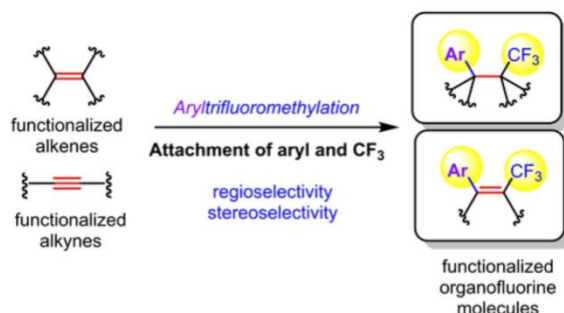


Chemistry An Asian Journal

Recent Progress in Aryltrifluoromethylation Reactions of Carbon-Carbon Multiple Bonds

Dr. Attila M. Remete, Dr. Melinda Nonn, Tamás T. Novák, Dr. Dorottya Csányi, Prof. Loránd Kiss

Chem. Asian J., 2022, 17, e202200395

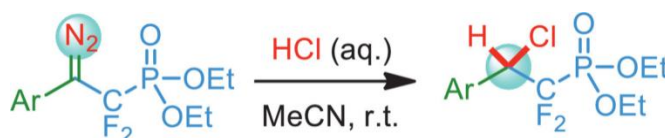


Chinese Chemical Letters

Facile synthesis of (β -chlorodifluoroethyl)phosphonates via chlorination reaction of difluoroalkyl diazo derivatives with HCl

Jiang Liu, Romana Pajkert, Li Wang, Haibo Mei, Gerd-Volker Röschenthaler, Jianlin Han

Chinese Chemical Letters, 2022, 33, 2429-2432

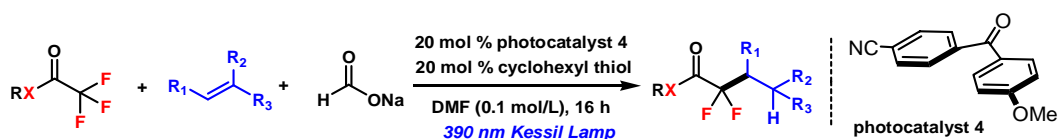


14 examples
yield up to 97%

Photochemical defluorinative functionalization of α -polyfluorinated carbonyls *via* spin-center shift

ZeLe Chen, Jiarong Chen, Jun Xuan

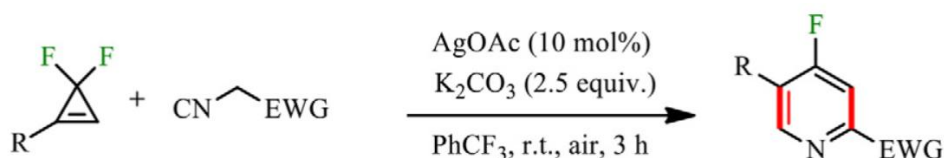
Chinese Chemical Letters, 2022, 33, 2763-2764



Convenient and efficient access to tri- and tetra-substituted 4-fluoropyridines *via* a [3 + 2]/[2 + 1] cyclization reaction

Xuejiao Tang, Kun Liu, Zeming Qu, Junyan Zhan, Rukui Zhu, Fan Teng, Lili Meng, Yanmin Huang, Chusheng Huang, Yimiao He, Qiang Zhu

Chinese Chemical Letters, 2022, 33, 2982-2986



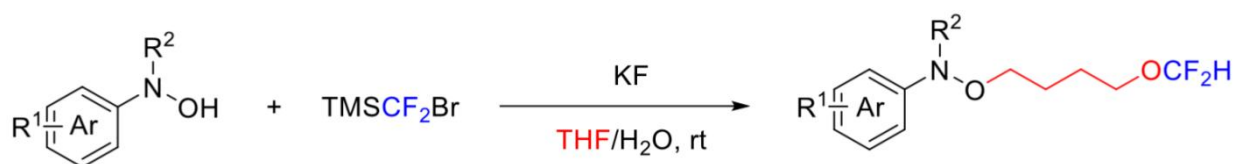
25 examples
yield up to 92%

European Journal of Organic Chemistry

Difluorocarbene-Induced Ring Opening of Tetrahydrofuran with TMSCF₂Br for Difluoromethoxybutylation of N-Aryl-N-hydroxylamines

Xinjie Zhu, Jun Wei, Chenxian Hu, Qitao Xiao, Lvtao Cai, Hao Wang, Yuanyuan Xie, Rong Sheng

Eur. J. Org. Chem., 2022, e202200629



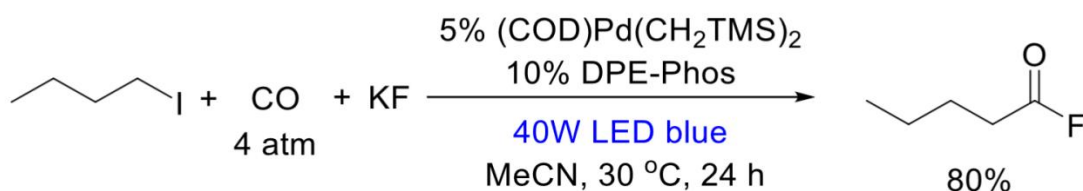
23 examples
yield up to 89%

Journal of the American Chemical Society

Versatile Palladium-Catalyzed Approach to Acyl Fluorides and Carbonylations by Combining Visible Light- and Ligand-Driven Operations

Yi Liu, Cuihan Zhou, Meijing Jiang, and Bruce A. Arndtsen

J. Am. Chem. Soc., 2022, 144, 9413-9420

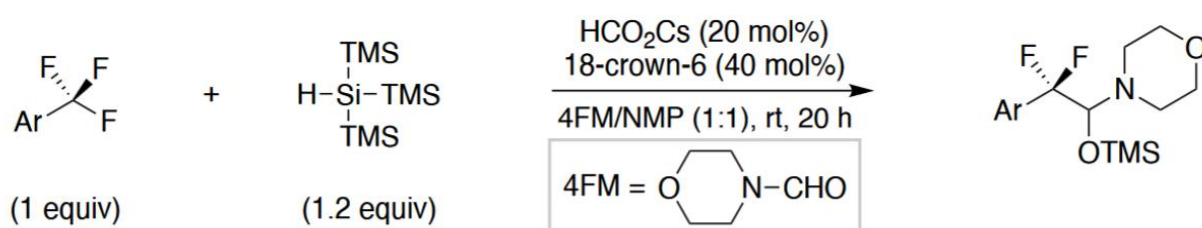


11 examples
yield up to 80%

A Base-Promoted Reductive Coupling Platform for the Divergent Defluorofunctionalization of Trifluoromethylarenes

Shawn E. Wright and Jeffrey S. Bandar

J. Am. Chem. Soc., 2022, 144, 13032-13038



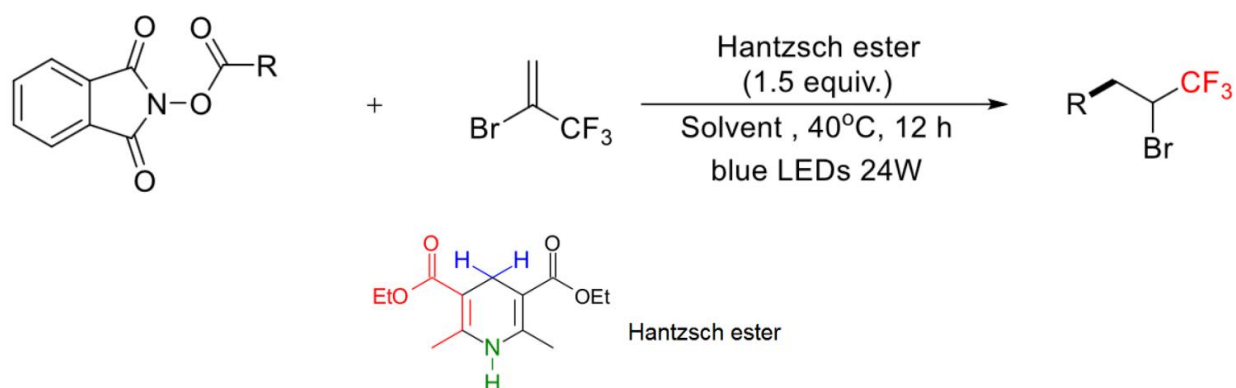
11 examples
yield up to 66%

Organic Letters

Synthesis of Secondary Trifluoromethylated Alkyl Bromides Using 2-Bromo-3,3,3-trifluoropropene as a Radical Acceptor

Peng Guo, Maoling Tao, Wen-Wen Xu, An-Jun Wang, Weipiao Li, Qiuli Yao, Jie Tong, and Chun-Yang He

Org. Lett., 2022, 24, 2143-2148

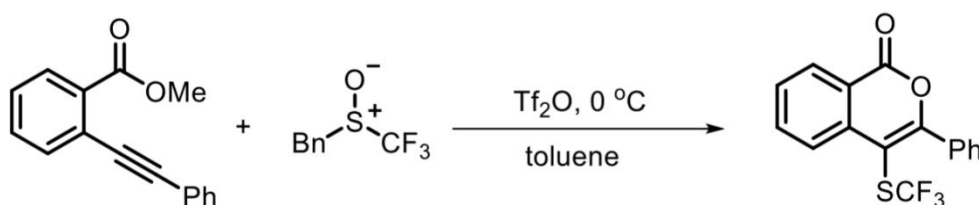


34 examples
yield up to 83%

Trifluoromethylthiolation/Selenolation and Lactonization of 2-Alkynylbenzoate: The Application of Benzyl Trifluoromethyl Sulfoxide/Selenium Sulfoxides as $\text{SCF}_3/\text{SeCF}_3$ Reagents

Haofeng Shi, Xingzong Wang, Xiaoxian Li, Beibei Zhang, Xuemin Li, Jingran Zhang, Jingyue Yang, and Yunfei Du

Org. Lett., 2022, 24, 2214-2219

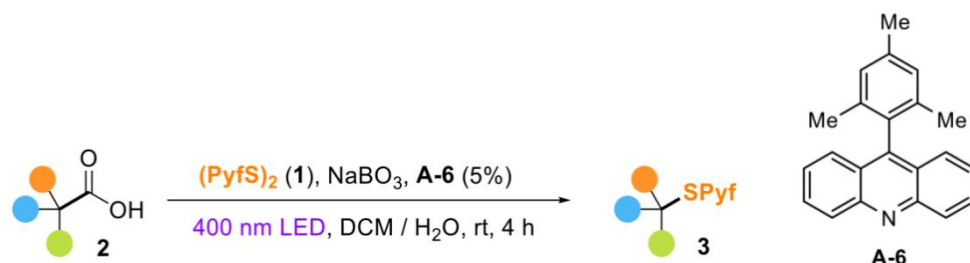


16 examples
yield up to 96%

Photocatalyzed Decarboxylative Thiolation of Carboxylic Acids Enabled by Fluorinated Disulfide

Mikhail O. Zubkov, Mikhail D. Kosobokov, Vitalij V. Levin, and Alexander D. Dilman

Org. Lett., 2022, 24, 2354-2358



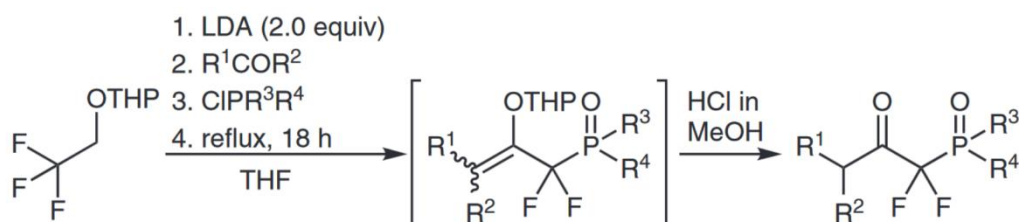
29 examples
yield up to 96%

Synthesis

Multigram Synthesis of Difluoromethylene Phosphonic and Phosphinic Amides and Phosphine Oxides via Formal [2,3]-Sigmatropic Allyl Phosphite–Allylphosphonate Rearrangement

Michael Shevchuk, Gerd-Volker Rösenthaller

Synthesis, 2022, 54, 171-183



11 examples
yield up to 91%