

# Organic & Biomolecular Chemistry

An international journal of synthetic, physical and biomolecular organic chemistry

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## IN THIS ISSUE

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### Cover

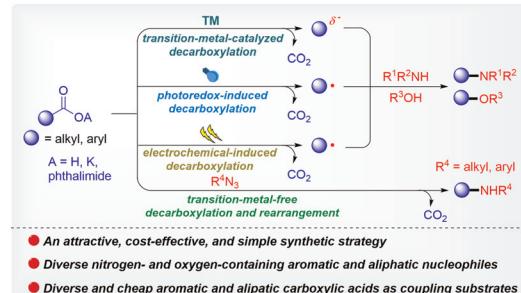
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## REVIEWS

7367

### From carboxylic acids or their derivatives to amines and ethers: modern decarboxylative approaches for sustainable C–N and C–O bond formation

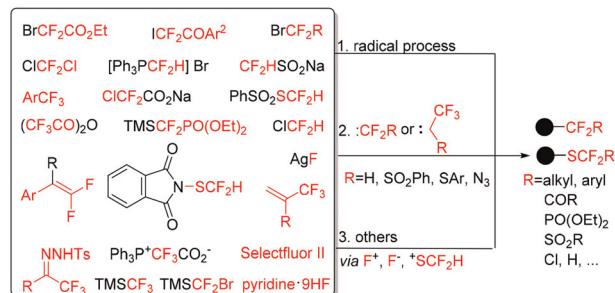
Weidan Yan, Tian Tian and Yasushi Nishihara\*



7383

### Recent advances in the three-component synthesis of difluorinated compounds

Zhan-Yong Wang,\* Ziyan Zhang, Weiyi Chen, Yang Liu, Aili Sun\* and Ran Xia\*



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## COMMUNICATIONS

7401

**Ball-milling-mediated remote asymmetric reductive coupling in air**

Hao Lei, Yufang Yang, Jiajia Sun, Shu Fan, Xiaofeng Wei,\* Siyuan Wang,\* Hai-Shu Lin\* and Yan Kang\*



7406

**Visible light-induced cascade cyclization of 2-isocyanoaryl thioethers/selenoethers: access to 2-arylthiobenzothiazoles/2-arylthiobenzoselenazoles**

Dan Liu, Shichao Yang, Huanfeng Jiang and Wanqing Wu\*

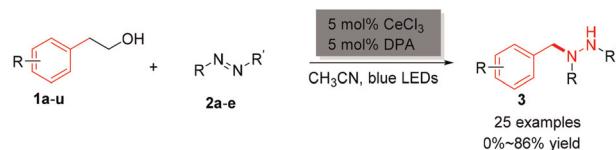


▲ Photocatalyst-, oxidant-, additive-free   ▲ Mild and redox-neutral conditions  
 ▲ One-pot construction of two C-S bonds   ▲ Good to excellent yields

7411

**Efficient photocatalytic synthesis of benzylhydrazine**

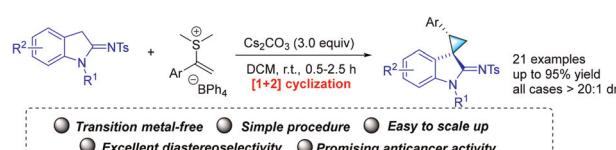
Yuhui Zhang, Fei Zeng, Yangyang Li, Meiqi Zhou, Jiafan Wang and Bingzhen Ma\*



7415

**Diastereoselective synthesis of spiro[cyclopropane-1,3'-indolin]-2'-imines via a sequential [1 + 2] annulation reaction of indolin-2-imines with  $\alpha$ -aryl vinylsulfonium salts**

Yan Gou, Shanling Hou, Qingyi Fu, Zhi Fan and Yuming Li\*

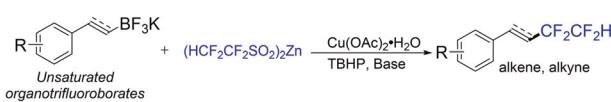


● Transition metal-free   ● Simple procedure   ● Easy to scale up  
 ● Excellent diastereoselectivity   ● Promising anticancer activity



## COMMUNICATIONS

7420

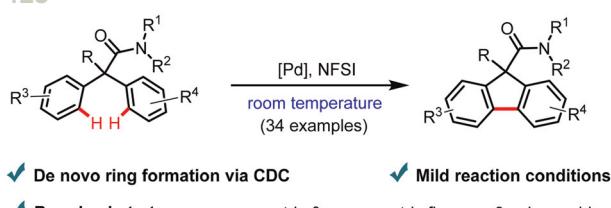


- operationally simple
- high selectivity
- easy-to-handle
- moderate to good yield

**Copper-mediated tetrafluoroethylation of unsaturated organotrifluoroborates *via* generation of the  $HCF_2CF_2$ -radical from zinc 1,1,2,2-tetrafluoroethanesulfinate**

Md Nirshad Alam, Satyajit Majumder, Teruo Umemoto and William R. Dolbier, Jr.\*

7425

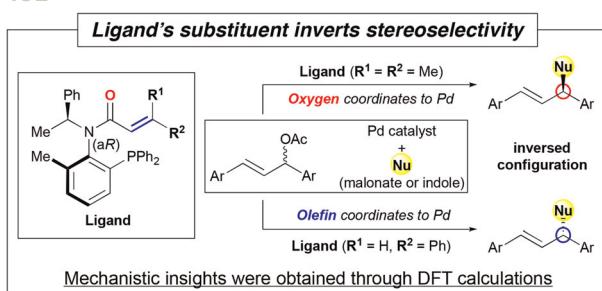


**Rapid access to fluorene-9-carboxamides through palladium-catalysed cross-dehydrogenative coupling**

Xin Yang, Kun Zhou, Yue Wang, Yang-Jie Mao, Kai Liu, Zhen-Yuan Xu, Dan-Qian Xu\* and Shao-Jie Lou\*

## PAPERS

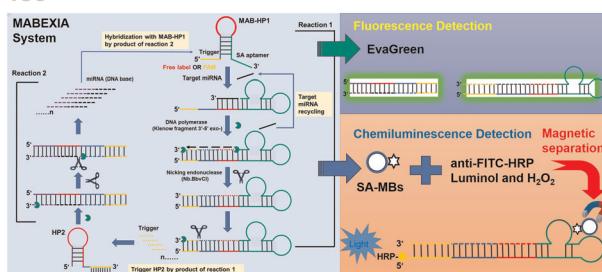
7431



**Stereoinversion in Pd-catalyzed allylic substitution induced by modification of olefinic moiety in chiral phosphine-acrylamide ligands**

Kohei Watanabe,\* Yuto Toba, Shimpei Mita, Yusuke Kanda, Toru Yagi, Kento Kanauchi, Manami Kumada, Yasushi Yoshida, Yoshio Kasahima, Ryo Takita, Masami Sakamoto and Takashi Mino\*

7439



**Molecular aptamer beacon-based dual-mode exponential isothermal amplification for microRNA detection**

Yu Han, Xuefeng Bian, Xiao Wang, Jiaying Chen, Liu Han\* and Xin Sun\*

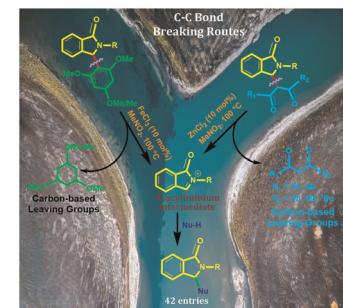


## PAPERS

7448

**Decarbonative routes to generate *N*-acyliminium ion intermediates for the synthesis of 3-substituted isoindolinones *via* an intermolecular amidoalkylation reaction**

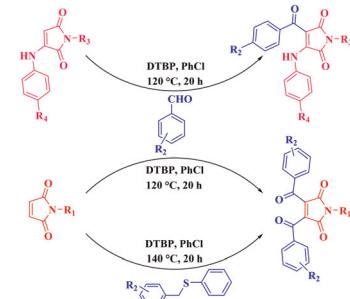
Nazir Uddin, Sudipta Roy, Santanab Giri, Gitish K. Dutta\* and Paresh Nath Chatterjee\*



7456

**Catalyst-free arylation of maleimides through  $C_{sp^2}$ -H functionalization with aldehydes and benzyl phenyl sulfides**

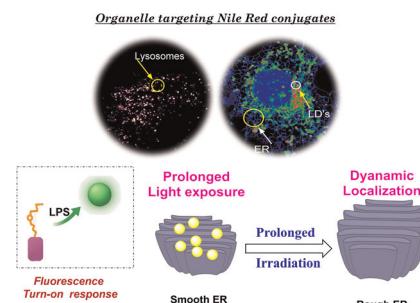
Elmira Taheri and Farnaz Jafarpour\*



7465

**Nile red derivatives for dual-channel organelle imaging and LPS detection**

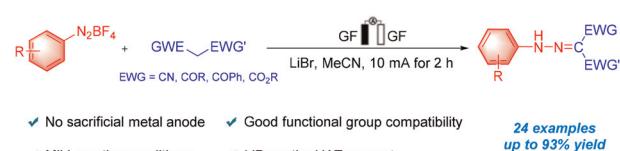
Mohini Ghorpade, Sneha Negi, Paramasivam Mahalingam and Sriram Kanvah\*



7477

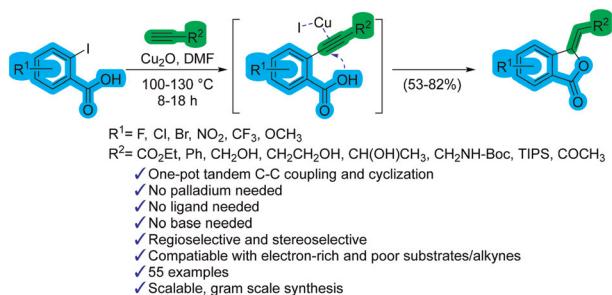
**Electrochemical diazenylation of active methylene compounds with aryl diazonium salts: efficient synthesis of  $\beta$ -dicarbonyl benzoylhydrazones**

Ping Lin, Zezhao Huang, Zeyao Liang, Jiahe Zhang, Li Zhu\* and Xiaoquan Yao\*



## PAPERS

7483



**Cu<sub>2</sub>O-mediated regio- and stereoselective one-pot synthesis of (Z)-3-ylidenephthalides from 2-iodobenzoic acids and terminal alkynes**

Ahmed R. Ali and Longqin Hu\*

