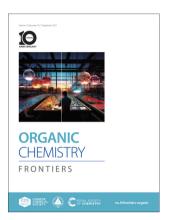
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#### IN THIS ISSUE

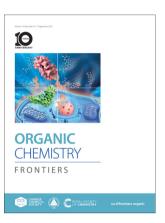
ISSN 2052-4129 CODEN OCFRA8 10(17) 4213-4462 (2023)



#### Cover

See Chau Ming So et al., pp. 4408-4436.

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#### Inside cover

See Lei Chen, Jun Yang et al., pp. 4223-4229.

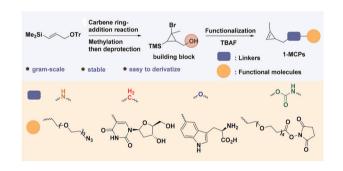
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#### **RESEARCH ARTICLES**

4223

Scalable synthesis of highly stable cyclopropene building blocks: application for bioorthogonal ligation with tetrazines

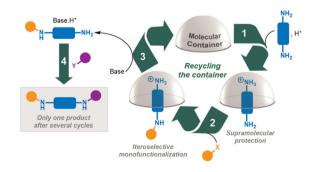
Lei Chen,\* Yuan Yang, Fei Li, Fei Jin, Bin He and Jun Yang\*



#### 4230

Supramolecular protection with a recyclable molecular container: an efficient strategy for the one-pot selective functionalization of polyfunctional substrates

Simon Lambert, Kristin Bartik\* and Ivan Jabin\*



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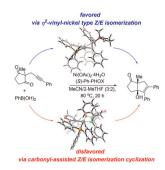
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#### 4243

Mechanistic insight into anti-carbometalation of an alkyne via  $\eta^2$ -vinyl-nickel type Z/E isomerization

Chunhui Shan,\* Miaomiao He, Xiaoling Luo, Rong Li and Tao Zhang\*



#### 4250

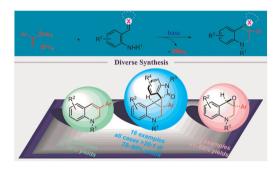
Metal-free reductive acyldifluoroalkylation of alkenes through cooperative NHC and organophotocatalysis

Zhenhui Wang, Xiaofeng Li, Wei Li, Yongyong Cao\* and Huaifeng Li\*

#### 4256

Diverse synthesis of functionalized hydroguinoline derivatives from  $\alpha$ -aryl vinylsulfonium salts

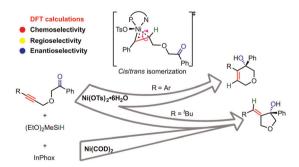
Zhen-Hua Wang,\* Tong Zhang, Qing-Fei Yan, Jian-Qiang Zhao, Yong You, Yan-Ping Zhang, Jun-Qing Yin and Wei-Cheng Yuan\*



#### 4263

DFT study of Ni-catalyzed intramolecular asymmetric anti-hydrometalative cyclization of alkynone: mechanism and origins of selectivity

Jinxia Li, Dingyi Tang, Yu Zhang, Weichi Chen, Xiaoxi Su, Peiyuan Yu\* and Shuanglin Qu\*



#### 4275

Direct decarbonylative thioetherification of carboxylic acids



■ C(sp²) -S bond formation
■ ubiquitous carboxylic acids

C-O/S-H bond activation
 valuable aryl sulfides

## Predominant intermolecular decarbonylative thioetherification of carboxylic acids using nickel precatalysts

Haiyao Ji, Han Cao, Guan Wang, Feifei Xing,\* Michal Szostak\* and Chengwei Liu\*

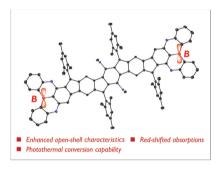
#### 4282

- naminones acting as economical, easy-to-handle C5 synthon
- Unprecedented [5 + 1] spiroannulation giving valuable skeleton
- High efficiency, good atom-economy and ready scalability

Synthesis of homophthalimide spironaphthalenones through [5 + 1] spiroannulation of aryl/alkenyl enaminones with diazo homophthalimides

Chun Yang, Xinying Zhang\* and Xuesen Fan\*

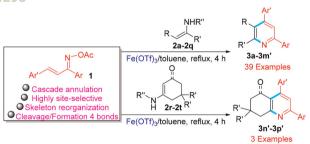
#### 4289



# Ladder-type boron-containing $\pi$ -systems with enhanced open-shell characteristics and photothermal conversion properties

Zeyi Li, Tingting Sun, Jiaxiang Guo, Xinyu Tian, Yujia Liu, Shihou Sheng,\* Kaiqi Ye, Zhigang Xie\* and Chuandong Dou\*

#### 4298



## Fe(OTf)<sub>3</sub>-catalyzed annulation of $\alpha$ , $\beta$ -unsaturated ketoxime acetates with enaminones for the synthesis of functionalized 2,4-diarylpyridines

Xing-Mei Hu, Jing Yang, Jia-Ming Yang, Bi-Na Shao, Rong Huang\* and Sheng-Jiao Yan\*

#### 4305

Assembly of iodinated indolo[1,2-c]quinazoline amines via I<sub>2</sub>/CHP-promoted cascade annulation of isocyanides and diarylalkynes

Min Zhang, Meng Li, Huanfeng Jiang, Biao Nie\* and Wanging Wu\*



#### 4311

Garcimultiflins A-C, unusual polycyclic polyprenylated acylphloroglucinols from the pericarps of Garcinia multiflora as interleukin-18 and pyroptosis inhibitors

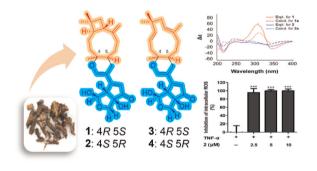
Jun Cao, Jiali Chen, Rongrong Du, Qingwen Zhang, Lishe Gan, Peicheng Zhang\* and Ligen Lin\*



#### 4320

Patriniaterpenes A-D: unveiling the unique structure and antioxidant properties of monoterpene-sesquiterpene conjugates from Patrinia scabra

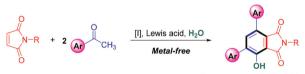
So-Ri Son, Geum Jin Kim, Yea Jung Choi, Sang Hee Shim, Joo-Won Nam, Sullim Lee, Dae Sik Jang\* and Hyukjae Choi\*



### 4329

Water as an oxygen source in I2-mediated construction of highly functionalized maleimide-fused phenols

Shuowen Wang, Zhi Huang, Ruitong Yang, Ya Chen,\* Wen Shao, Guojiang Mao and Guo-Jun Deng\*



One-step, up to 85% yield

- Water as an oxygen source
   Multiple C-C/C-O bonds formation
- Metal-free conditions Construction of novel highly functionalized phenols

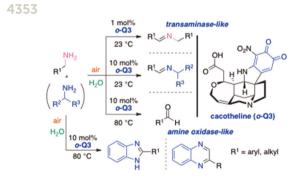
#### 4336

### A theoretical study of selective radical relay and coupling reactions for alkene difunctionalization

Kai Yang, Jiabin Liu, Dongmin Fu, Linbin Niu,\* Shi-Jun Li\* and Yu Lan\*

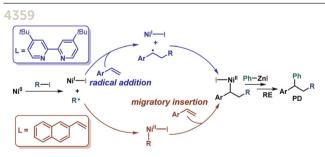
## Functionalization of 10-azacorroles: nitration, bromination and acylation

Sha Li, Yuhuan Zhu, Xiaofang Li,\* Shaowei Zhang,\* Michał J. Białek and Piotr J. Chmielewski\*



# A biomimetic approach to aerobic oxidation of amines in water *via* a redox-active cacotheline organocatalyst

Jisun Baek, Hun Young Kim and Kyungsoo Oh\*



Investigation of the activation mode of vinylarene in Giri's Ni-catalyzed vinylarene intermolecular 1,2-alkylarylation cross-coupling: a theoretical study

Song Liu,\* Dianmin Zhang,\* Xiaoqing Zhang, Yuyan Cheng and Hong Deng

#### 4368

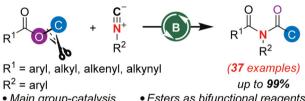
Direct transfer of a trifluoromethylsulfinyl group by a general reagent N-trifluoromethylsulfinylphthalimide under a catalytic or stoichiometric Lewis acid or Lewis base

Liuqing Yang, Shuo Wang, Fangcan Liang, Ying Han, Yilong Li, Dingjian Shan, Lulu Liu, Qingling Wang\* and Dianhu Zhu\*

#### 4381

Boron Lewis acid-catalyzed formal insertion of isocyanides into a C-O bond of benzyl esters

Tong-Tong Xu, Yuanjiu Xiao, Jin-Lan Zhou, Lei Tang, Feng Wu, Jiang-Yi-Hui Sheng, Wen-Biao Wu\* and Jian-Jun Feng\*



- Main group-catalysis
- · Esters as bifunctional reagents
- Step- & Atom-economy Late-stage functionalization

#### 4388

Facile synthesis of chiral 2-functionalized tetrahydroquinolines via Pd/Cu-catalyzed cascade  $\gamma$ -C(sp<sup>3</sup>)-H arylation/C-N coupling of amides derived from amino acids and their derivatives

Dian Yu, Si-Yuan Peng, Han Wang, Qiu-Cui Zheng, Ya-Hui Ma, Dong-Yi Xiao, Qian-Li Li, Wen-Shu Wang, Xiao-Jie Cui and Fei-Xian Luo\*

 $R = CO_2Me$ ,  $CH_2CO_2Me$ , or  $CH_2OR'$ 

Facile synthesis of chiral tetrahydroquinolines from amino acids

- √ good regioselectivity
- √ good chirality maintenance
- √ broad functional group compatibility

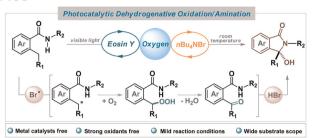
#### 4394

Selective  $N-\alpha$ -C-H alkylation of cyclic tertiary amides via visible-light-mediated 1,5-hydrogen atom transfer

Junlei Wang,\* Qinglin Xie, Guocheng Gao, Hongqing Li, Wenyun Lu,\* Xiaodong Cai, Xuemei Chen and Binbin Huang\*

- mild reaction conditions
- Oup to 40 examples
- agood selectivity
- Late-stage modification of natural products and pharmaceutical molecules

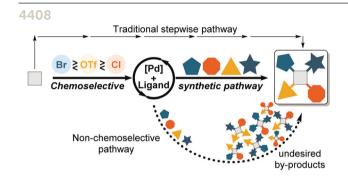
#### 4400



#### Photocatalytic dehydrogenative oxidation/ amination of 2-alkyl benzamides under transitionmetal-free conditions

Yushen Yu, Zhihui Liang, Lele Zhang, Yuhan Lin, Min Liu, Shanshan Wang, Minggiang Huang, Lina Cai and Shunyou Cai\*

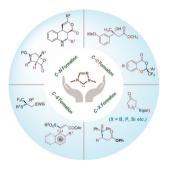
#### **REVIEWS**



Recent advances in the application of ligands in palladium-catalyzed chemoselective coupling reactions at C-Br, C-OTf, and C-Cl sites

Shan Shan Ng, Wai Hang Pang, On Ying Yuen and Chau Ming So\*

4437



Catalyst-controlled stereoselective carbonheteroatom bond formations by N-heterocyclic carbene (NHC) organocatalysis

Yanyan Wang, Yonggui Liu, Sha Zhao, Yijie Long and Xingxing Wu\*

#### **CORRECTION**

#### 4459

Correction: Functionalization of 10-azacorroles: nitration, bromination and acylation

Sha Li, Yuhuan Zhu, Xiaofang Li,\* Shaowei Zhang,\* Michał J. Białek and Piotr J. Chmielewski\*