

Visible-Light-Induced Photocatalytic C3-Trifluoroethylation of Quinoxalin-2-(1H)-ones

Jian Liu, Zhibin Huang, Cheng Wang, Zefeng Deng, Xu Xu, Runsheng Zeng and Yingsheng Zhao

Eur. J. Org. Chem. 2023, 26, e202300129

<https://doi.org/10.1002/ejoc.202300129>



44 examples
yield up to 80%

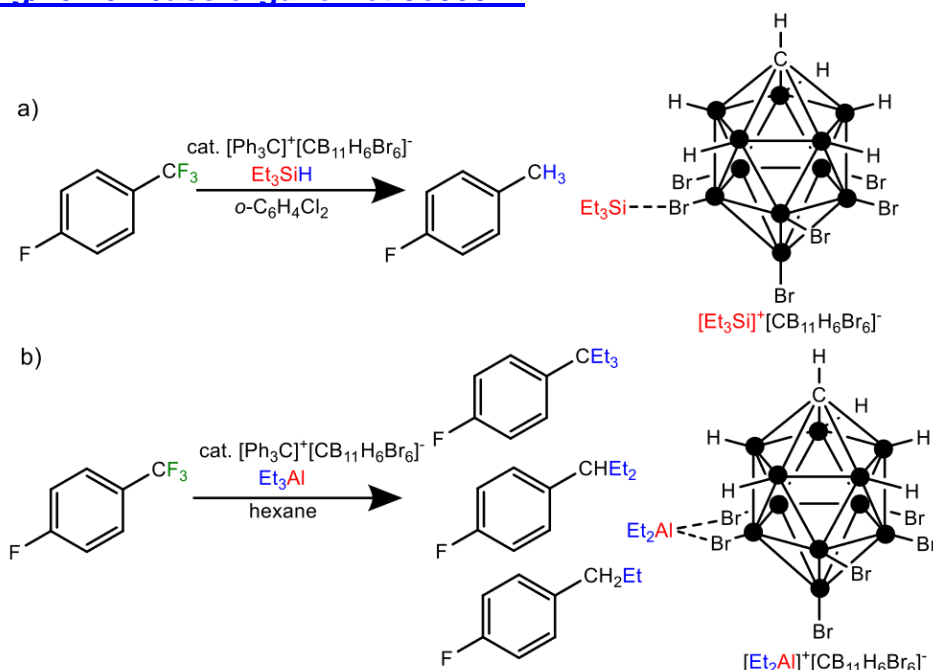
Organometallics

Mechanisms of the Ruthenium Sulfur Complex in Generation and Stabilization of Silicon and Aluminum Electrophiles for C(sp³)-F Bond Activation

Thanapat Worakul and Panida Surawatanawong

Organometallics, 2023, 42 (10), 896-907

<https://doi.org/10.1021/acs.organomet.3c00021>

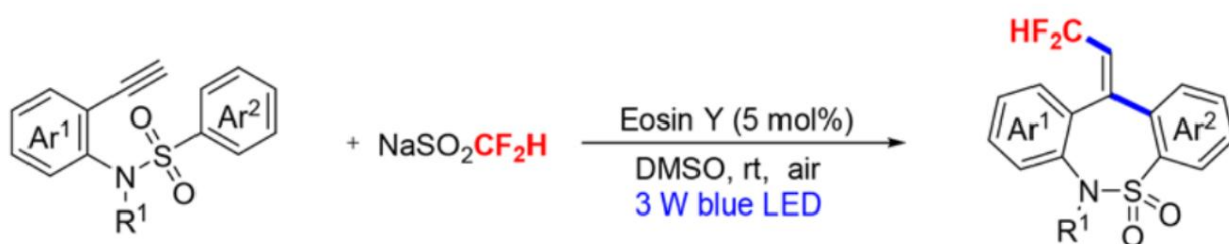


Organic Chemistry Frontiers

Photochemical difluoromethylation of alkynes: synthesis of CF₂H-substituted seven-membered dioxodibenzothiazepines and dibenzazepines

Xiaoyu Chen, Yang Geng, Bo Liu, Yu Zhu, a Dapeng Zou, Yangjie Wu and
Yusheng Wu

Org. Chem. Front., 2023, 10, 1968
<https://doi.org/10.1039/d3qo00020f>

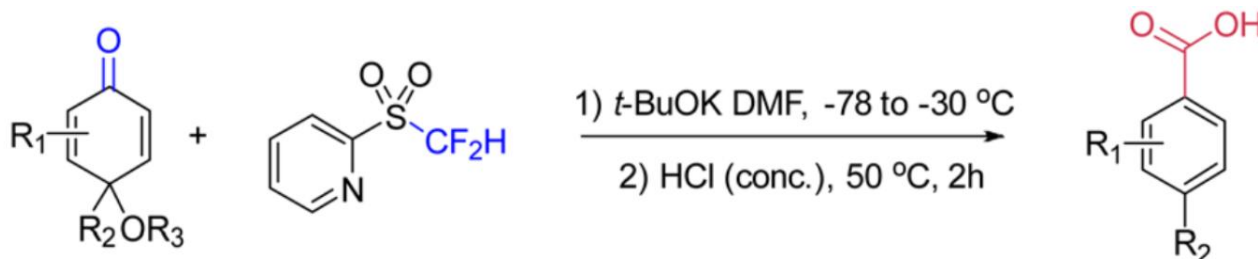


21 examples
yield up to 82%

Preparation of benzoyl fluorides and benzoic acids from phenols *via* a dearomatization– rearomatization strategy

Meixian Yang, Xinyue Huang, Wenjun Miao, Lan Yi, Jiajing Cai,
Zhenghuan Zhao, Jia He and Dachuan Qiu

Org. Chem. Front., 2023, 10, 1975
<https://doi.org/10.1039/d3qo00183k>

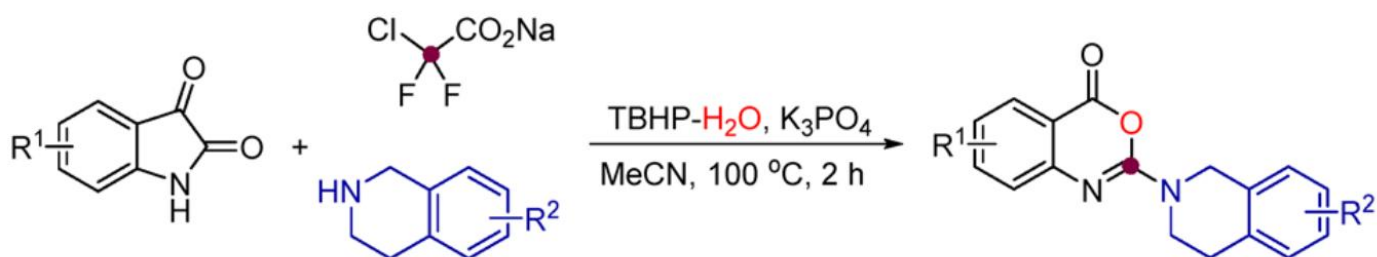


23 examples
yield up to 95%

TBHP-promoted multicomponent reaction to access 2-aminobenzoxazinones using sodium chlorodifluoroacetate as the C1 synthon

Huijuan Li, Yongfeng Wang, Cheng Xu, Jingwen Zou, Yaxuan Wu and Guodong Yin

Org. Chem. Front., 2023, 10, 1988
<https://doi.org/10.1039/d3qo00157a>

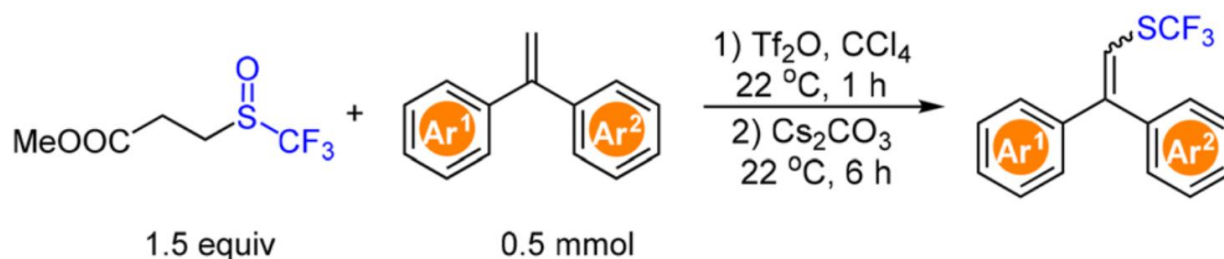


20 examples
yield up to 82%

β -Trifluorosulfinylesters: tuneable reagents for switchable trifluoromethylsulfonylation and C–H trifluoromethylthiolation

Wen Liu, Yan Zhang, Shuya Xing, Huilin Lan, Xinrui Chen, Ying Bai and Xinxin Shao

Org. Chem. Front., 2023, 10, 2186
<https://doi.org/10.1039/d3qo00013c>



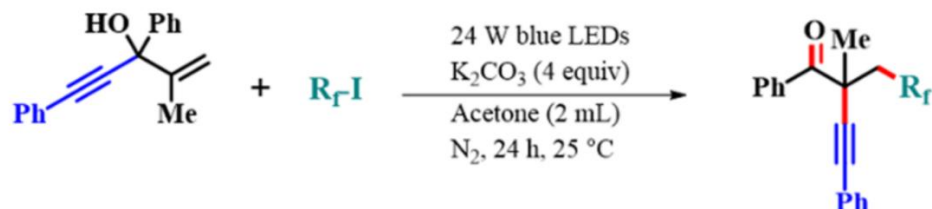
12 examples
yield up to 91%

Photochemical alkynylperfluoroalkylation of unactive alkenes mediated by halogen-bonded charge-transfer complexes

Huangbin Sun, Chang Huang, Xueting Bin, Fuzhi Cui and Guofang Jiang

Org. Chem. Front., 2023, 10, 2332

<https://doi.org/10.1039/d3qo00304c>



11 examples
yield up to 93%

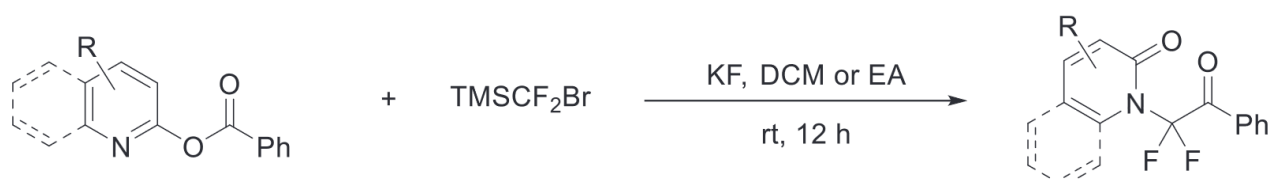
Tetrahedron Letters

Difluorocarbene enabled ester insertion/1,4-acyl rearrangement of 2-acetoxypyridines: Modular access to gem-difluoromethylenated 2-pyridones

Shi-Wei Li, Gang Wang, Zhi-Shi Ye

Tetrahedron Letters, 2023, 119, 154413

<https://doi.org/10.1016/j.tetlet.2023.154413>



21 examples
yield up to 98%