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An international journal of synthetic, physical and biomolecular organic chemistry

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Cover

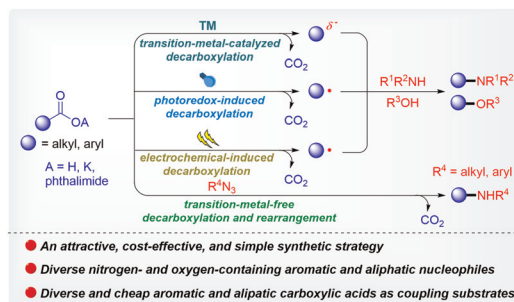
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REVIEWS

7367

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

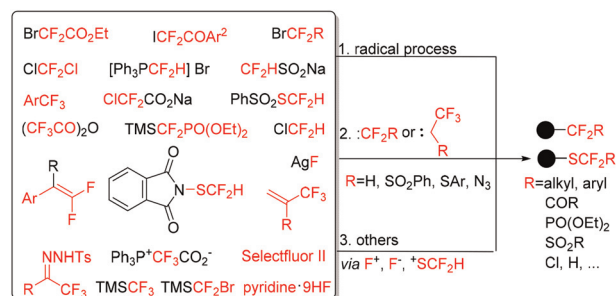
Weidan Yan, Tian Tian and Yasushi Nishihara*



7383

Recent advances in the three-component synthesis of difluorinated compounds

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



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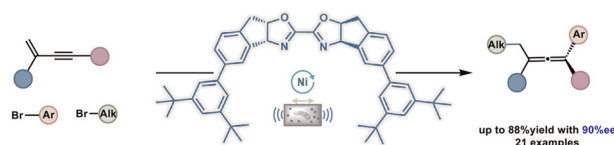
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COMMUNICATIONS

7401

Ball-milling-mediated remote asymmetric reductive coupling in airHao Lei, Yufang Yang, Jiajia Sun, Shu Fan, Xiaofeng Wei,*
Siyuan Wang,* Hai-Shu Lin* and Yan Kang*

7406

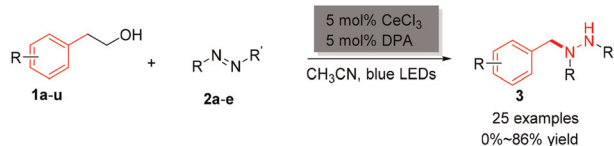
Visible light-induced cascade cyclization of 2-isocyanoaryl thioethers/selenoethers: access to 2-arylthiobenzothiazoles/2-arylthiobenzoselenazoles

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

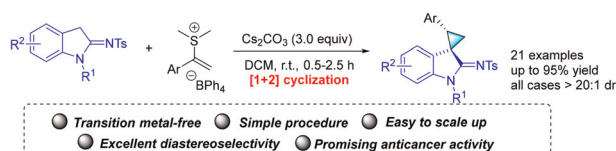
7411

Efficient photocatalytic synthesis of benzylhydrazineYuhui Zhang, Fei Zeng, Yangyang Li, Meiqi Zhou,
Jiafan Wang and Bingzhen Ma*

7415

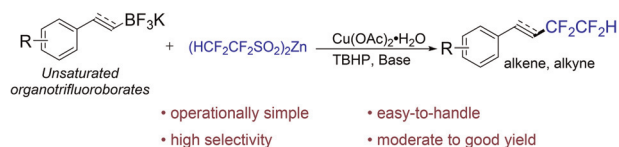
Diastereoselective synthesis of spiro[cyclopropane-1,3'-indolin]-2'-imines via a sequential [1 + 2] annulation reaction of indolin-2-imines with α -aryl vinylsulfonium salts

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



COMMUNICATIONS

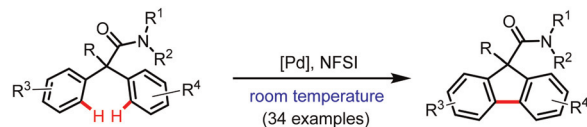
7420



Copper-mediated tetrafluoroethylation of unsaturated organotrifluoroborates via generation of the HCF₂CF₂-radical from zinc 1,1,2,2-tetrafluoroethanesulfinate

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

7425



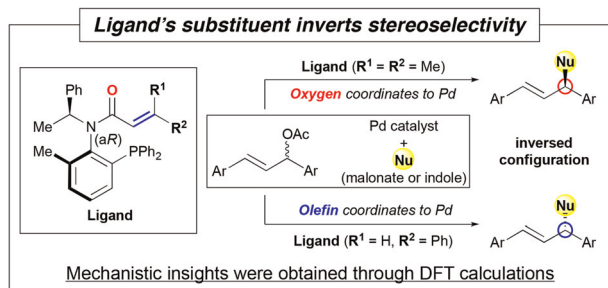
- De novo ring formation via CDC
- Mild reaction conditions
- Broad substrate scope: symmetric & unsymmetric fluorene-9-carboxamides

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

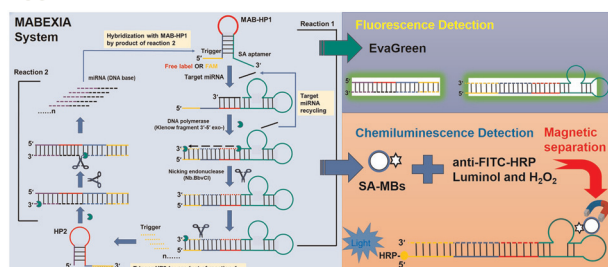
7431



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 Kasashima, 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*

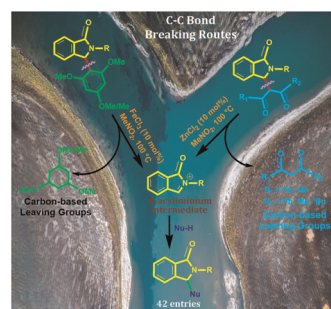


PAPERS

7448

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

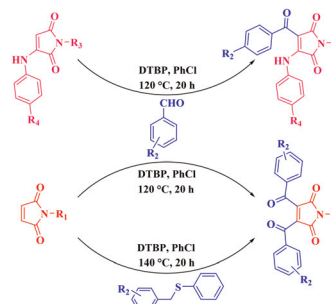
Nazir Uddin, Sudipta Roy, Santanab Giri, Gitish K. Dutta* and Paresh Nath Chatterjee*



7456

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

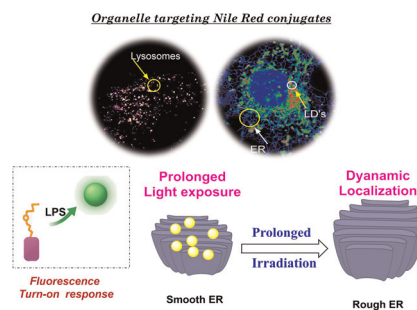
Elmira Taheri and Farnaz Jafarpour*



7465

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

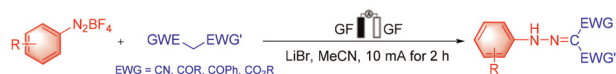
Mohini Ghorpade, Sneha Negi, Paramasivam Mahalingam and Sriram Kanvah*



7477

Electrochemical diazenylation of active methylene compounds with aryldiazonium salts: efficient synthesis of β -dicarbonyl benzoylhydrazones

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

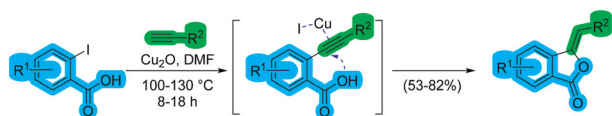


- ✓ No sacrificial metal anode
- ✓ Good functional group compatibility
- ✓ Mild reaction conditions
- ✓ LiBr as the HAT reagent

24 examples
up to 93% yield



7483


 $R^1 = \text{F, Cl, Br, NO}_2, \text{CF}_3, \text{OCH}_3$
 $R^2 = \text{CO}_2\text{Et, Ph, CH}_2\text{OH, CH}_2\text{CH}_2\text{OH, CH(OH)CH}_3, \text{CH}_2\text{NH-Boc, TIPS, COCH}_3$

- ✓ One-pot tandem C-C coupling and cyclization
- ✓ No palladium needed
- ✓ No ligand needed
- ✓ No base needed
- ✓ Regioselective and stereoselective
- ✓ Compatible with electron-rich and poor substrates/alkynes
- ✓ 55 examples
- ✓ Scalable, gram scale synthesis

Cu_2O -mediated regio- and stereoselective one-pot synthesis of (*Z*)-3-ylidenephthalides from 2-iodobenzoic acids and terminal alkynes

Ahmed R. Ali and Longqin Hu*

