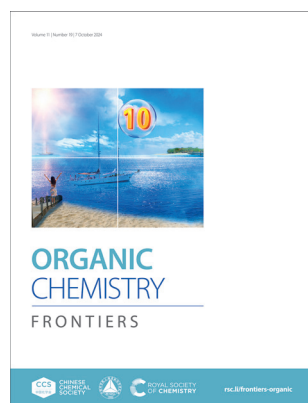


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Cover

See Zi-Qi Zhu, Feng Shi *et al.*, pp. 5573–5604.

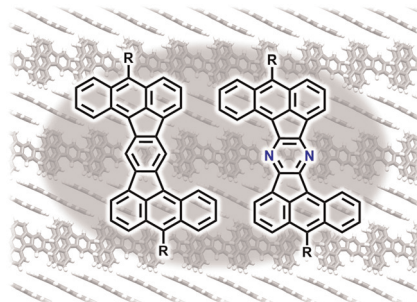
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RESEARCH ARTICLES

5340

Z-shaped polycyclic aromatic hydrocarbons with embedded five-membered rings and their application in organic thin-film transistors

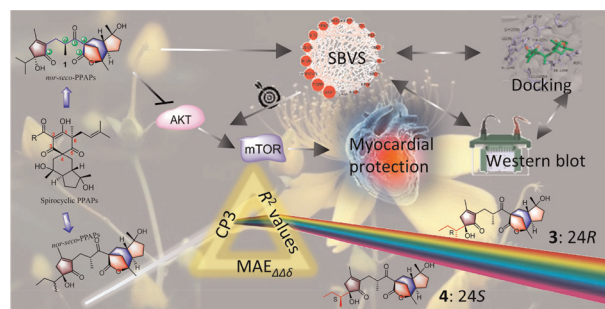
Sven M. Elbert, Evelin Bolgert, Owen T. A. Paine, Farhad Ghalami, Wen-Shan Zhang, Ute Zschieschang, Frank Rominger, Dennis Popp, Hagen Klauk, Marcus Elstner and Michael Mastalerz*



5350

Unprecedented *nor-seco*-polycyclic polyprenylated acylphloroglucinols counteract myocardial cell injury *via* activation of the Akt/mTOR signaling pathway

Jiangchun Wei, Pingping Fan, Xingpiao Jin, Xiping Li, Zhiyue Li, Xuanluan Chen, Hanxiao Zeng, Zhengzhi Wu,* Yonghui Zhang* and Zhengxi Hu*



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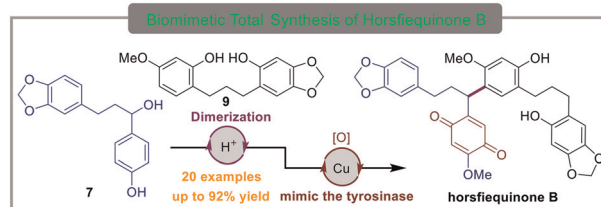
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RESEARCH ARTICLES

5358

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

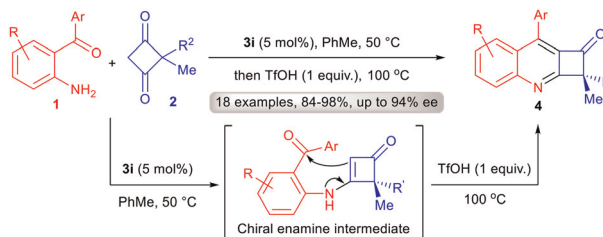
Lumin Li, Ruiling Liu, Rui Yang, Hanwei Li, Ya Liu, Rui Zhan, Wen-Jing Wang, Li-Dong Shao* and Dashan Li*



5363

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

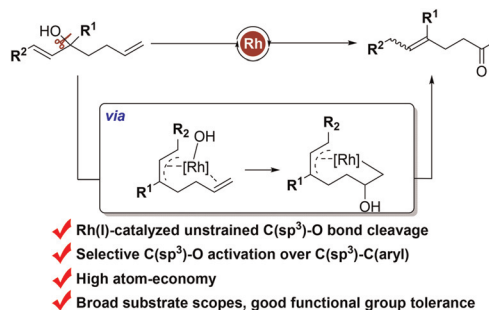
Li-E. Wang, Si Zhang, Ruo-Shi Jin, Yi-Yuan Peng, Qiu-Ping Ding and Xing-Ping Zeng*



5368

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

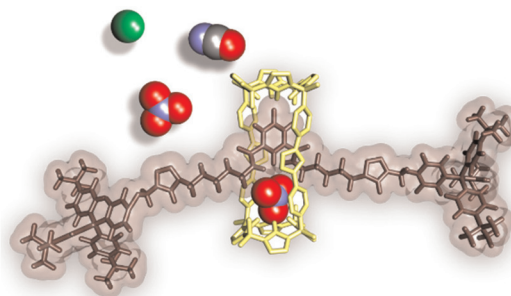
Xue Zhang, Jiang-Min Yan, Jia-Ning Zhang, Si-Qi Xiong, Cheng Liang, Qing-Hua Li* and Tang-Lin Liu*



5374

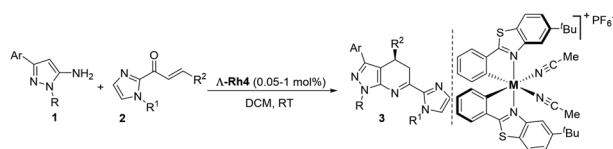
Selective binding of nitrate by a neutral bis(calix[4]pyrrole) [2]rotaxane

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



RESEARCH ARTICLES

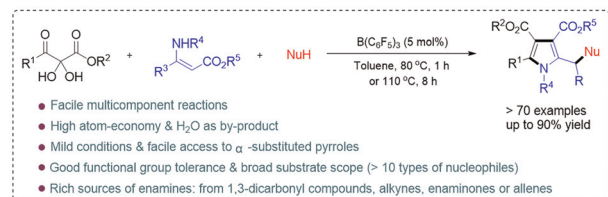
5385



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*

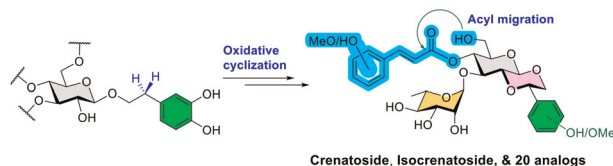
5390



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*

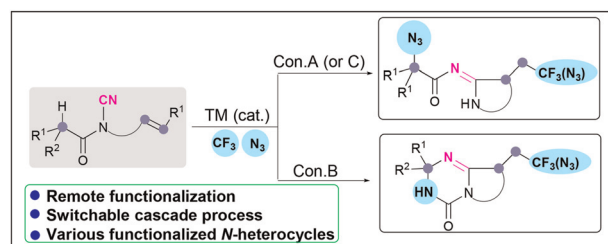
5396



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*

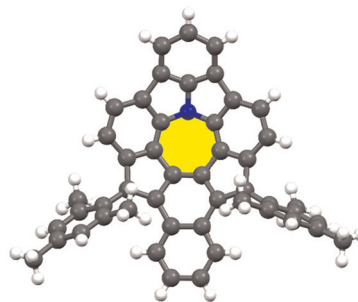


RESEARCH ARTICLES

5408

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

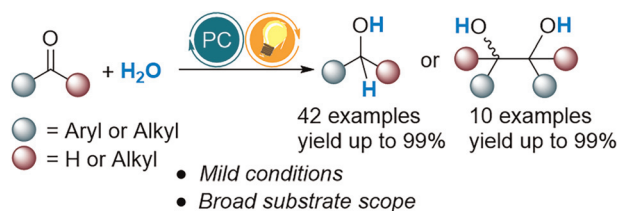
Tian Liu, Weifan Wang and Gang Zhang*



5415

Photoinduced catalytic reduction of carbonyl compounds using water as a hydrogen source

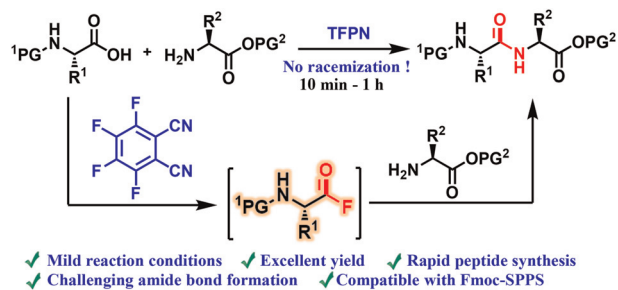
Shenhao Chen and Chanjuan Xi*



5422

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

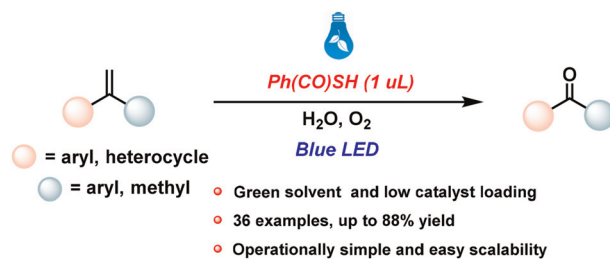
Jinhua Yang,* Dou Zhang, Yajing Chang, Bo Zhang, Peng Shen, Chunyu Han* and Junfeng Zhao*



5429

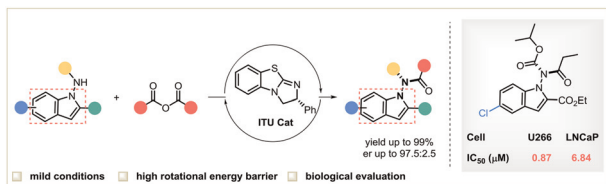
Visible light-induced aerobic oxidation of an alkene catalyzed by thiobenzoic acid in water

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



RESEARCH ARTICLES

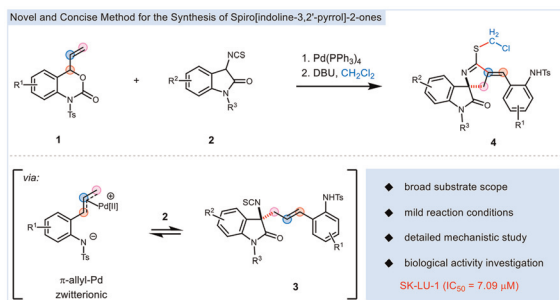
5437



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*

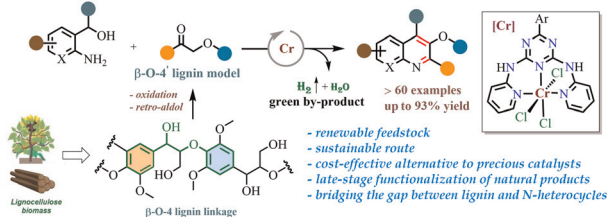
5443



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*

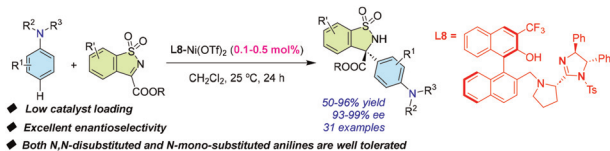
5454



Chromium-catalysed selective synthesis of 3-oxo and 3-amino quinolines using $\beta\text{-O-4'}$ lignin models or $\alpha\text{-amino ketones}$

Priyanka Adhikari, Asish Borah and Animesh Das*

5462



Enantioselective aza-Friedel–Crafts alkylation of aniline derivatives with cyclic N-sulfonyl $\alpha\text{-ketimoesters}$: 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*

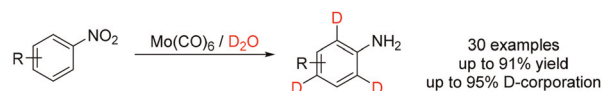


RESEARCH ARTICLES

5473

Molybdenum-mediated reductive deuteration of nitroarenes with D₂O: synthesis of *ortho*- and *para*-deuterated anilines

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

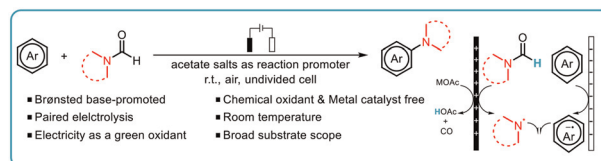


- ♣ reductive deuteration of nitroarenes
- ♣ D₂O as cheap and safe D-source
- ♥ high selectivities, high D-incorporation
- ♦ functional group compatible

5479

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

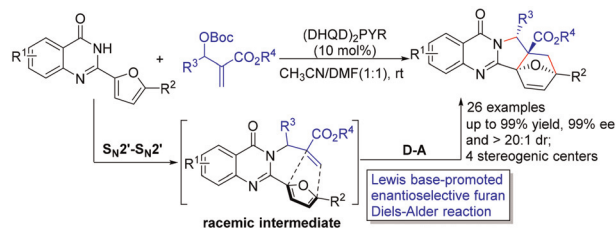
Xiao-Xia Ye, Min Liu, Shi-Yan Wang, Jin-Ming Zheng, Yi-Fei Li, Meng-Xiao Yan, Xiao-Dong Hu, Yan-Shu Luo,* You-Yun Zeng, Yun-Rui Cai* and Ren-Hao Li*



5488

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

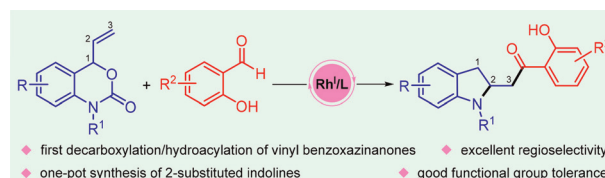
Yuhan Li, Dongyi Zhang, Zhonglin Wei, Zhuoqi Zhang, Jinbao Xiang* and Lianyou Zheng*



5495

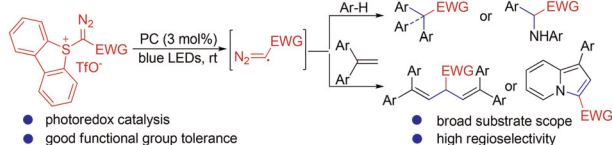
Regioselective construction of 2-substituted indolines enabled by a rhodium-catalyzed decarboxylation–hydroacylation sequence

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



RESEARCH ARTICLES

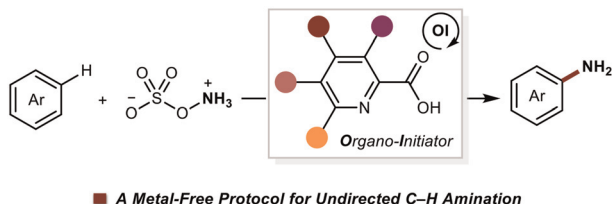
5502



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*

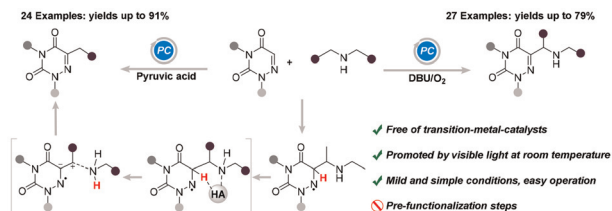
5511



Organo-initiator enabled undirected C–H amination of arenes

Zongxing Hu, Yanhui Bai and Honghui Lei*

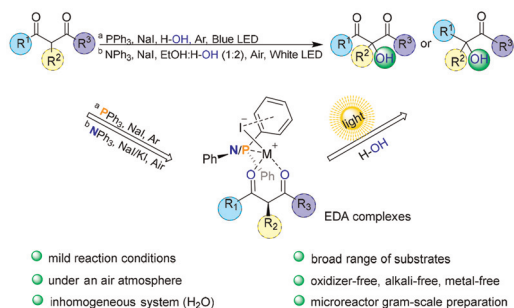
5516



Pyruvic acid or DBU/O₂ 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/NPh₃ or NaI/PPh₃ in water

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

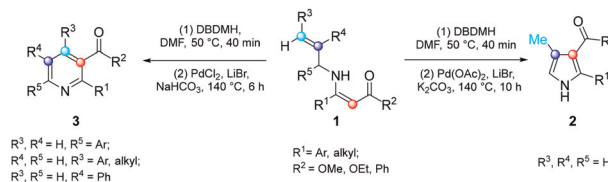


RESEARCH ARTICLES

5532

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

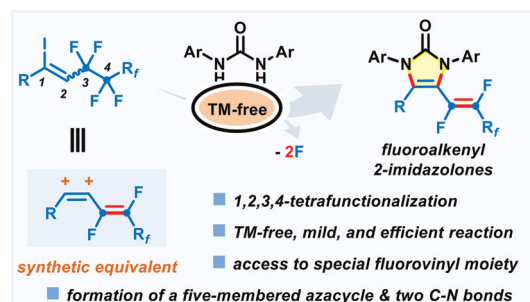
Xiyan Duan,* Junqi Wang, Hui Li, Fengjiao Du, Ran Chen, Weidong Lian and Meixin Shi



5538

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

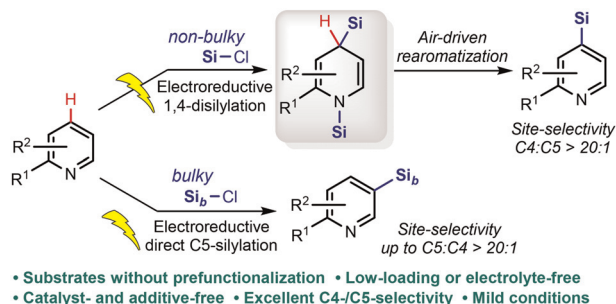
Wei Han, Ming-Yao Tang, Ye-Kun Chen, Mengtao Ma, Zhi-Liang Shen* and Xue-Qiang Chu*



5545

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

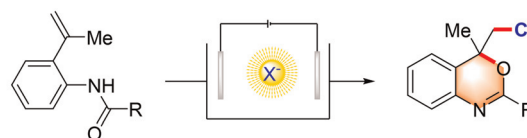
Zhihao Yang, Xuan Liu, Tianyuan Zhang,* Hirofumi Maekawa, Xin-Qi Hao* and Mao-Ping Song



5553

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*

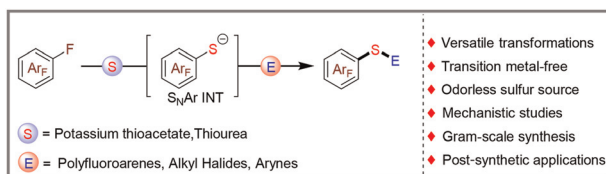


- 23 Examples, yields up to 92%
- Gram-scale reaction
- External electrolyte & chemical oxidant free
- Late-stage synthesis



RESEARCH ARTICLES

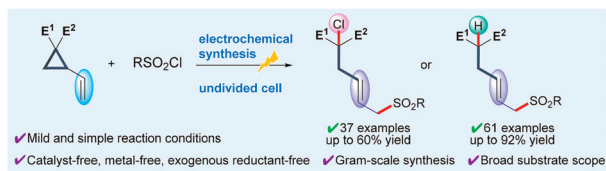
5558



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

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

5564

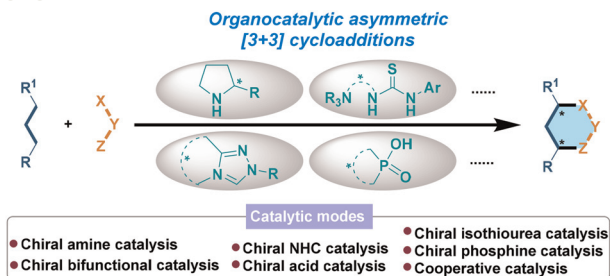


Electrochemical 1,5-chlorosulfonylation and 1,5-hydrosulfonylation of vinylcyclopropanes

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

REVIEWS

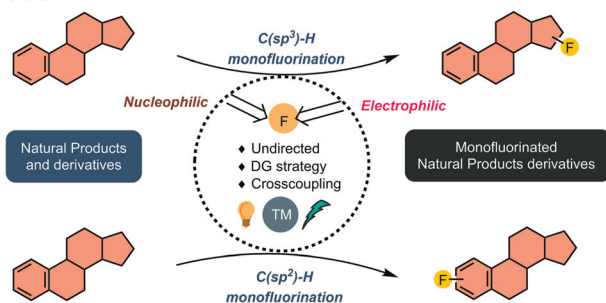
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Advances in organocatalytic asymmetric [3 + 3] cycloadditions: synthesis of chiral six-membered (hetero)cyclic compounds

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

5605



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

5638

Post-functionalization of end-capped twistacenes with pyrene units

Sujuan Wang, Tongtong Ye and Jinchong Xiao*

