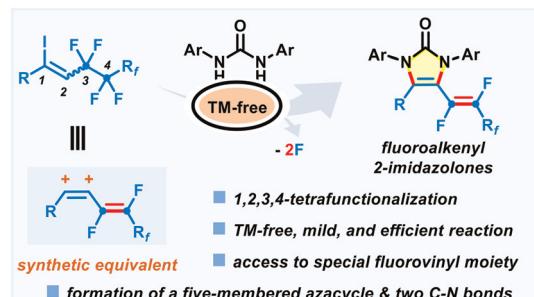
Xiyan Duan,\* Junqi Wang, Hui Li, Fengjiao Du, Ran Chen, Weidong Lian and Meixin Shi



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**Defluorinative functionalization of perfluoroalkyl alkenes with ureas: synthesis of C4-perfluoroalkenyl 2-imidazolones**

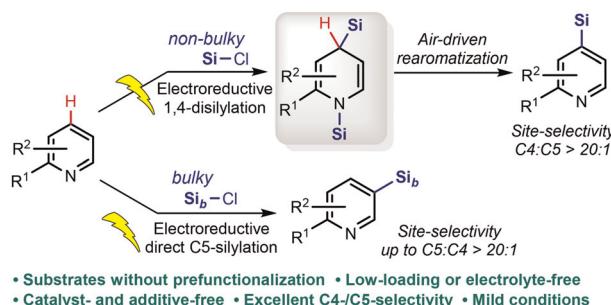
Wei Han, Ming-Yao Tang, Ye-Kun Chen, Mengtao Ma, Zhi-Liang Shen\* and Xue-Qiang Chu\*



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**Site-selective electrochemical C–H silylations of pyridines enabled by temporary reductive dearomatization**

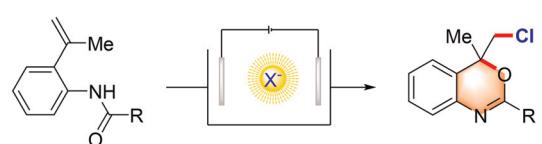
Zhihao Yang, Xuan Liu, Tianyuan Zhang,\* Hirofumi Maekawa, Xin-Qi Hao\* and Mao-Ping Song



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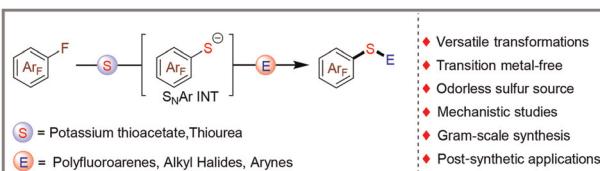
**Photoelectrochemical synthesis of 4-halomethyl benzoxazines with a halogen anion source**

Xiang Chen,\* Xiao Li, Hui Dai, Yao-Hui Wang, Zhi-Lin Wu and Wei-Min He\*



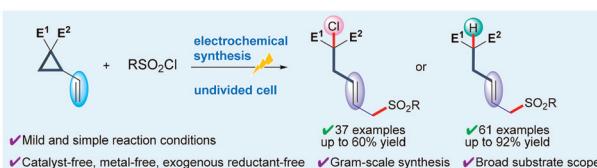
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**Transition metal-free synthesis of polyfluoroaryl sulfides via S-transfer reaction**

Yuhua Wang, Mengqin Liu, Heye Zhou, Tao Qin,\*  
Bin Liu\* and Xing Lu\*

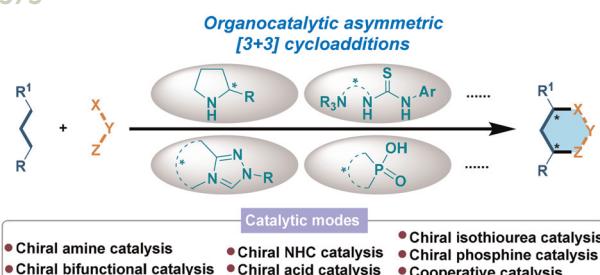
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**Electrochemical 1,5-chlorosulfonylation and 1,5-hydrosulfonylation of vinylcyclopropanes**

Xin Zhang, Wei Li, Yuxiang Zhou, Sihui Lv, Lichun Xu,  
Lou Shi,\* Yanni Li\* and Deqiang Liang\*

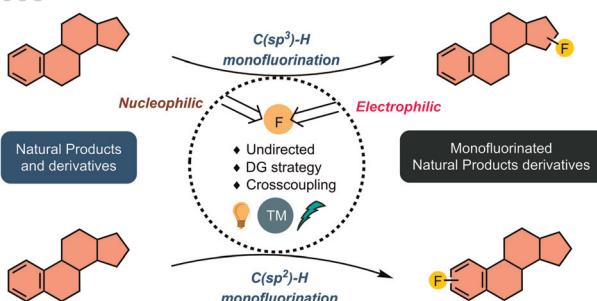
## REVIEWS

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**Advances in organocatalytic asymmetric [3 + 3] cycloadditions: synthesis of chiral six-membered (hetero)cyclic compounds**

Zi-Qi Zhu,\* Tian-Zhen Li, Si-Jia Liu and Feng Shi\*

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**Recent advances in late-stage monofluorination of natural products and their derivatives**

Amardeep Singh, Haritha Sindhe, Akshay Kamble,  
Karthikeyan Rajkumar, Vanshika Agrawal and  
Satyasheel Sharma\*



## REVIEWS

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**Post-functionalization of end-capped twistacenes with pyrene units**

Sujuan Wang, Tongtong Ye and Jinchong Xiao\*

