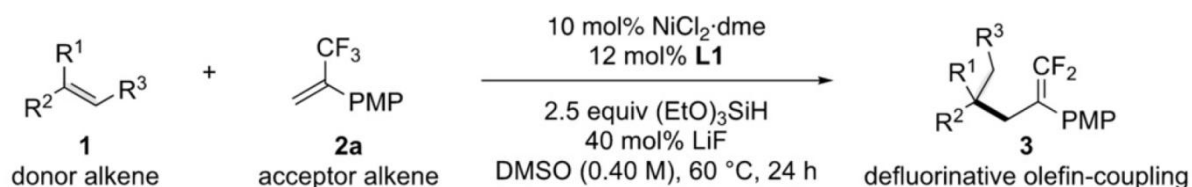


Angewandte Chemie

NiH-Catalyzed Migratory Defluorinative Olefin Cross-Coupling: Trifluoromethyl-Substituted Alkenes as Acceptor Olefins to Form gem -Difluoroalkenes

Fenglin Chen, Xianfeng Xu, Yuli He, Prof. Genping Huang, Prof. Shaolin Zhu

Angew. Chem. Int. Ed., 2020, 59, 5398-5402



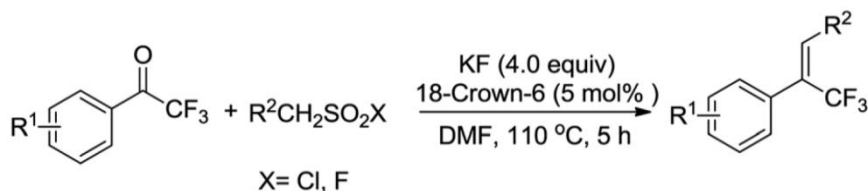
36 examples
yield up to 94%

Chemical Communications

Recent advances in the synthesis and applications of α-(trifluoromethyl)styrenes in organic synthesis

Feitao Tian, Guobing Yan and Jian Yu*

Chem. Commun., 2019, 55, 13486-13505

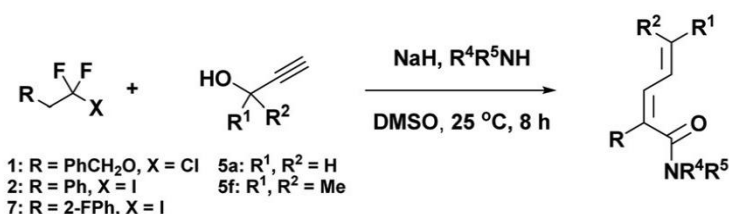


6 examples
yield up to 92%

Stereoselective three-component cascade synthesis of α-substituted 2,4-dienamides from gem-difluorochloro ethanes

Shyamsundar Das, Nakeun Ko, Eunsung Lee, Sang Eun Kim^{acd} and Byung Chul Lee

Chem. Commun., 2019, 55, 14355-14358

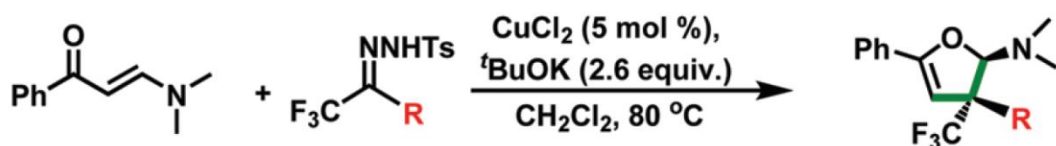


7 examples
yield up to 86%

Stereoselective synthesis of trifluoromethyl-substituted 2H-furan- amines from enaminones

Xiaoyu Liang, Pan Guo, Wenjie Yang, Meng Li, Chengzhou Jiang, Wangbin Sun,
Teck-Peng Loh and Yaojia Jiang

Chem. Commun., 2020, 56, 2043-2046



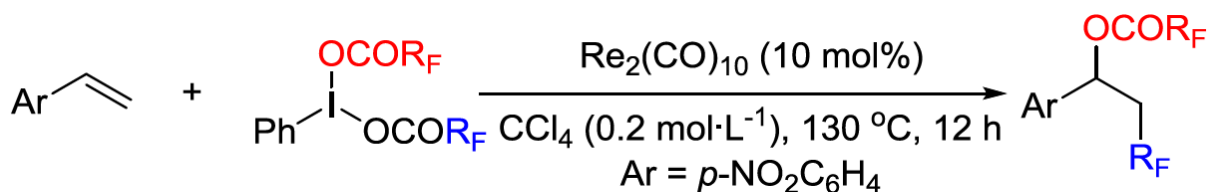
17 examples
yield up to 96%

Chinese Journal of Chemistry

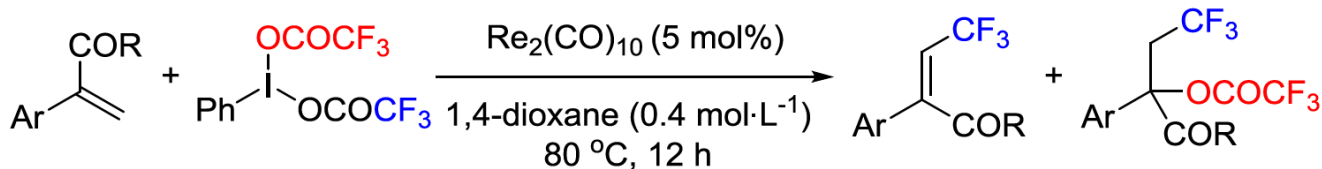
Rhenium-Catalyzed Decarboxylative Tri-/Difluoromethylation of Styrenes with Fluorinated Carboxylic Acid-Derived Hypervalent Iodine Reagents

Yin Wang, Yunhui Yang, Congyang Wang

Chin. J. Chem., 2019, 37, 1009-1014



4 examples
yield up to 54%



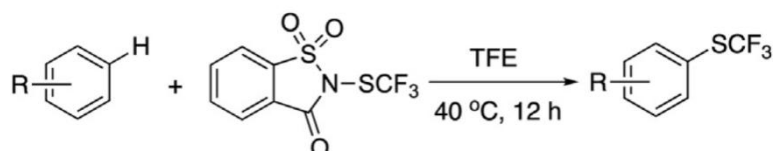
11 examples
yield up to 69%

Chinese Chemical Letters

Friedel-Crafts trifluoromethylthiolation of electron-rich (hetero)arenes with trifluoromethylthio-saccharin in 2,2,2-trifluoroethanol (TFE)

Shiyao Lu, Wenbo Chen, Qilong Shen

Chin. Chem. Lett, 2019, 30, 2279-2281



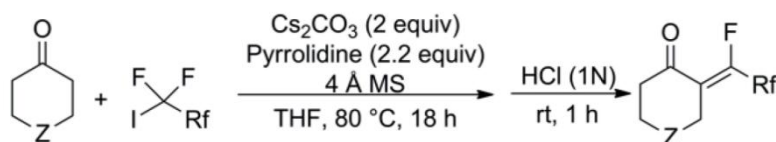
22 examples
yield up to 99%

European Journal of Organic Chemistry

Versatile Fluorinated Building Blocks by Stereoselective (Per)fluoroalkenylation of Ketones

Fei Ye, Shaoke Zhang, Zhihong Wei, Florian Weniger, Anke Spannenberg, Christoph Taeschler, Stefan Ellinger, Haijun Jiao, Helfried Neumann, Matthias Beller

Eur.J. Org.Chem., 2020, 70-81

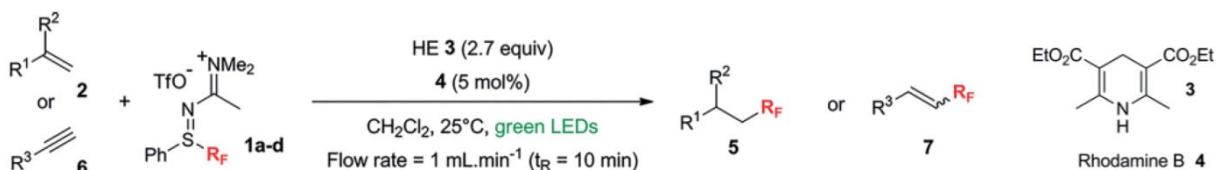


25 examples
yield up to 87%

Metal-Free Visible-Light-Mediated Hydrotrifluoromethylation of Unactivated Alkenes and Alkynes in Continuous Flow

Anne-Laure Barthelemy, Guillaume Dagousset, Emmanuel Magnier

Eur.J. Org.Chem., 2020, 1429-1432



19 examples
yield up to 76%

Fluoroalkylselenolation of Alkyl Silanes/Trifluoroborates under Metal-Free Visible-Light Photoredox Catalysis

Clément Ghiazza, Lhoussain Khrouz, Thierry Billard, Cyrille Monnereau, Anis Tlili

Eur.J. Org.Chem., 2020, 1559-1566



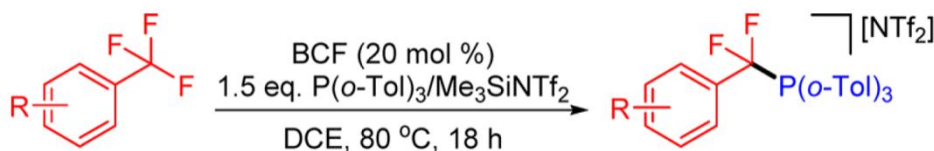
11 examples
yield up to 74%

Journal of the American Chemical Society

Frustrated Lewis-Pair-Mediated Selective Single Fluoride Substitution in Trifluoromethyl Groups

Dipendu Mandal, Richa Gupta, Amit K. Jaiswal, and Rowan D. Young*

J. Am. Chem. Soc., 2020, 142, 2572-2578



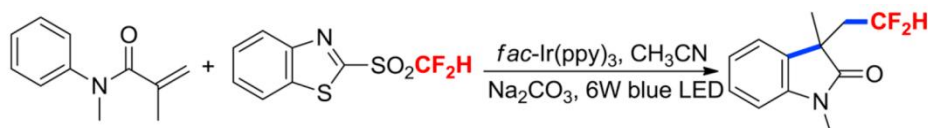
11 examples
yield up to 91%

Journal of Fluorine Chemistry

Synthesis of CF_2H -containing oxindoles via photoredox-catalyzed radical difluoromethylation and cyclization of N-arylacrylamides

Mei Zhu, Qingqing You, Rongxia Li

J. Fluor. Chem., 2019, 228, 109391

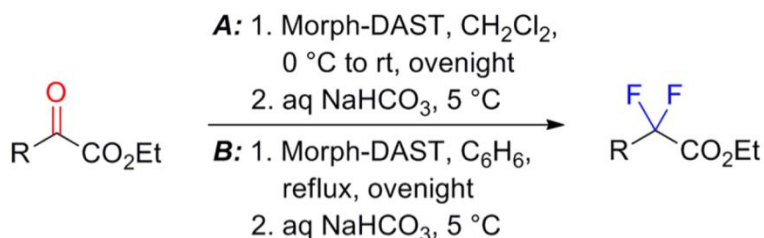


19 examples
yield up to 88%

Synthesis and chemical transformations of diazoly α,α -difluoroacetates

Oleksandr V.Geraschenko, Vitalii V.Solomin, Bohdan V.Vashchenko, Pavlo Khodakivskyi, Andrey A.Tolmachev, Oleksandr O.Grygorenko

J. Fluor. Chem., 2020, 229, 109407

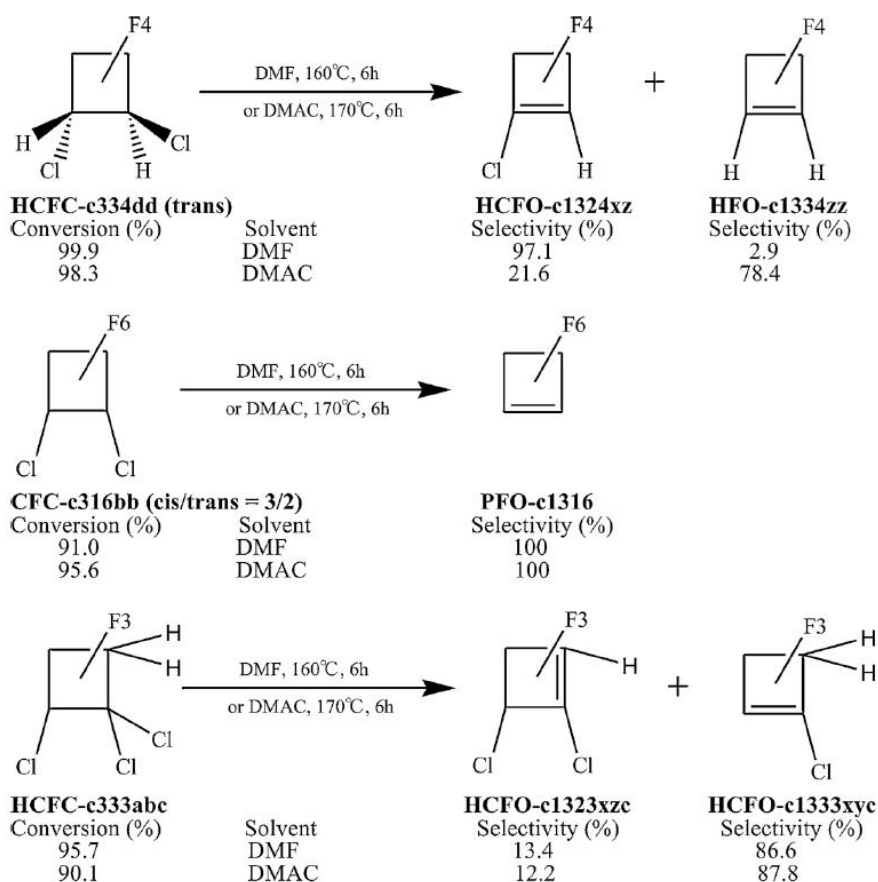


9 examples
yield up to 96%

Synthesis of hydrohalocyclobutenes through dechlorination of hydrohalocyclobutanes in amide solvents

Wenni Zhang, Fengniu Lu, Chengping Zhang, Qin Guo, Hengdao Quan

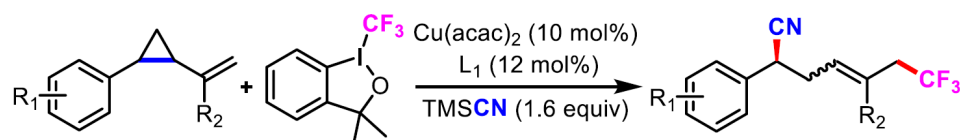
J. Fluor. Chem., 2020, 233, 109506



Enantioselective Copper-Catalyzed 1,5-Cyanotrifluoromethylation of Vinylcyclopropanes

Zi-Qi Zhang, Xiang-Yu Meng, Jie Sheng, Quan Lan, and Xi-Sheng Wang*

Org. Lett., 2019, 21, 8256-8260

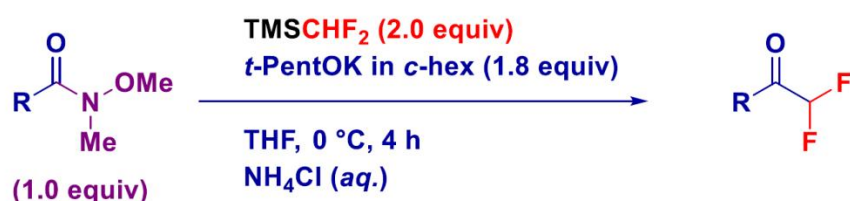


24 examples
yield up to 93%

Direct and Chemoselective Synthesis of Tertiary Difluoroketones via Weinreb Amide Homologation with a CHF₂-Carbene Equivalent

Margherita Miele, Andrea Citarella, Nicola Micale, Wolfgang Holzer, and Vittorio Pace*

Org. Lett., 2019, 21, 8261-8265

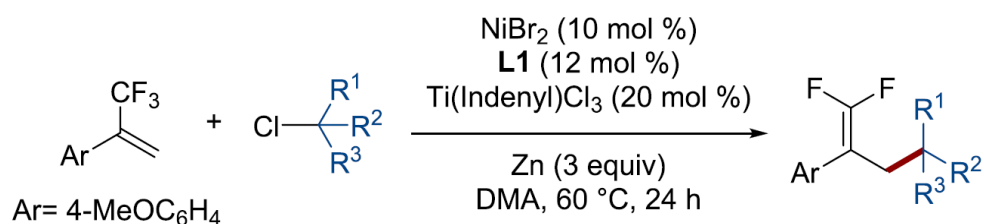


37 examples
yield up to 96%

Reductive Allylic Defluorinative Cross-Coupling Enabled by Ni/Ti Cooperative Catalysis

Zhiyang Lin, Yun Lan, and Chuan Wang*

Org. Lett., 2019, 21, 8316-8322

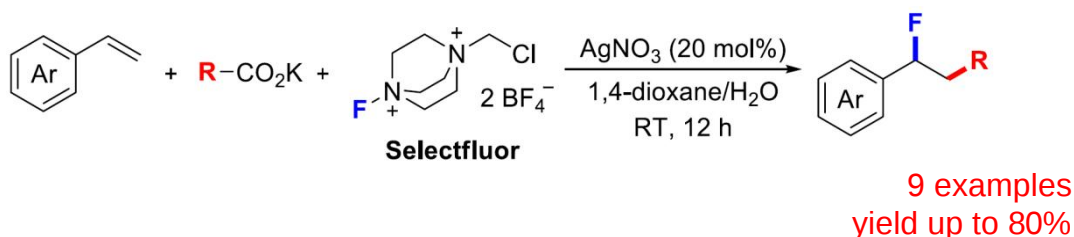


15 examples
yield up to 95%

Silver-Catalyzed Decarboxylative Alkylfluorination of Alkenes

Chen-Guang Li, Qiang Xie, Xiao-Lan Xu, Feng Wang, Bei Huang, Yu-Feng Liang*, and Hua-Jian Xu*

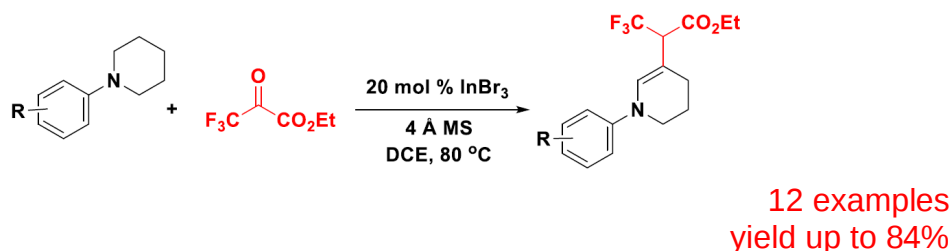
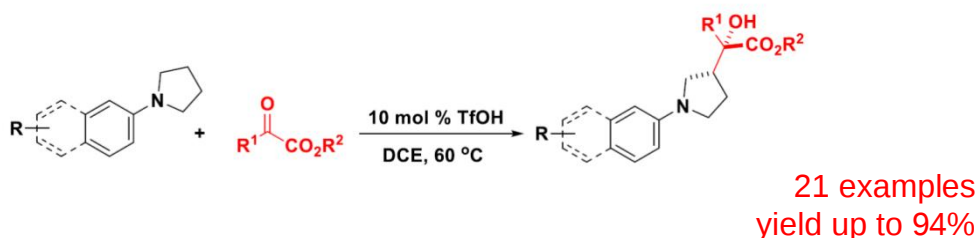
Org. Lett., 2019, 21, 8496-8500



Redox-Neutral β -C(sp³)-H Functionalization of Cyclic Amines via Intermolecular Hydride Transfer

Lan Zhou, Yao-Bin Shen, Xiao-De An, Xian-Jiang Li, Shuai-Shuai Li*, Qing Liu, and Jian Xiao*

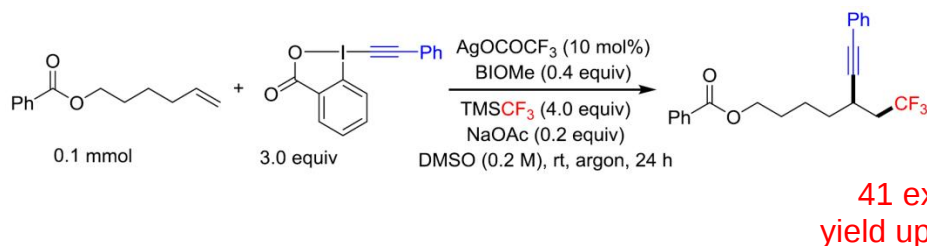
Org. Lett., 2019, 21, 8543-8547



Silver-Catalyzed Trifluoromethylalkynylation of Unactivated Alkenes with Hypervalent Iodine Reagents

Xinkan Yang and Gavin Chit Tsui*

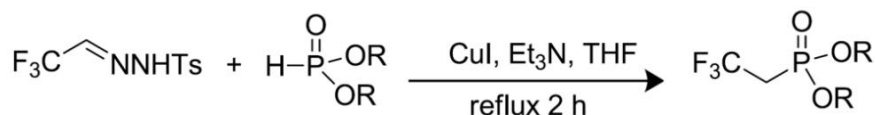
Org. Lett., 2019, 21, 8625-8629



Trifluoroacetaldehyde N-Tosylhydrazone as a Precursor of Trifluorodiazaoethane in Reactions of Insertion into the Heteroatom–Hydrogen Bond

Vladimir S. Ostrovskii, Irina P. Beletskaya, and Igor D. Titanyuk*

Org. Lett., 2019, 21, 9080-9083

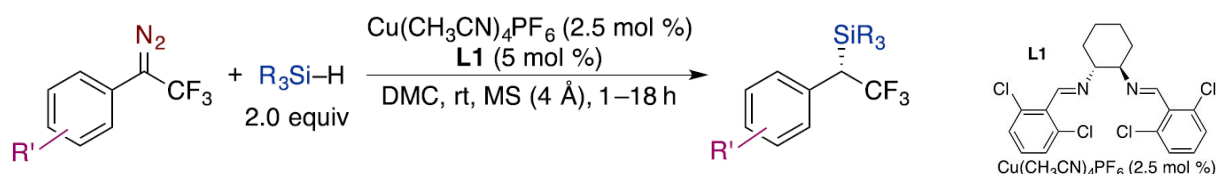


6 examples
yield up to 81%

Asymmetric Cu^I-Catalyzed Insertion Reaction of 1-Aryl-2,2,2-trifluoro-1-diazoethanes into Si–H Bonds

Virginie Carreras, Claire Besnard, Vincent Gandon*, and Thierry Ollevier*

Org. Lett., 2019, 21, 9094-9098

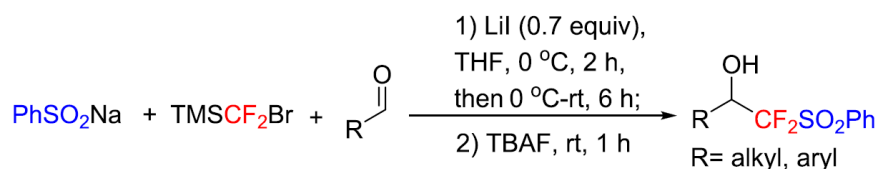


20 examples
yield up to 98%

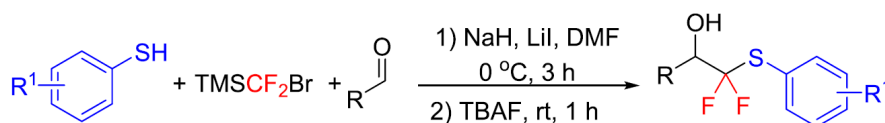
Nucleophilic (Phenylsulfonyl/arylthio)difluoromethylation of Aldehydes with TMSCF₂Br: A Three-Component Strategy

Qiqiang Xie, Ziyue Zhu, Chuanfa Ni, and Jinbo Hu

Org. Lett., 2019, 21, 9138-9141



20 examples
yield up to 93%

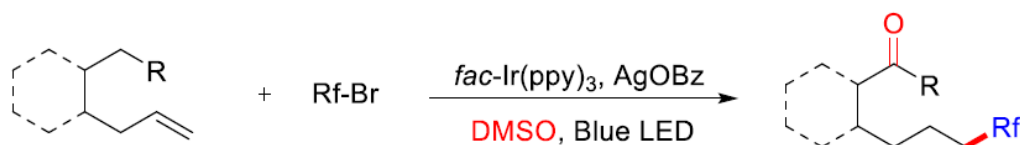


11 examples
yield up to 99%

Photoredox-Catalyzed Remote Difunctionalizations of Alkenes To Synthesize Fluoroalkyl Ketones with Dimethyl Sulfoxide as the Oxidant

Lixin Li*, Haotian Luo, Zhengguang Zhao, Yong Li, Qiuju Zhou, Jing Xu, Jie Li and Yan-Na Ma*

Org. Lett., 2019, 21, 9228-9231

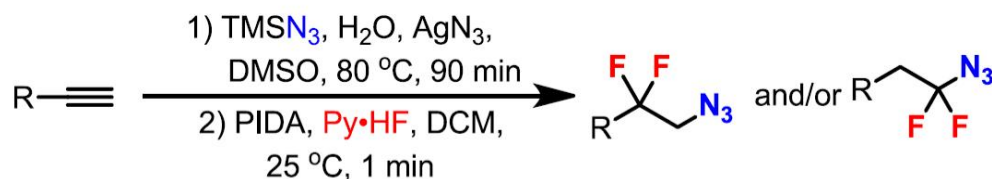


9 examples
yield up to 81%

Transformation of Alkynes into α - or β -Difluorinated Alkyl Azides by an Efficient One-Pot Two-Step Procedure

Huaizhi Li, Bhoomireddy Rajendra Prasad Reddy, and Xihe Bi*

Org. Lett., 2019, 21, 9358-9362

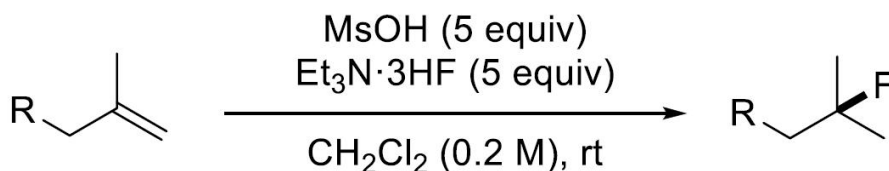


32 examples
yield up to 85%

Direct Hydrofluorination of Methallyl Alkenes Using a Methanesulfonic Acid/Triethylamine Trihydrofluoride Combination

Xavier Bertrand and Jean-François Paquin*

Org. Lett., 2019, 21, 9759-9762

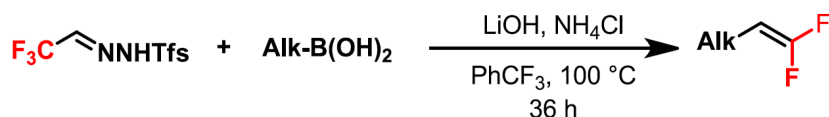


27 examples
yield up to 78%

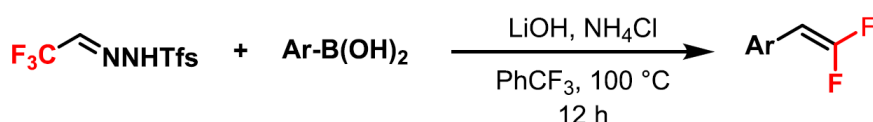
Coupling of Trifluoroacetaldehyde *N*-Triflylhydrazone with Organoboronic Acids for the Synthesis of *gem*-Difluoroalkenes

Yu Ma, Bhoomireddy Rajendra Prasad Reddy, and Xihe Bi*

Org. Lett., 2019, 21, 9860-9863



21 examples
yield up to 94%

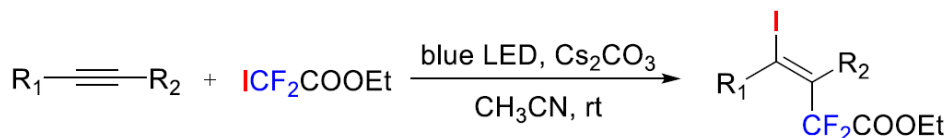


20 examples
yield up to 94%

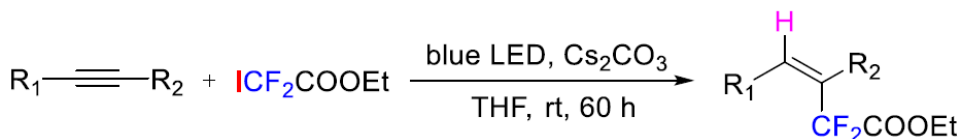
Blue Light Induced Difluoroalkylation of Alkynes and Alkenes

Kangkui Li, Xuexin Zhang, Jingchao Chen*, Yang Gao, Chunhui Yang, Keyang Zhang, Yongyun Zhou, and Baomin Fan*

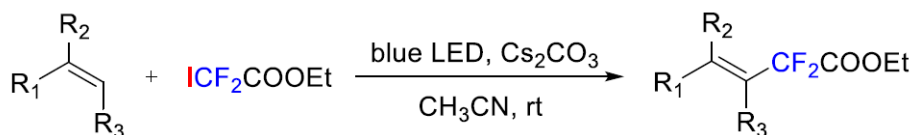
Org. Lett., 2019, 21, 9914-9918



22 examples
yield up to 93%



6 examples
yield up to 85%

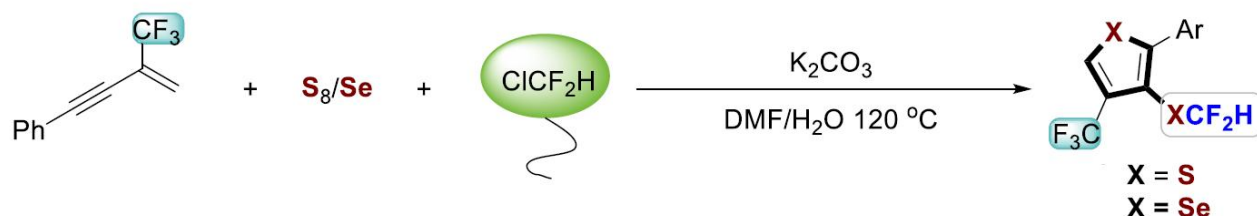


16 examples
yield up to 89%

Precise Construction of SCF₂H or SeCF₂H Groups on Heteroarenes Generated *in Situ* from CF₃-Containing 1,3-Enynes

Kangkui Li, Xuexin Zhang, Jingchao Chen*, Yang Gao, Chunhui Yang, Keyang Zhang, Yongyun Zhou, and Baomin Fan*

Org. Lett., 2020, 22, 615-619

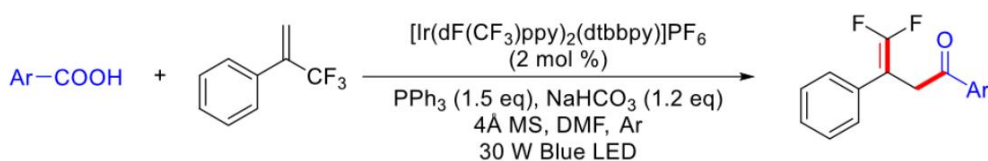


28 examples
yield up to 94%

Visible-Light-Induced Deoxygenation/Defluorination Protocol for Synthesis of γ,γ -Difluoroallylic Ketones

Yuan-Qiang Guo, Ruiguo Wang, Hongjian Song, Yuxiu Liu, and Qingmin Wang*

Org. Lett., 2020, 22, 709-713

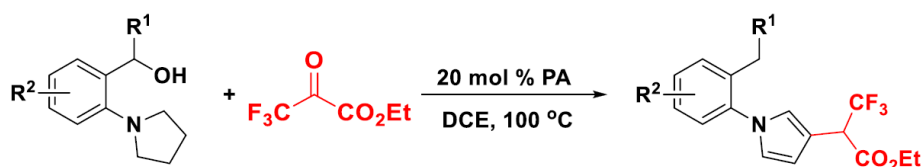


24 examples
yield up to 92%

Organocatalytic Cascade β -Functionalization/Aromatization of Pyrrolidines via Double Hydride Transfer

Lan Zhou, Xiao-De An, Shuo Yang, Xian-Jiang Li, Chang-Lun Shao*, Qing Liu, and Jian Xiao*

Org. Lett., 2020, 22, 776-780

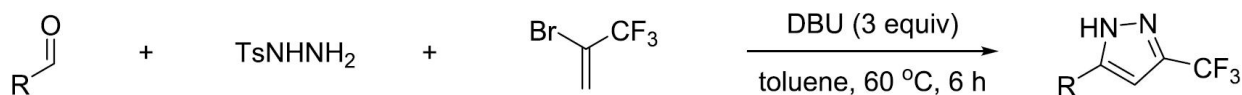


20 examples
yield up to 78%

Regioselective Synthesis of 3-Trifluoromethylpyrazole by Coupling of Aldehydes, Sulfonyl Hydrazides, and 2-Bromo-3,3,3-trifluoropropene

Chuanle Zhu*, Hao Zeng, Chi Liu, Yingying Cai, Xiaojie Fang, and Huanfeng Jiang*

Org. Lett., 2020, 22, 809-813

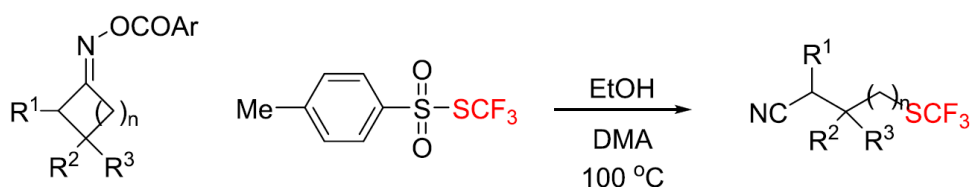


52 examples
yield up to 91%

Metal-Free sp^3 C-SCF₃ Coupling Reactions between Cycloketone Oxime Esters and S-trifluoromethyl 4-Methylbenzenesulfonylthioate

Xia Zhao*, Miaomiao Tian, Liangshuo Ji, Junjie Liu, and Kui Lu

Org. Lett., 2020, 22, 863-866

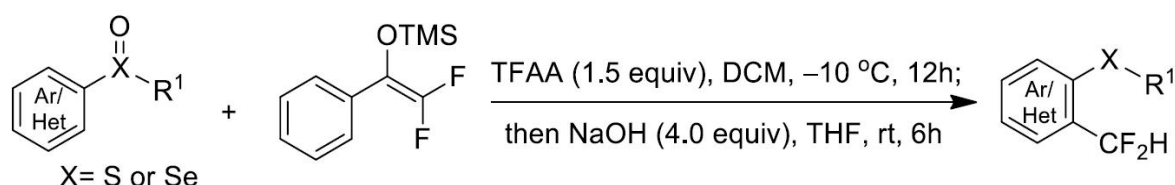


16 examples
yield up to 85%

[3,3]-Sigmatropic Rearrangement/Haller–Bauer Reaction of Aryl Sulfoxides and Selenoxides with Difluoroenoxy silanes: Access to CF₂H-Containing Chalcogenides

Jinshan Li, Yixin Chen, Rong Zhong, Yonggang Zhang, Jianguo Yang, Hanfeng Ding, and Zhiming Wang*

Org. Lett., 2020, 22, 1164-1168



10 examples
yield up to 96%