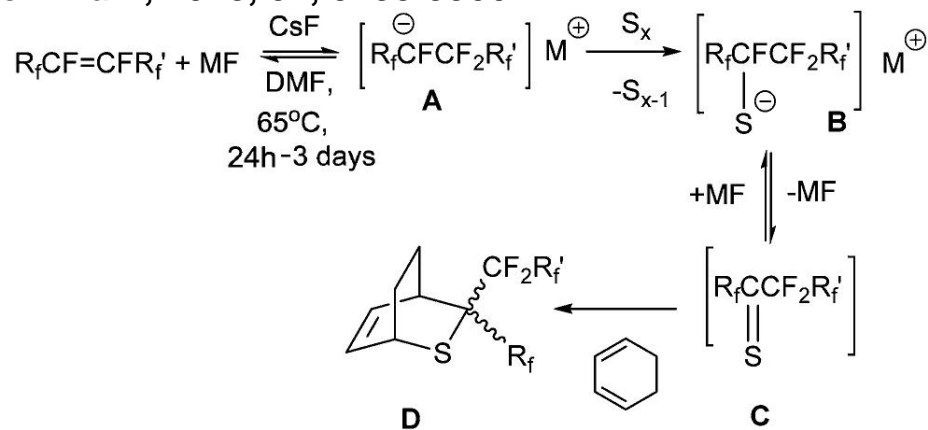


Chemical Communications

Diels–Alder reactions of “*in situ*” generated perfluorinated thioketones

Viacheslav Petrov, Alexander A. Marchione and Rebecca Dooley

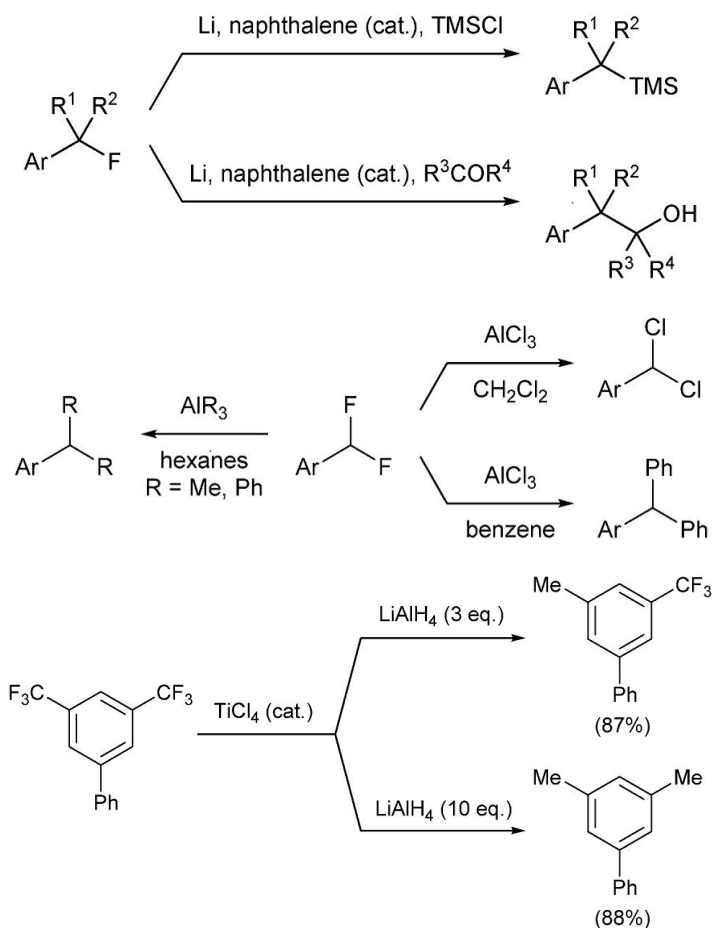
Chem. Commun., 2018, 54, 9298-9300

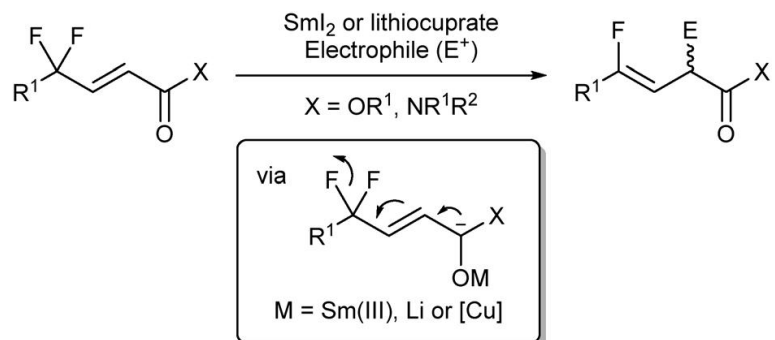
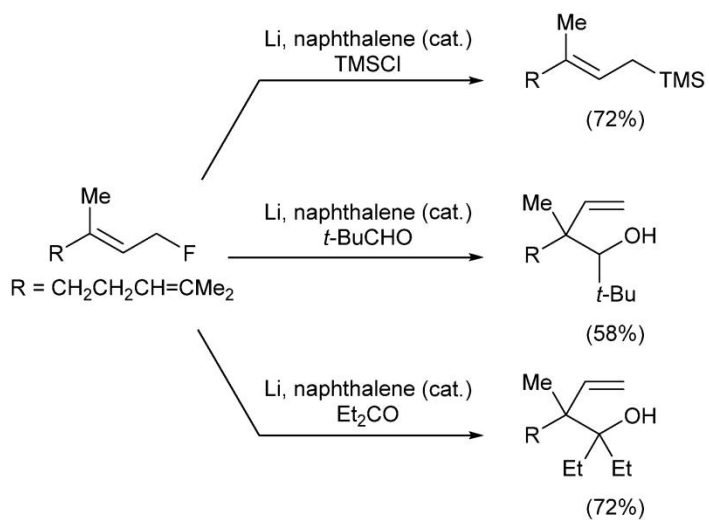
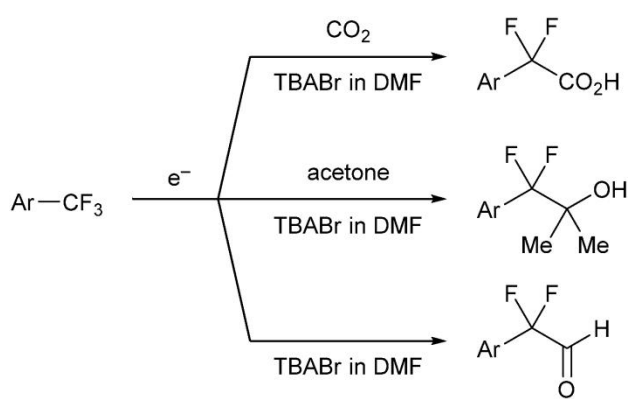
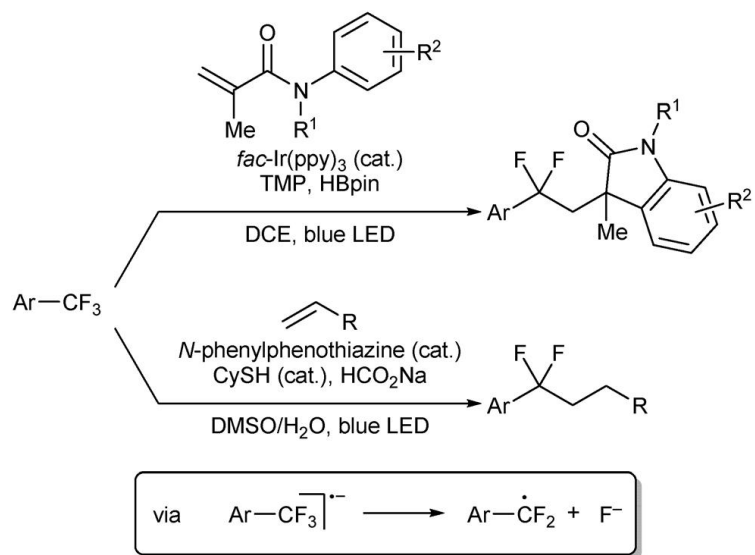


Activation of C–F bonds α to C–C multiple bonds

Jean-Denys Hamel and Jean-François Paquin

Chem. Commun., 2018, 54, 10224-10239

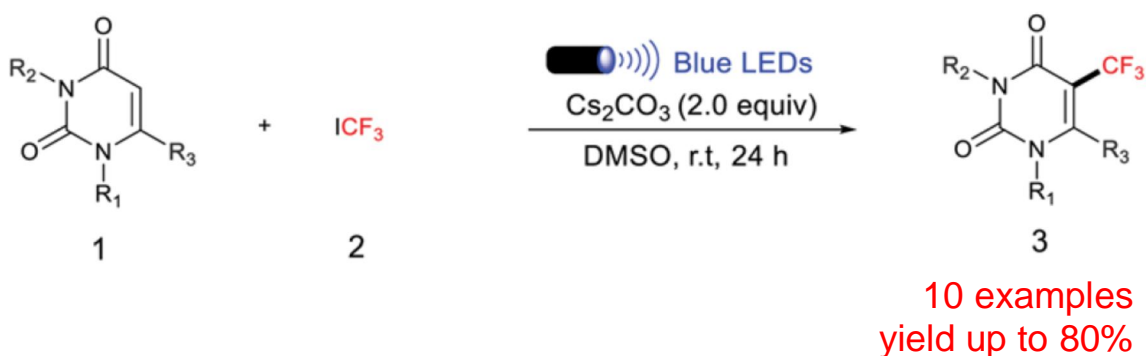
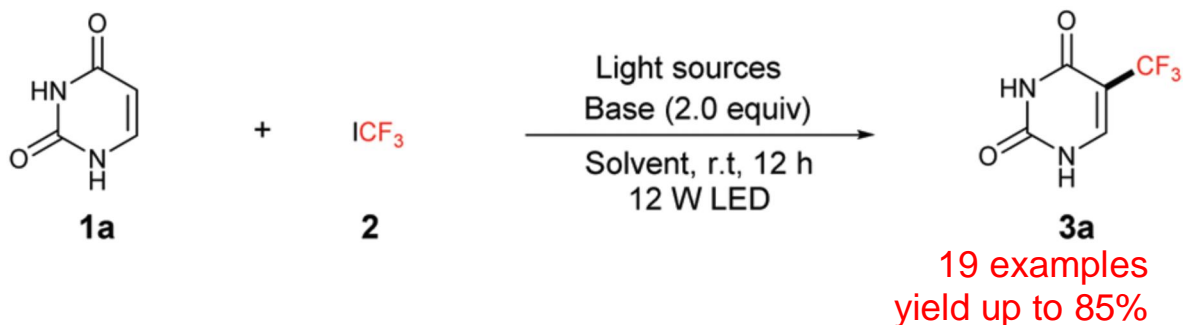




Catalyst-free and visible light promoted trifluoromethylation and perfluoroalkylation of uracils and cytosines

Yang Huang, Yun-Yun Lei, Liang Zhao, Jiwei Gu, Qiuli Yao, Ze Wang, Xiao-Fei Li, Xingang Zhang and Chun-Yang He

Chem. Commun., 2018, 54, 13662-13665

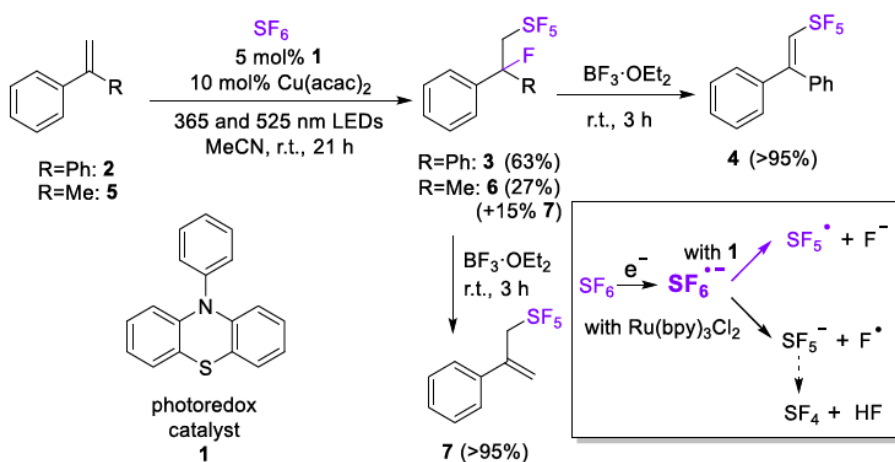


CHEMCATCHEM

Photoredox catalytic activation of sulfur hexafluoride for pentafluorosulfanylation of α -methyl and α -phenyl styrene

David Rombach,^[a] and Hans-Achim Wagenknecht

ChemCatChem, 2018,10,2955-2961

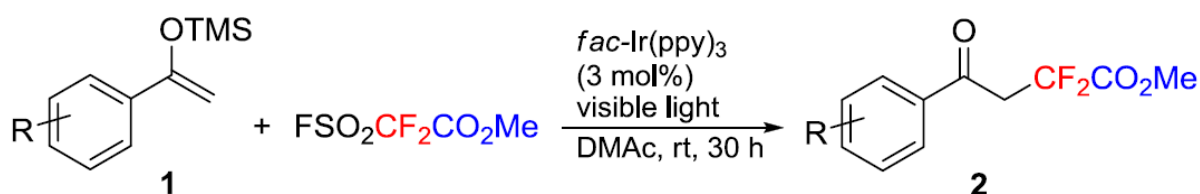


Chinese Journal of Chemistry

Visible Light-Induced Methoxycarbonyldifluoromethylation of Trimethylsilyl Enol Ethers and Allyltrimethylsilanes with $\text{FSO}_2\text{CF}_2\text{CO}_2\text{Me}$

Wei Yu,^a Yao Ouyang,^a Xiu-Hua Xu,^a and Feng-Ling Qing^{*,a,b}

Chin. J. Chem., 2018, 36, 1024-1030

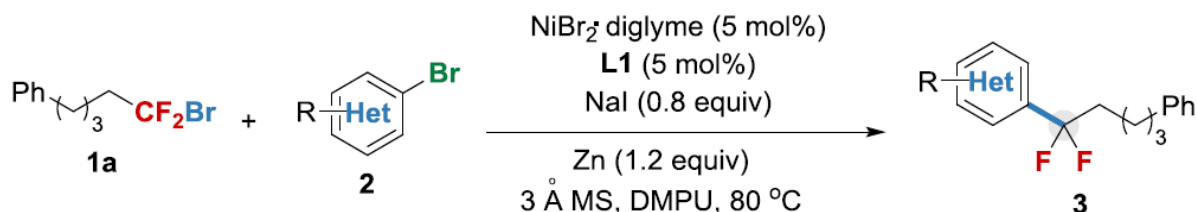


18 examples
yield up to 88%

Nickel-Catalyzed Difluoroalkylation of (Hetero)aryl Bromides with Unactivated 1-Bromo-1,1-difluoroalkanes

Xu He, Xing Gao, and Xingang Zhang

Chin. J. Chem., 2018, 36, 1059-1062



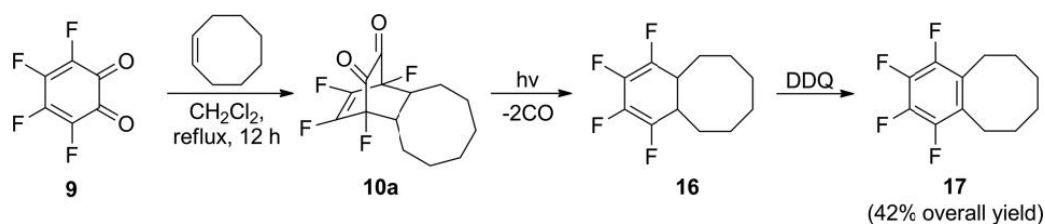
19 examples
yield up to 88%

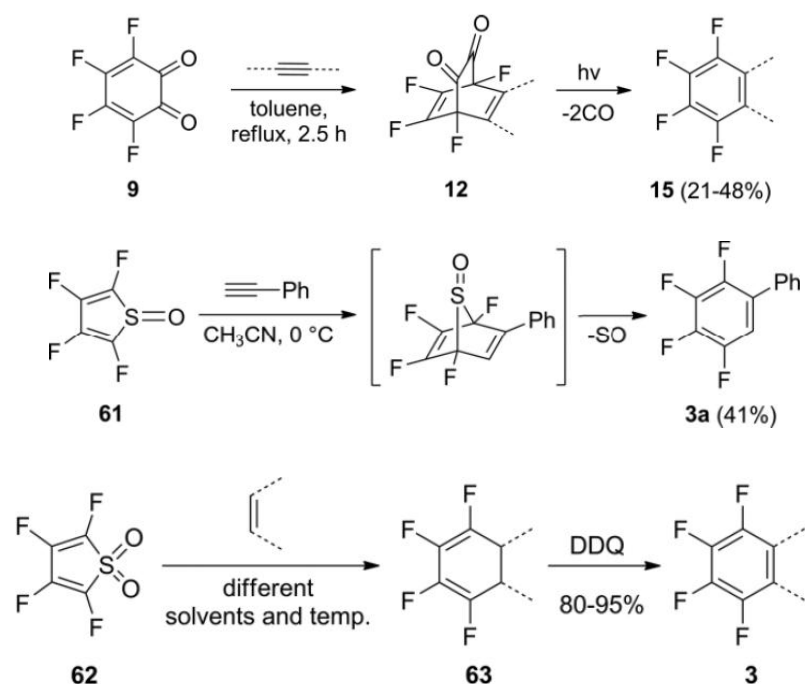
European Journal of Organic Chemistry

Diels–Alder Reaction in the Synthesis of Fluorinated (Hetero)Aromatic Compounds

Ivan S. Kondratov, Nataliya A. Tolmachova, and Günter Haufe

Eur. J. Org. Chem., 2018, 3618-3647



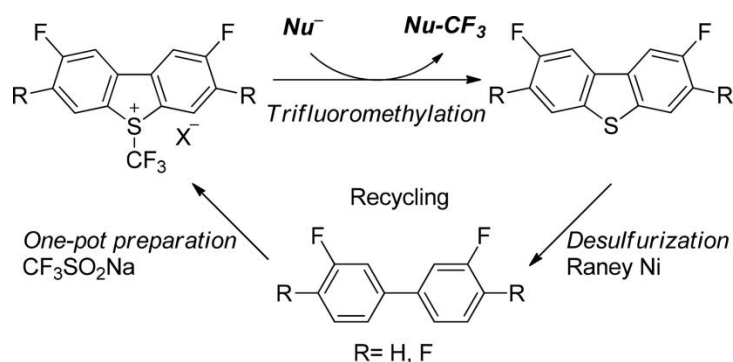


Journal of the American Chemical Society

Recyclable Trifluoromethylation Reagents from Fluoroform

Jacob B. Geri and Nathaniel K. Szymczak

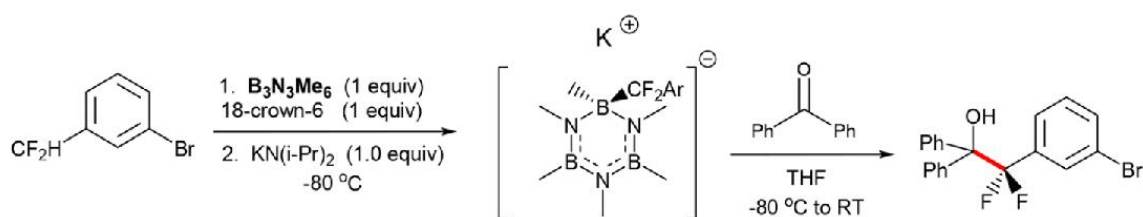
J. Am. Chem. Soc., 2017, 139, 9811-9814



The Difluoromethyl Group as a Masked Nucleophile: A Lewis Acid Base Approach

Jacob B. Geri, Michael M. Wade Wolfe, and Nathaniel K. Szymczak

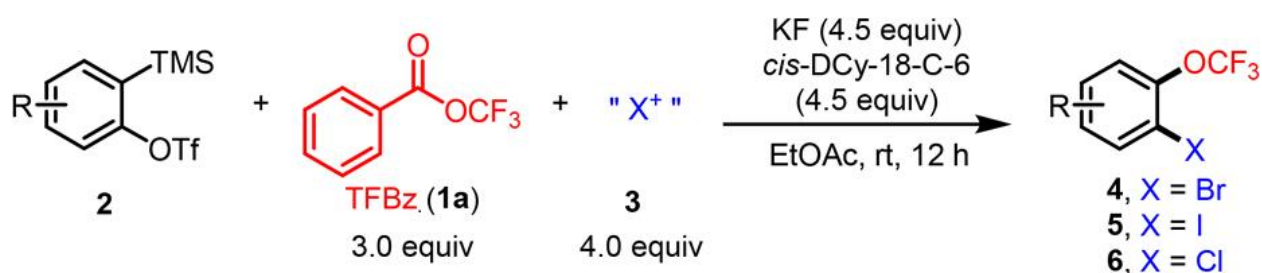
J. Am. Chem. Soc., 2017, 140, 9404-9408



Trifluoromethyl Benzoate: A Versatile Trifluoromethoxylation Reagent

Min Zhou, Chuanfa Ni, Yuwen Zeng, and Jinbo Hu

J. Am. Chem. Soc., 2017, 140, 6801-6804



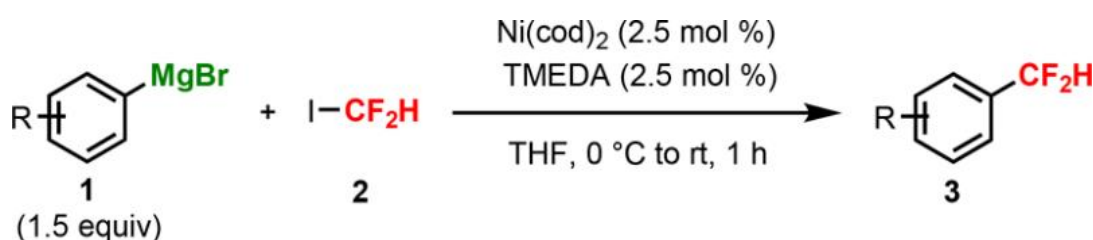
28 examples
yield up to 85%

Organic Letters

Nickel-Catalyzed Aromatic Cross-Coupling Difluoromethylation of Grignard Reagents with Difluoroiodomethane

Hirota Motoshi and Koichi Mikami

Org. Lett., 2018, 20, 5340-5343

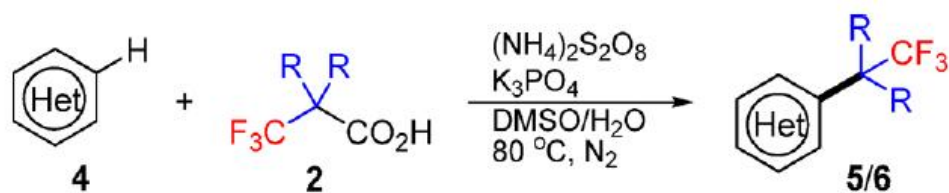


23 examples
yield up to 99%

Transition-Metal-Free Decarboxylation of 3,3,3-Trifluoro-2,2-dimethylpropanoic Acid for the Preparation of C(CF₃)Me₂-Containing Heteroarenes

Shuai Liu, Yangen Huang, Feng-Ling Qing, and Xiu-Hua Xu

Org. Lett., 2018, 20, 5497-5501

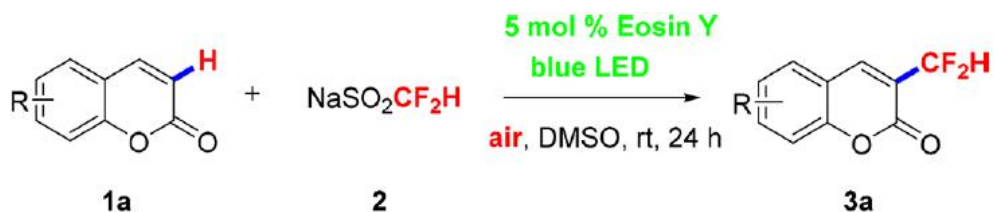


12 examples
yield up to 70%

Visible-Light- and Oxygen-Promoted Direct Csp²-H Radical Difluoromethylation of Coumarins and Antifungal Activities

Peng Dai, Xiang Yu, Peng Teng, Wei-Hua Zhang,* and Chao Deng

Org. Lett., 2018, 20, 6901-6905



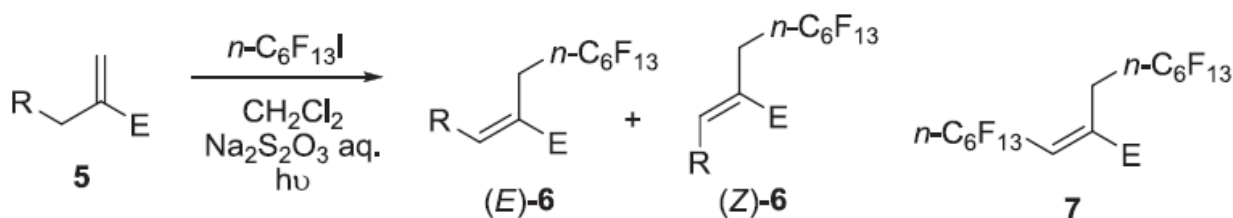
23 examples
yield up to 82%

Tetrahedron

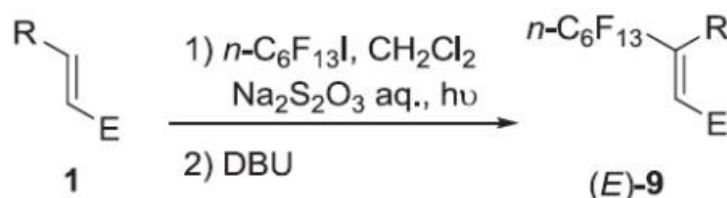
Photoinduced addition and addition-elimination reactions of perfluoroalkyl iodides to electron-deficient olefins

Tomoko Yajima, Ishrat Jahan, Takayuki Tono, Manami Shinmen, Aya Nishikawa, Kanako Yamaguchi, Izumi Sekine, Hajime Nagano

Tetrahedron 2012, 68, 6856-6861



5 examples
yield up to 91%

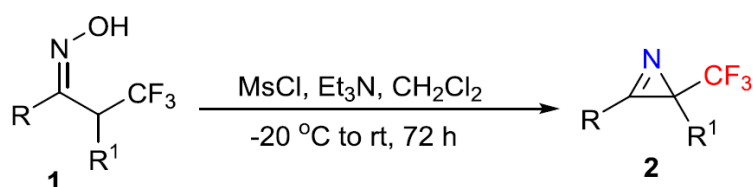


3 examples
yield up to 82%

Facile construction of trifluoromethyl-azirines via one-pot metal-free Neber reaction

Yin-Jun Huang, Baokun Qiao, Fa-Guang Zhang, Jun-An Ma

Tetrahedron 2018, 74, 3791-3796

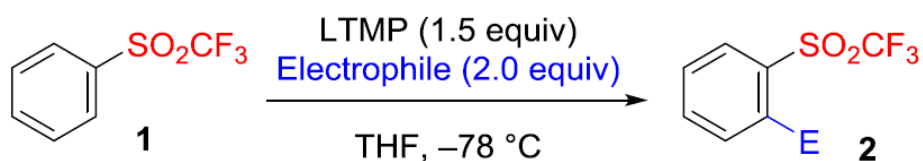


22 examples
yield up to 97%

Ortho-lithiation reaction of aryl triflates

Yuji Sumii, Misaki Taniguchi, Xiu-Hua Xu, Etsuko Tokunaga, Norio Shibata

Tetrahedron 2018, 74, 5635-5641

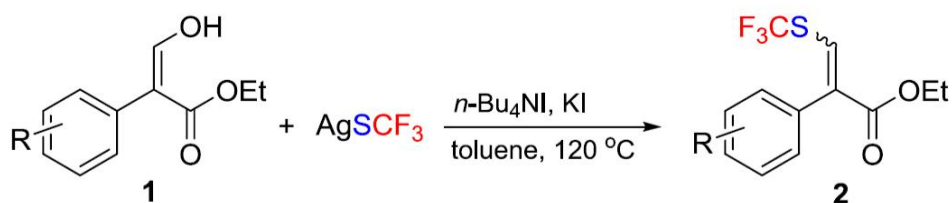


12 examples
yield up to 73%

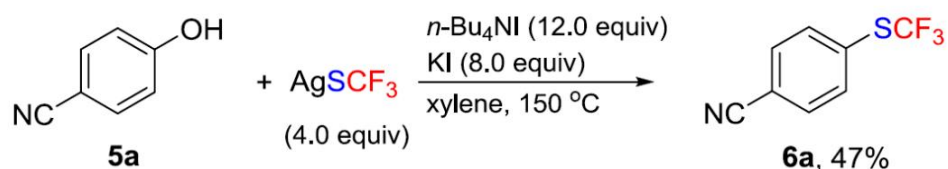
Synthesis of vinyl and electron-deficient aryl trifluoromethyl sulfides via Csp²-OH bond activation with AgSCF₃ and n-Bu₄Ni/KI

Yin-Li Liu, Xiu-Hua Xu, Feng-Ling Qing

Tetrahedron 2018, 74, 5827-5832



15 examples
yield up to 91%

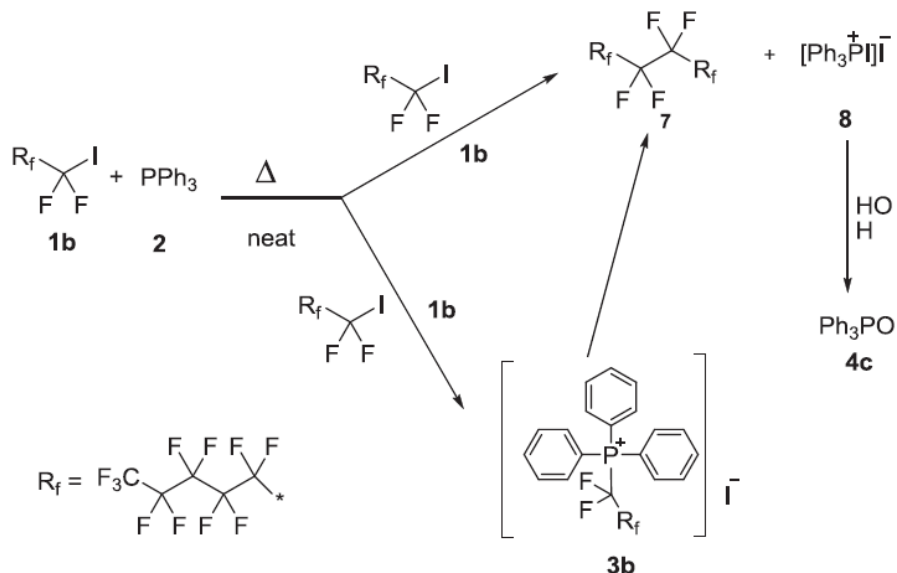


Tetrahedron Letters

Nonmetallic Wurtz coupling reaction of perfluorohexyl iodide

Anton V. Kolotaev, Derenik S. Khachatryan

Tetrahedron Letters 2018, 59, 2745-2747



In situ intramolecular difluorocarbene-triggered synthesis of 2-gem-difluoro-2,3-dihydrobenzofuran-3-ols

Xu Yang, Xiang Zhang, Dali Yin

Tetrahedron Letters 2018, 59, 2941-2944

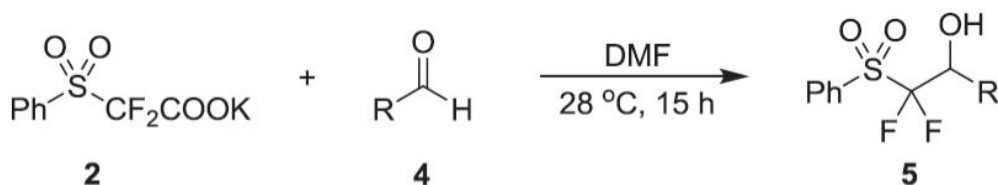


11 examples
yield up to 86%

Decarboxylative difluoromethylation of aldehydes with PhSO₂CF₂COOK: A facile and efficient access to difluoromethylated carbinols

Yu-Jun Zhu, Zhong-Liang Lei, Da-Kang Huang, Bo Lian, Zhen-Jiang Liu, Xiao-Jun Hu, Jin-Tao Liu

Tetrahedron Letters 2018, 59, 3184-3187

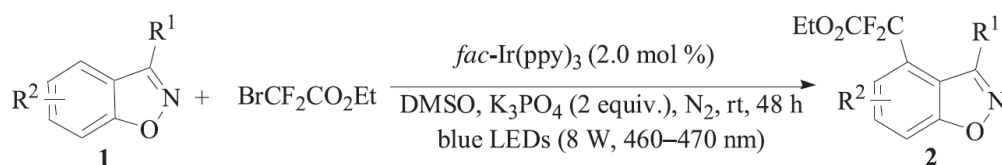


12 examples
yield up to 98%

Visible-light-induced photocatalytic difluoroalkylation of 3-substituted benzo[*d*]isoxazoles via direct and regioselective C-H functionalization

Ming-Qing Hua, Fang-You Mou, Nian-Hong Wang, Yan Chen, Heng-Ying Xiong, Yan Huang, Cheng-Lin Lei, Qi Zhang

Tetrahedron Letters 2018, 59, 4449-4453



9 examples
yield up to 84%

Synthesis

Direct Trifluoromethylthiolation Reactions Involving Radical Processes

Barthelemy, Anne-Laure; Magnier, Emmanuel; Dagousset, Guillaume

Synthesis, 2018, 50, 4765-4776

