

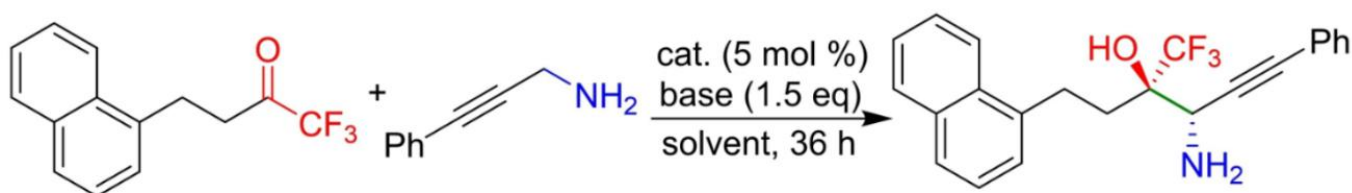
Angewandte Chemie International Edition

Direct Asymmetric α -C H Addition of N-unprotected Propargylic Amines to Trifluoromethyl Ketones by Carbonyl Catalysis

Pengwei Ji, Xiaopei Liu, Jiwei Xu, Xu Zhang, Jianhua Guo, Wen-Wen Chen, Baoguo Zhao

Angew. Chem. Int. Ed. 2022, 61, e202206111

<https://doi.org/10.1002/anie.202206111>



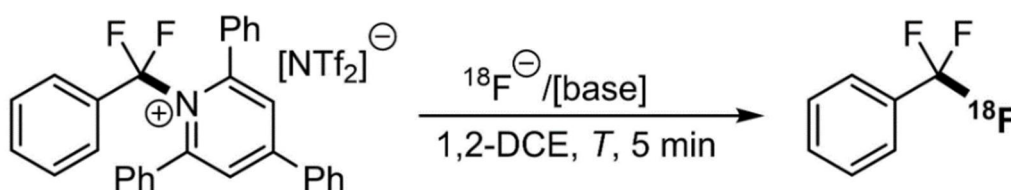
21 examples
yield up to 81%

Fluorine-18 Labeling of Difluoromethyl and Trifluoromethyl Groups via Monoselective C–F Bond Activation

Shivashankar Khanapur, Kenneth Lye, Dipendu Mandal, Xin Jie Wee, Edward G. Robins, and Rowan D. Young

Angew. Chem. Int. Ed. 2022, 61, e202210917

<https://doi.org/10.1002/anie.202210917>



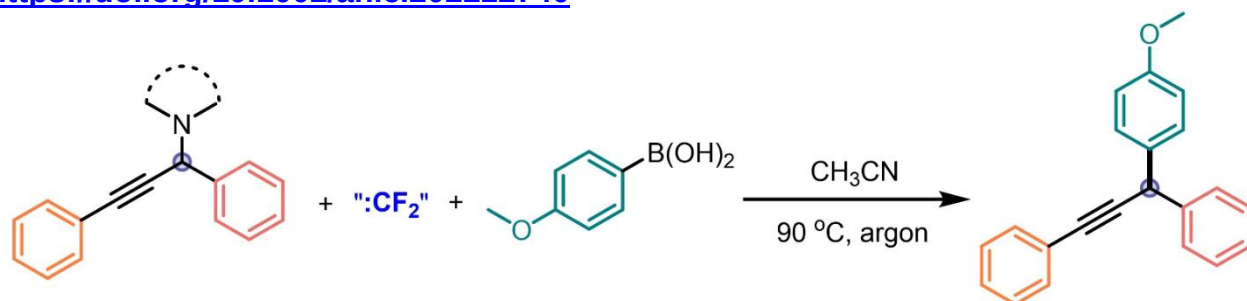
13 examples
yield up to 67%

Deaminative Arylation and Alkenylation of Aliphatic Tertiary Amines with Aryl and Alkenylboronic Acids via Nitrogen Ylides

Jianke Su, Chengbo Li, Xinyuan Hu, Yu Guo, and Qiuling Song

Angew. Chem. Int. Ed. 2022, 61, e202212740

<https://doi.org/10.1002/anie.202212740>



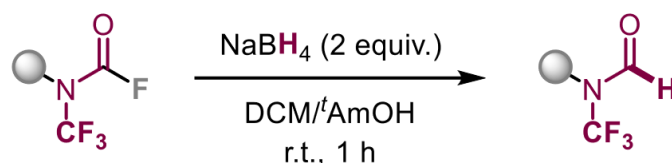
91 examples
yield up to 86%

Access to N-CF₃ Formamides by Reduction of N-CF₃ Carbamoyl Fluorides

Filip G. Zivkovic, Christian D.-T. Nielsen, and Franziska Schoenebeck

Angew. Chem. Int. Ed. 2022, 61, e202213829

<https://doi.org/10.1002/anie.202213829>



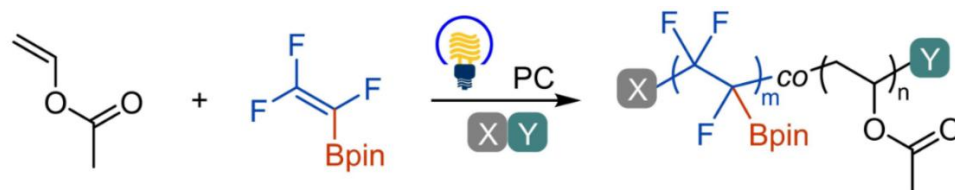
24 examples
yield up to 85%

Organocatalyzed Controlled Radical Copolymerization toward Hybrid Functional Fluoropolymers Driven by Light

Yang Zeng, Qinzhi Quan, Peng Wen, Zexi Zhang, and Mao Chen

Angew. Chem. Int. Ed. 2022, 61, e202215628

<https://doi.org/10.1002/anie.202215628>



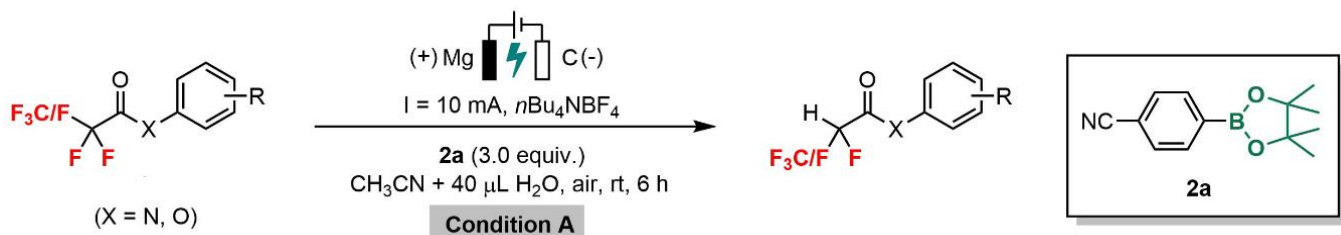
13 examples

Organoboron Reagent-Controlled Selective (Deutero)Hydrodefluorination

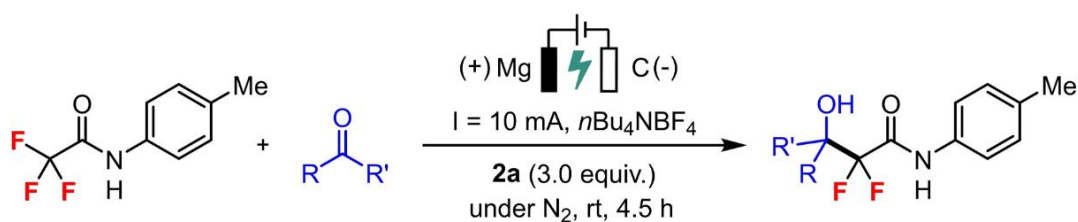
Zheng-Jia Shen, Chen Zhu, Xiao Zhang, Chao Yang, Magnus Rueping, Lin Guo, and Wujiong Xia

Angew. Chem. Int. Ed. 2023, 62, e202217244

<https://doi.org/10.1002/anie.202217244>



29 examples
yield up to 77%



5 examples
yield up to 51%

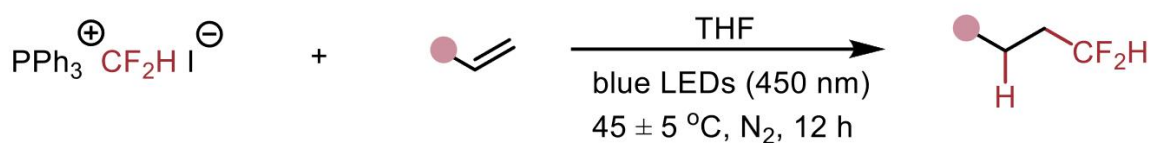
Chinese Chemical Letters

Visible-light-induced direct hydrodifluoromethylation of alkenes with difluoromethyltriphenylphosphonium iodide salt

Xiaojian Ren, Qiang Liu, Zhixiang Wang, Xiangyu Chen

Chinese Chemical Letters, 2023, 34, 107473

<https://doi.org/10.1016/j.cclet.2022.04.071>



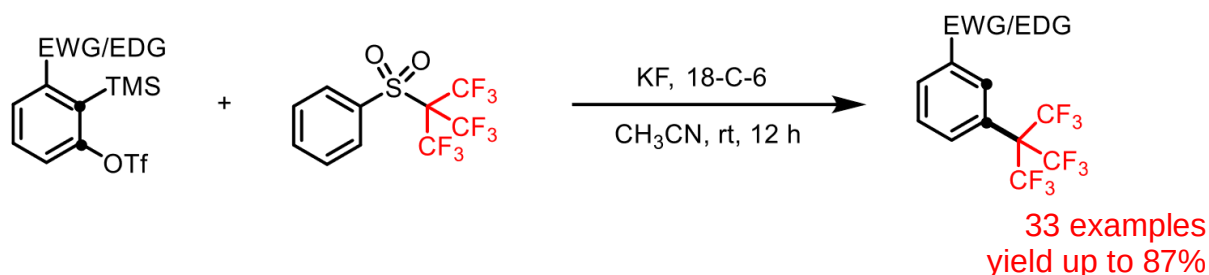
30 examples
yield up to 78%

Regioselective Aromatic Perfluoro-tert-butylation Using Perfluoro-tert-butyl Phenyl Sulfone and Arynes

Zhiqiang Wei, Lixian Wen, Kaidi Zhu, Qian Wang, Yanchuan Zhao, and Jinbo Hu

J. Am. Chem. Soc., 2022, 144, 22281-22288

<https://doi.org/10.1021/jacs.2c10479>

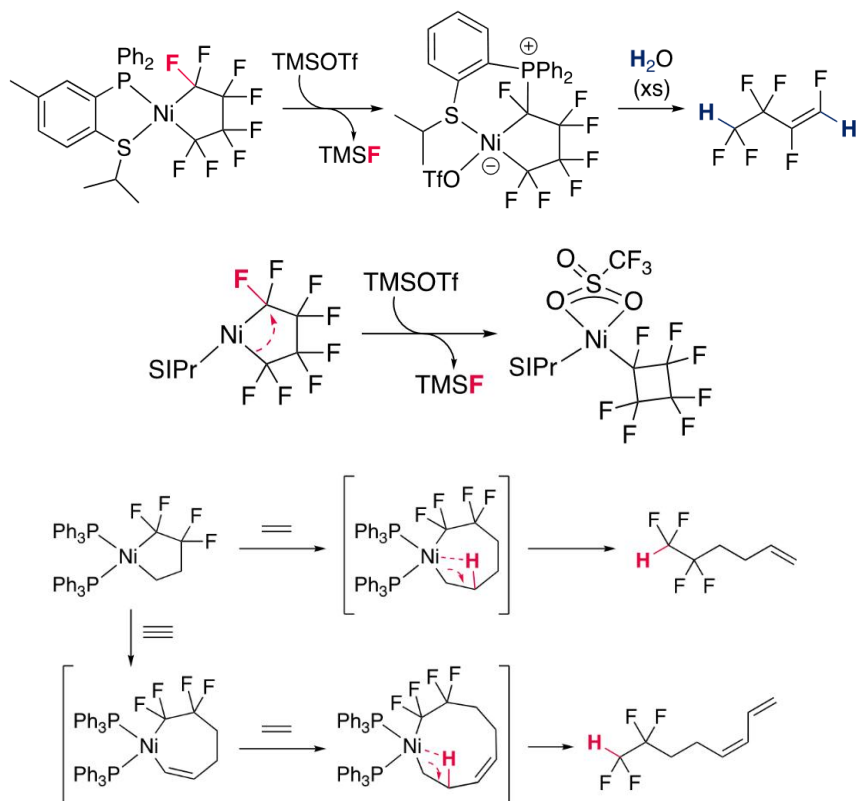


Nickel-Catalyzed Homologation of Vinylidene Difluoride ($\text{CH}_2=\text{CF}_2$): Selective β -F vs β -H Elimination

Alexandre J. Sicard, Behnaz Ghaffari, Bulat M. Gabidullin, Jeffrey S. Ovens, Russell P. Hughes, and R. Tom Baker

J. Am. Chem. Soc., 2022, 144, 22713-22721

<https://doi.org/10.1021/jacs.2c10448>



Visible-light-promoted generation of p-(N,N-dimethyl)benzyl equivalents and their reactions with quinols: easy access to diarylalkanes

Baihui Zheng, Xiaotong Li, Shuyang Meng, Yifei Li, Qun Liu and Ling Pan

Org. Chem. Front., 2023, 10, 859-865

<https://doi.org/10.1039/d2qo01906j>



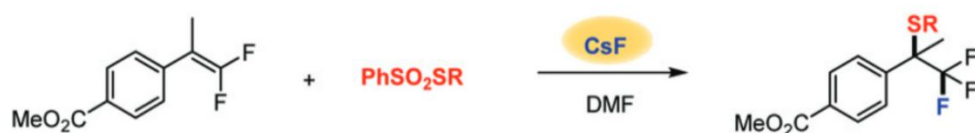
15 examples
yield up to 81%

Synthesis of α -trifluoromethyl sulfides through fluorosulfuration of gem-difluoroalkenes

Tingting Song, a Chen-Ho Tung a and Zhenghu Xu

Org. Chem. Front., 2022, 9, 2926-2931

<https://doi.org/10.1039/d2qo00391k>



19 examples
yield up to 98%