

Organic Letters

Visible-Light-Induced C–F Bond Activation for the Difluoroalkylation of Indoles

Scott T. Shreiber, Albert Granados, Bianca Matsuo, Jadab Majhi, Mark W. Campbell, Shivani Patel, and Gary A. Molander*

Org. Lett., 2022, 24, 8542-8546

<https://doi.org/10.1021/acs.orglett.2c03549>



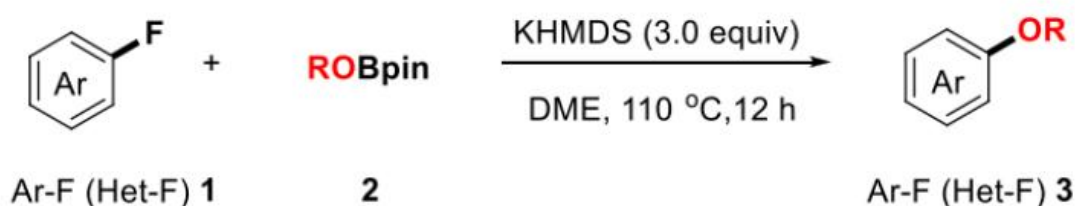
12 examples
yield up to 61%

Etherification of Fluoroarenes with Alkoxyboronic Acid Pinacol Esters via C–F Bond Cleavage

Jun Zhou, Bingyao Jiang, Zhengyu Zhao, and Norio Shibata*

Org. Lett., 2022, 24, 5084-5089

<https://doi.org/10.1021/acs.orglett.2c01864>



ROBpin = 2-R-oxy-4,4,5,5-tetramethyl-1,3,2-dioxaborolane

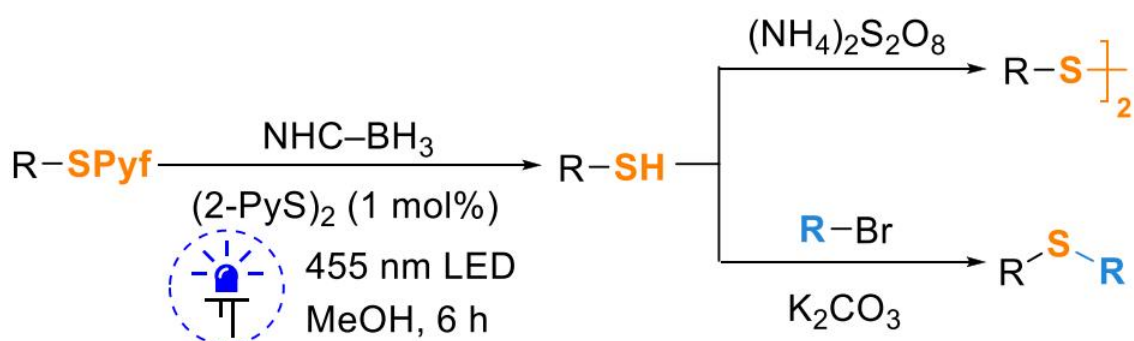
38 examples
yield up to 96%

Light-Promoted Dearylation of Perfluorinated Aryl Sulfides with N-Heterocyclic Carbene–Borane

Liubov I. Panferova, Mikhail O. Zubkov, Mikhail D. Kosobokov,
and Alexander D. Dilman*

Org. Lett., 2022, 24, 8559-8563

<https://doi.org/10.1021/acs.orglett.2c03585>



22 examples
yield up to 84%

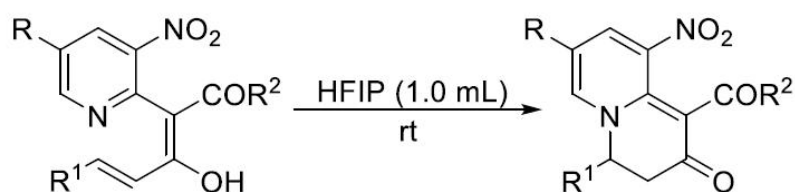
Tetrahedron

HFIP-promoted intramolecular dearomative annulation of pyridylacetate derivatives to access functionalized 3,4-dihydroquinolizin-2-ones

Yao-Bin Shen, Jian-Qiang Zhao, Zhen-Zhen Ge, Zhen-Hua Wang, Wei-Cheng Yuan

Tetrahedron, 2022, 116, 132810

<https://doi.org/10.1016/j.tet.2022.132810>



20 examples
yield up to 95%

Synthesis and further use of SF₅-alkynes as platforms for the design of more complex SF₅-containing products

Lucas Popek, Thi Mo Nguyen, Nicolas Blanchard, Dominique Cahard, Vincent Bizet

Tetrahedron, 2022, 116, 132814

<https://doi.org/10.1016/j.tet.2022.132814>



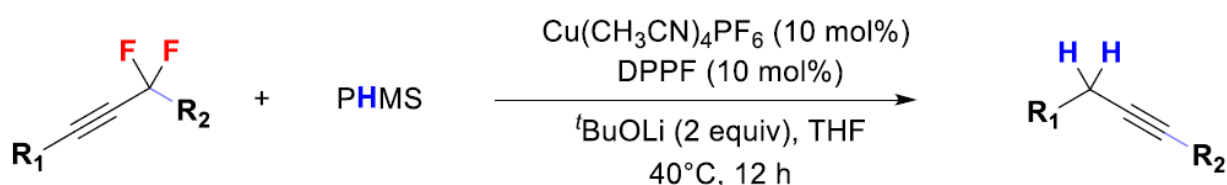
3 examples
yield up to 92% (1st step)
yield up to 72% (2nd step)

Copper catalyzed hydrodefluorination of propargylic gem-difluorides with “triple bonds migration”

Ting Wang, Zhirong Li, Jiayi Hu, Tao Wu

Tetrahedron, 2022, 116, 132897

<https://doi.org/10.1016/j.tet.2022.132897>



18 examples
yield up to 83%

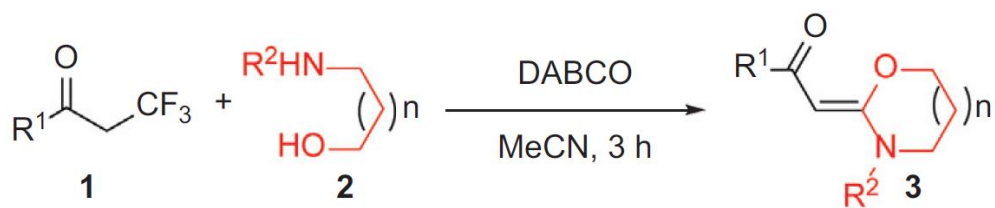
Tetrahedron Letters

Tandem defluorination/annulation of α -CF₃ carbonyls with bis-nucleophiles: Stereodivergent synthesis of 2-alkylidene-1,3-heterocycles

Yangyang Ma, Kuantao Mao, Yuanjin Chen, Leiyang Lv, Zhiping Li

Tetrahedron Letters, 2022, 100, 153902

<https://doi.org/10.1016/j.tetlet.2022.153902>



17 examples
yield up to 89%