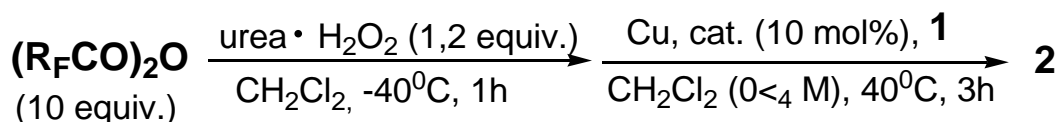
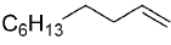
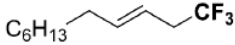
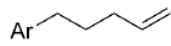
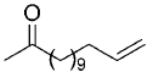
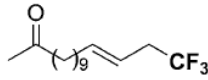
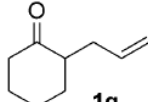
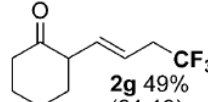
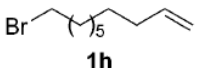
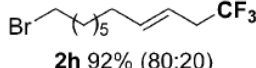
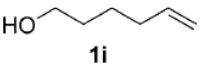
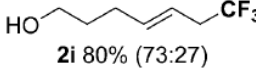
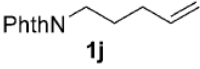
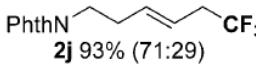
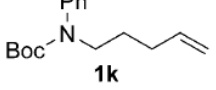
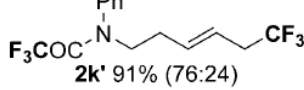
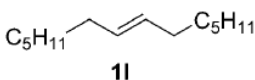
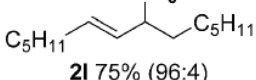

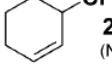
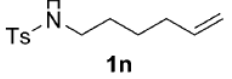
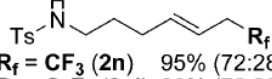


Perfluoroalkylation of Unactivated Alkenes with Acid Anhydrides as the Perfluoroalkyl Source

Shintaro Kawamura and Mikiko Sodeoka

Angew. Chem. Int. Ed., 2016, 55, 8740-8743



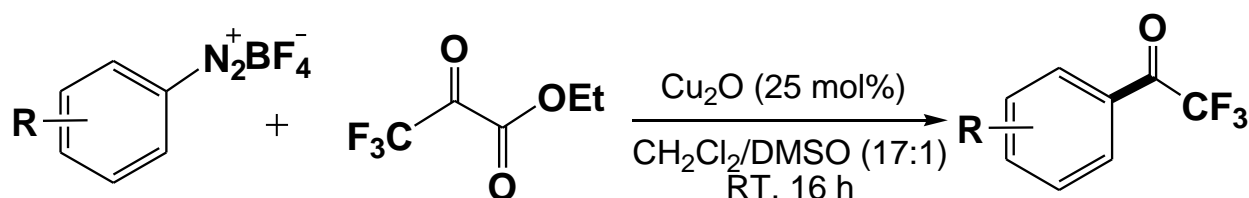
Entry	Starting material	Product / Isolated yield (<i>E/Z</i>) ^[a]
1	 1b	 2b 82% (80:20)
2 [b,c] 3 [b,c] 4 [b,c,d]	 1c-e	Ar = 4-MeC ₆ H ₄ (2c) 71% (82:18) Ar = 4-FC ₆ H ₄ (2d) 77% (79:21) Ar = 4-MeOC ₆ H ₄ (2e) 73% (81:19)
5	 1f	 2f 83% (79:21)
6	 1g	 2g 49% (81:19)
7 [c,e]	 1h	 2h 92% (80:20)
8 [c]	 1i	 2i 80% (73:27)
9	 1j	 2j 93% (71:29)
10	 1k	 2k' 91% (76:24)
11	 1l	 2l 75% (96:4)
12	 1m	 2m 48% (NMR yield)
13 14 15	 1n	 R_f = CF ₃ (2n) 95% (72:28) R_f = C ₂ F ₅ (2n') 80% (72:28) R_f = C ₃ F ₇ (2n'') 72% (75:25)

[a] *E/Z* ratios were determined by ¹⁹F NMR analysis. [b] The reaction was conducted in 0.2 M CH₂Cl₂ at 0°C. [c] 20 mol% of the catalyst was used. [d] Cu(O₂CCF₃)₂ was used instead of [Cu(CH₃CN)₄]PF₆. [e] The crude product was hydrolyzed with Et₃N/SiO₂.

Copper-Mediated Trifluoroacetylation of Arenediazonium Salts with Ethyl Trifluoroacetate

Wei Wu, Qinli Tian, Taotao Chen, and Zhiqiang Weng

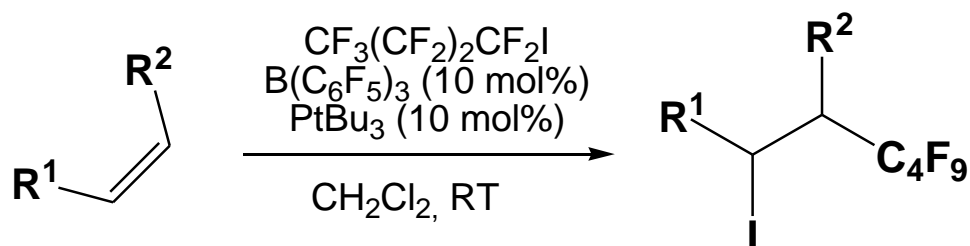
Chem. Eur. J., 2016, 22, 16455-16458



Perfluoroalkylation of Alkenes by Frustrated Lewis Pairs

Ilona Behrends, Susanne B-hr, and Constantin Czekelius

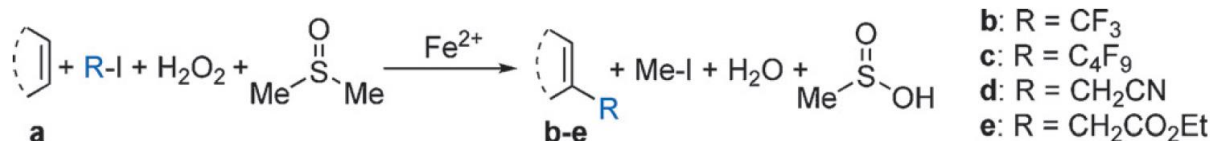
Chem. Eur. J., 2016, 22, 17177-17181



Continuous Flow Homolytic Aromatic Substitution with Electrophilic Radicals: A Fast and Scalable Protocol for Trifluoromethylation

Jffllia L. Monteiro, Paula F. Carneiro, Petteri Elsner, Dominique M. Roberge, Peter G. M. Wuts, Katherine C. Kurjan, Bernhard Gutmann, and C. Oliver Kappe

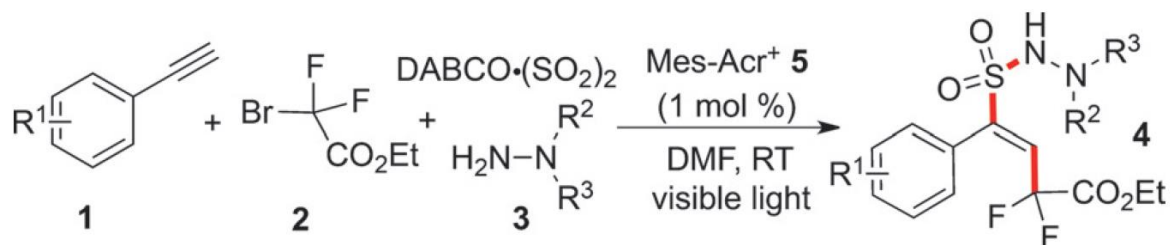
Chem. Eur. J., 2017, 23, 177-186



Vicinal Difluoroalkylation and Aminosulfonylation of Alkynes Under Photoinduced Conditions

Yuanchao Xiang, Yuewen Li, Yunyan Kuang, and Jie Wu

Chem. Eur. J., 2017, 23, 1032-1035

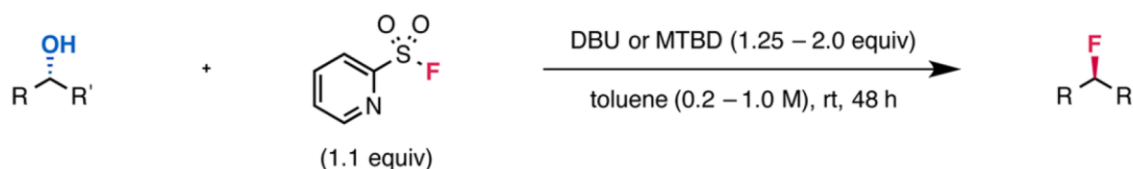


Journal of the American Chemical Society

PyFluor: A Low-Cost, Stable, and Selective Deoxyfluorination Reagent

Matthew K. Nielsen, Christian R. Ugaz, Wenping Li, and Abigail G. Doyle

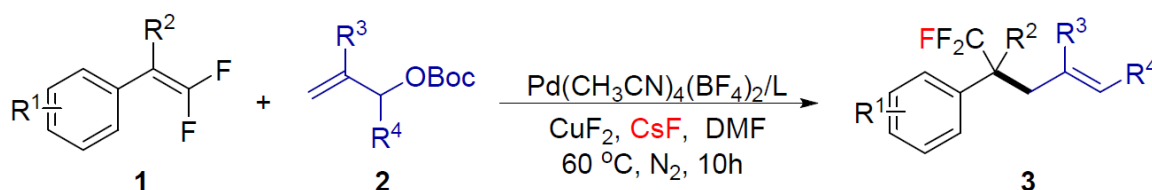
J. Am. Chem. Soc., 2015, 137, 9571-9574



F⁻ Nucleophilic Addition Induced Allylic Alkylation

Panpan Tian, Cheng-Qiang Wang, Sai-Hu Cai, Shengjin Song, Lu Ye, Chao Feng, and Teck-Peng Loh

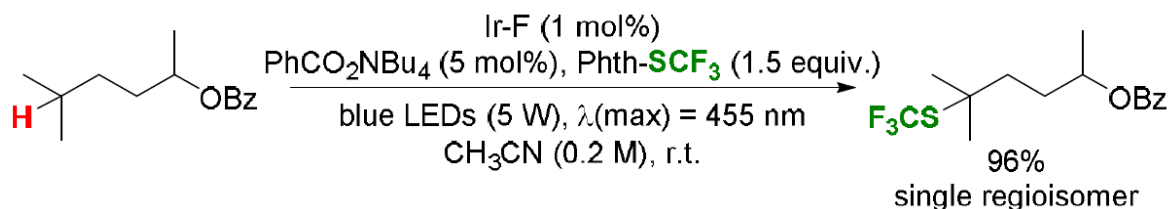
J. Am. Chem. Soc., 2016, 138, 15869-15872



Visible light-promoted activation of unactivated C(sp³)-H bonds and its selective trifluoromethylthiolation

Satobhisha Mukherjee, Biplab Maji, Adrian Tlahuext-Aca, Frank Glorius

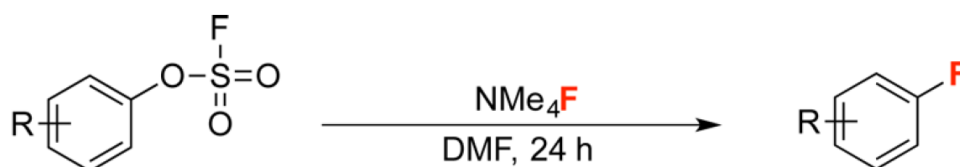
J. Am. Chem. Soc., 2016, 138, 16200-16203



Nucleophilic Deoxyfluorination of Phenols via Aryl Fluorosulfonate Intermediates

Sydonie D. Schimler, Megan A. Cismesia, Patrick S. Hanley, Robert D. J. Froese, Matthew J. Jansma, Douglas C. Bland, and Melanie S. Sanford

J. Am. Chem. Soc., 2017, 139, 1452-1455

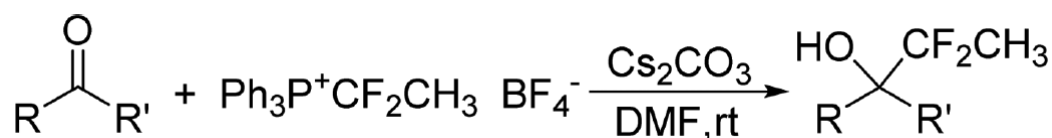


Journal of Organic Chemistry

Nucleophilic 1,1-difluoroethylation with fluorinated phosphonium salt

Zuyong Deng, Can Liu, Xian-Liang Zeng, Jin-Hong Lin, and Ji-Chang Xiao

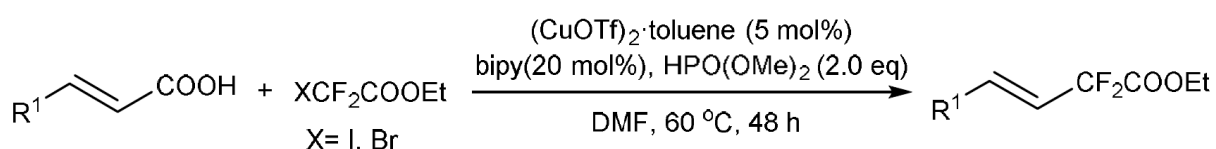
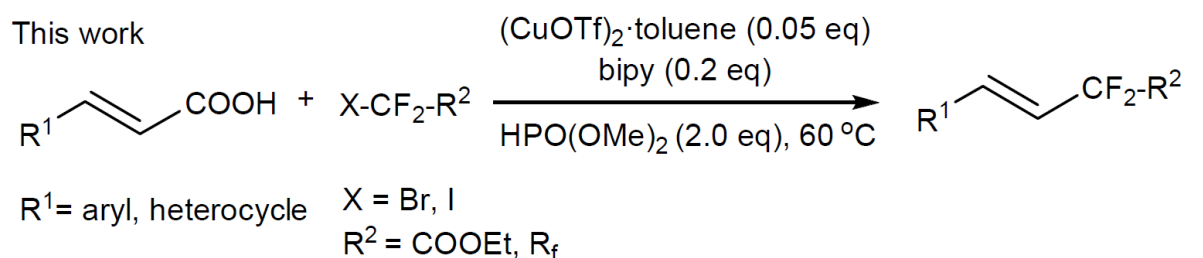
J. Org. Chem., 2016, 81, 12084-12090



Copper-Catalyzed Decarboxylative Difluoroalkylation and Perfluoroalkylation of α,β -Unsaturated Carboxylic Acids

Yin-Long Lai, Dian-Zhao Lin, and Jing-Mei Huang

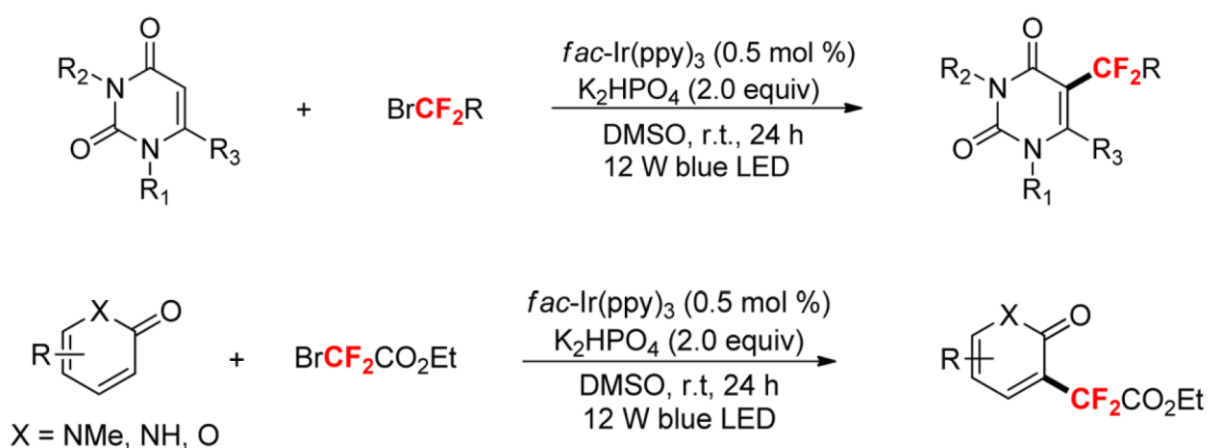
J. Org. Chem., 2017, 82, 597-605



Visible-Light-Induced Direct Difluoroalkylation of Uracils, Pyridinones, and Coumarins

Chun-Yang He, Jingjing Kong, Xuefei Li, Xiaofei Li, Qiuli Yao, and Fu-Ming Yuan

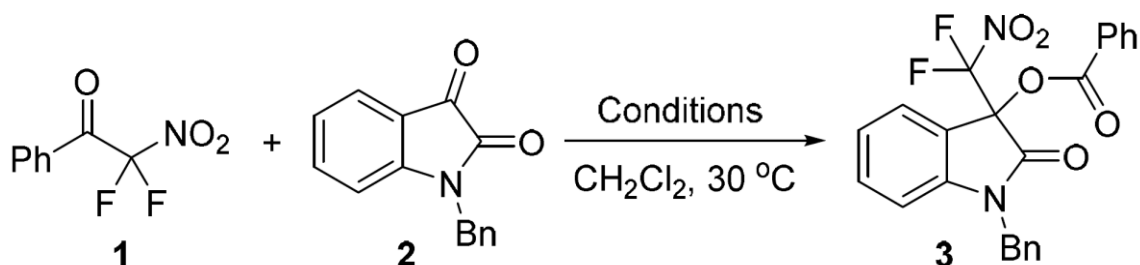
J. Org. Chem., 2017, 82, 910-917



Organocatalytic Insertion of Isatins into Aryl Difluoronitromethyl Ketones

Ransheng Ding, Pegah R. Bakhshi, and Christian Wolf

J. Org. Chem., 2017, 82, 1273-1280

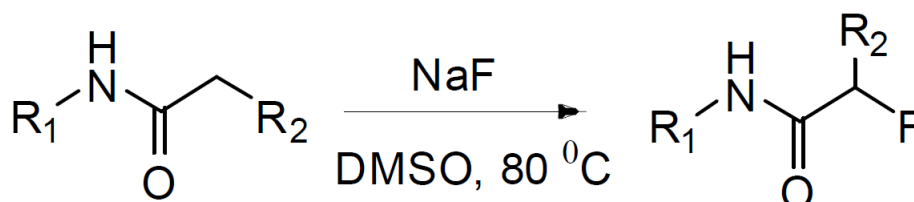


New Journal of Chemistry

Catalyst Free Synthesis of α -Fluorinated Aroylacyl Imides

Dhanamoorthy Vaithialingam, Duraimurugan Kumaraguru and Siva Ayyanar

New J.Chem., 2016, 40, 7604-7611

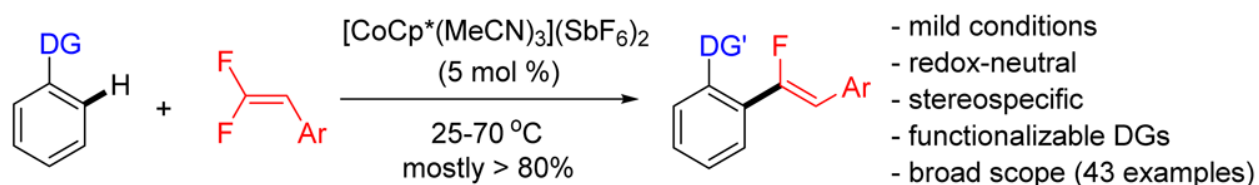


Organic Letters

Cobalt(III)-Catalyzed Regio- and Stereoselective α -Fluoroalkenylation of Arenes with gem-Difluorostyrenes

Lingheng Kong, Xukai Zhou, and Xingwei Li

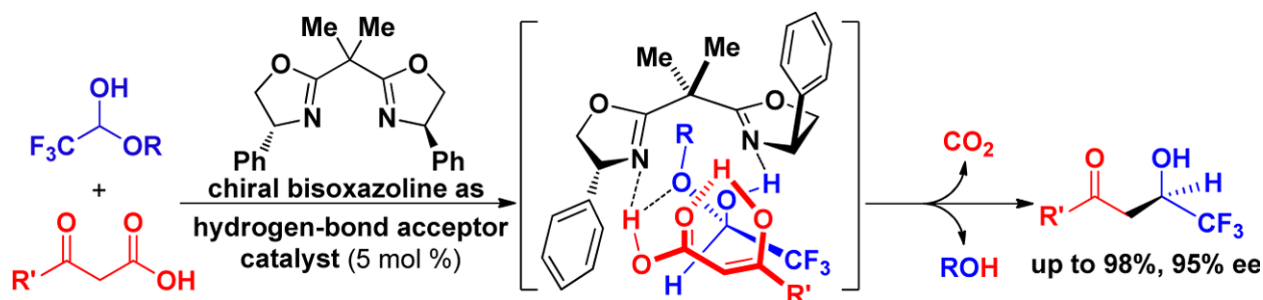
Org. Lett., 2016, 18, 6320-6323



C2-Symmetric Chiral Bisoxazolines as Hydrogen-Bond-Acceptor Catalysts in Enantioselective Aldol Reaction of β -Carbonyl Acids with Trifluoroacetaldehyde Hemiacetals

Zhen-Yan Yang, Jun-Liang Zeng, Nan Ren, Wei Meng, Jing Nie, and Jun-An Ma

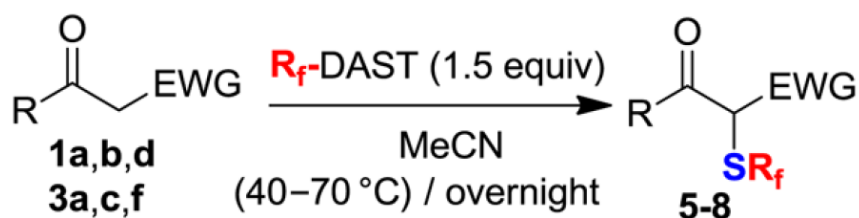
Org. Lett., 2016, 18, 6364-6367



Perfluoroalkyl Analogues of Diethylaminosulfur Trifluoride: Reagents for Perfluoroalkylthiolation of Active Methylene Compounds under Mild Conditions

Ibrayim Saidalimu, Shugo Suzuki, Takuya Yoshioka, Etsuko Tokunaga, and Norio Shibata

Org. Lett., 2016, 18, 6404-6407



Trichloroisocyanuric Acid Promoted Cascade Cyclization/Trifluoromethylation of Allylic Oximes: Synthesis of Trifluoromethylated Isoxazolines

Weigang Zhang, Yingpeng Su, Ke-Hu Wang, Lili Wu, Bingbing Chang, Ya Shi, Danfeng Huang, and Yulai Hu

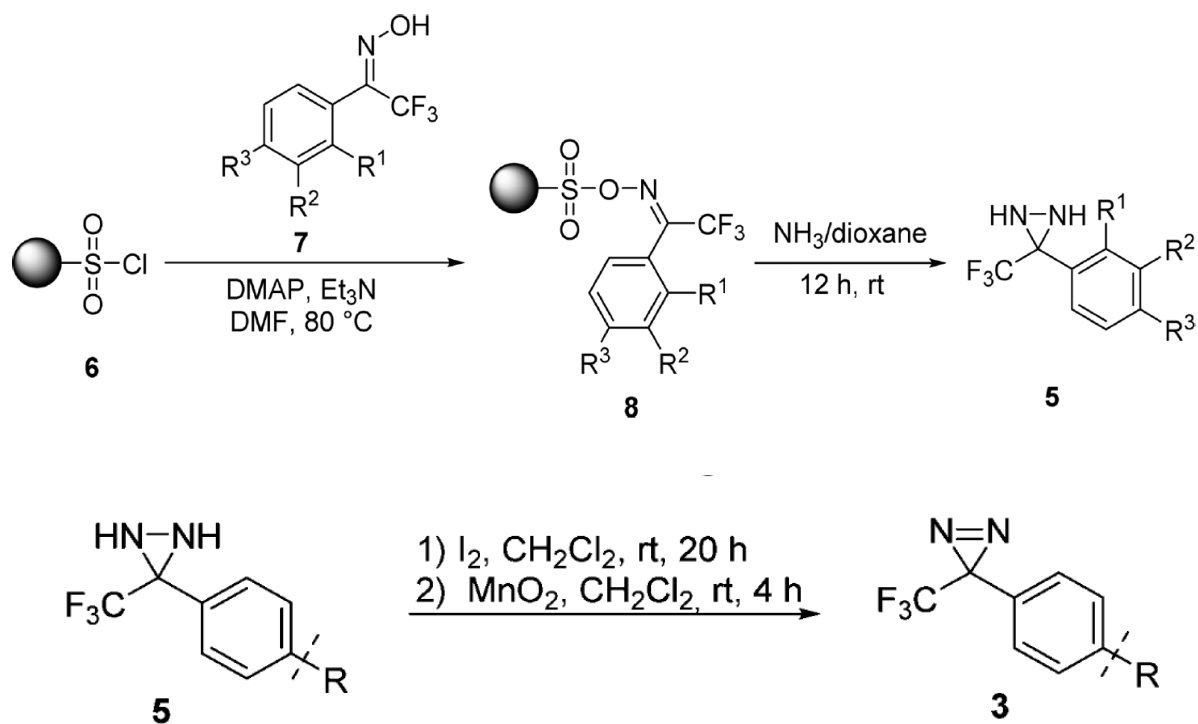
Org. Lett., 2017, 19, 376-379



Synthesis of Diaziridines and Diazirines via Resin-Bound Sulfonyl Oximes

Irina Protasova, Bekir Bulat, Nicole Jung, and Stefan Bräse

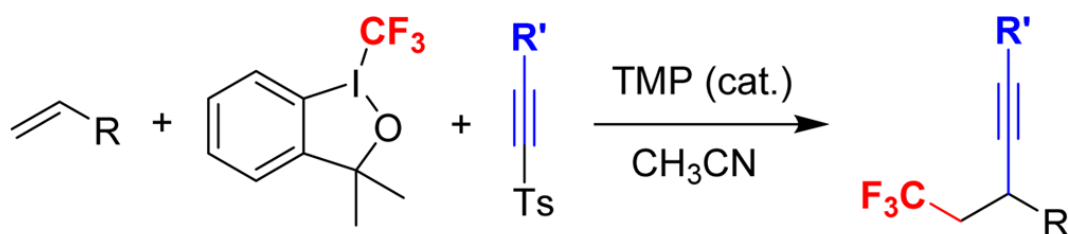
Org. Lett., 2017, 19, 34-37



Catalytic Radical Trifluoromethylalkynylation of Unactivated Alkenes

Shaofang Zhou, Tao Song, He Chen, Zhonglin Liu, Haigen Shen, and Chaozhong Li

Org. Lett., 2017, 19, 698-701

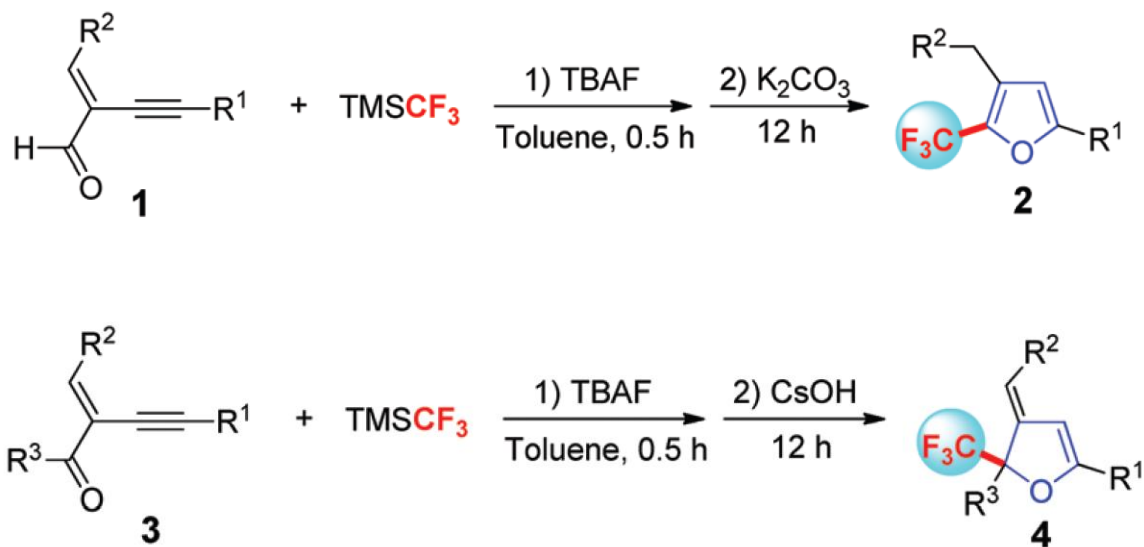


- catalytic non-chain radical process
- metal-free

A highly efficient one-pot trifluoromethylation/cyclization reaction of electron-deficient 1,3-conjugated enynes: modular access to trifluoromethylated furans and 2,3-dihydrofurans

Wei Zhou, Zhenting Yue and Junliang Zhang

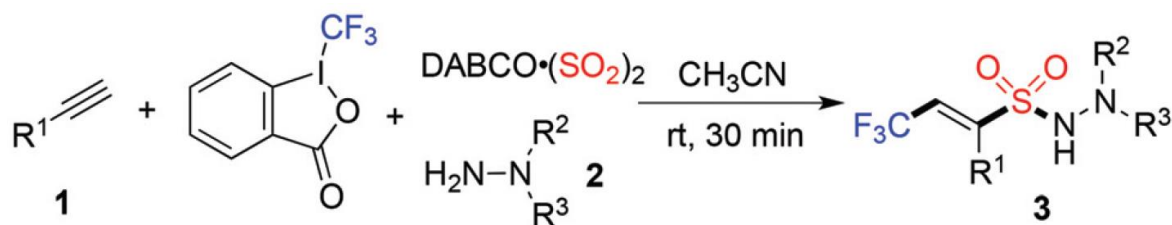
Org.Chem.Front., 2016, 3, 1416-1419



Direct vicinal difunctionalization of alkynes through trifluoromethylation and aminosulfonylation via insertion of sulfur dioxide under catalyst-free conditions

Yuewen Li, Yuanchao Xiang, Zhiming Li and Jie Wu

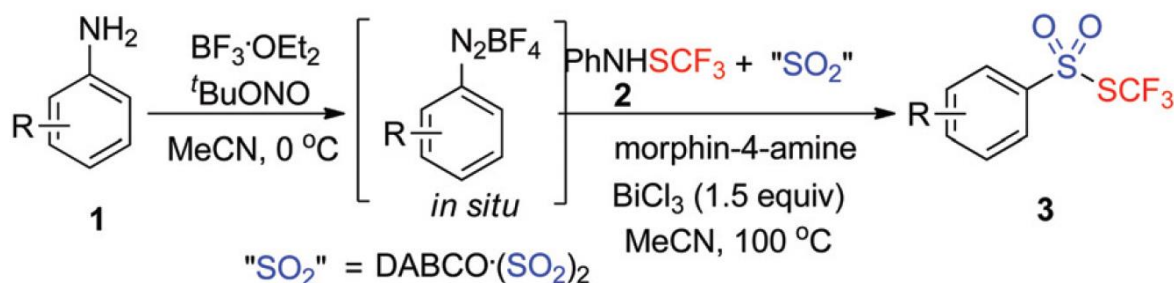
Org.Chem.Front., 2016, 3, 1493-1497



Reductive insertion of sulfur dioxide for the synthesis of trifluoromethyl thiol sulphonates through a one-pot reaction of aniline and trifluoromethanesulfanylamide

Jie Sheng, Yuewen Li and Guanyinsheng Qiu

Org.Chem.Front., 2017, 4, 95-100

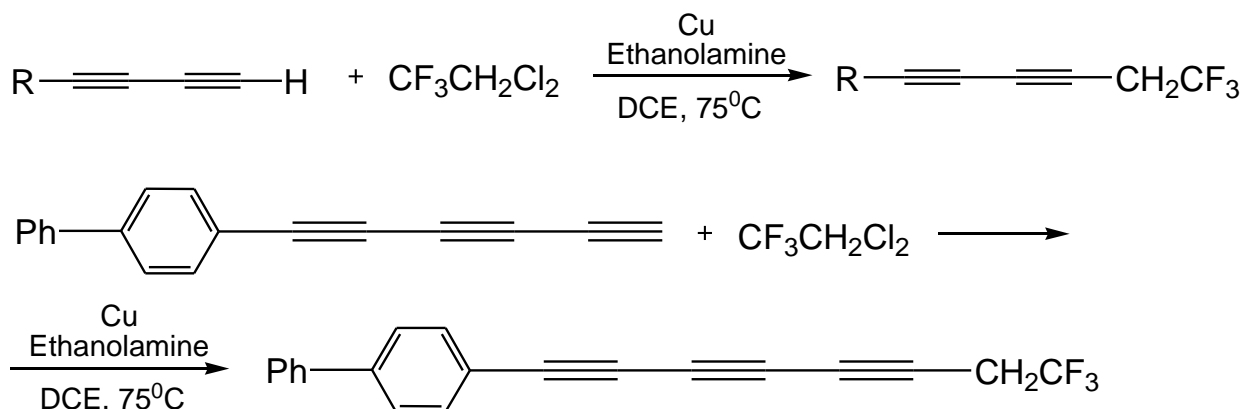


Tetrahedron Letters

Syntheses of trifluoroethylated unsymmetrical 1,3-diynes by using 1,1-dichloro-2,2,2-trifluoroethane

Jian Zheng, Qing-Yun Chen, Ke Sun, Yangen Huang, Yong Guo,

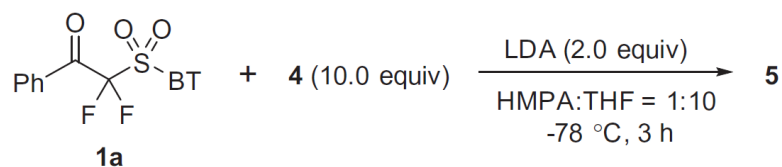
Tetrahedron Lett., 2016, 57, 5757-5760



An efficient method for the synthesis of gem-difluoroolefins

Chun-Ru Cao, Song Ou, Min Jiang, Jin-Tao Liu

Tetrahedron Lett., 2017, 58, 482-485



Entry ^a	4	Product	5	Yield (%) ^b
1			5a	75
2			5f	56
3			5g	37
4			5h	43
5			5i	51
6	CH ₃ NO ₂		5j	69

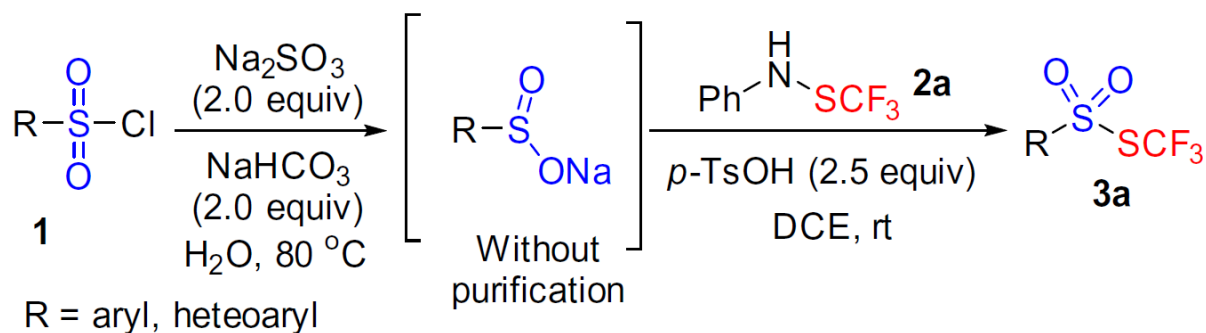
^a Reaction conditions: **1a** (1.0 equiv), **4** (10.0 equiv), LDA (2.0 equiv), HMPA:THF = 1:10 (V:V) at -78 °C for 3 h;

^b Isolated yield.

Generation of trifluoromethyl thiosulphonate through one-pot reaction of sulfonyl chloride and trifluoromethanesulfanylamides

Yuewen Li, Guanyinsheng Qiu, Hailong Wang, Jie Sheng

Tetrahedron Lett., 2017, 58, 690-693

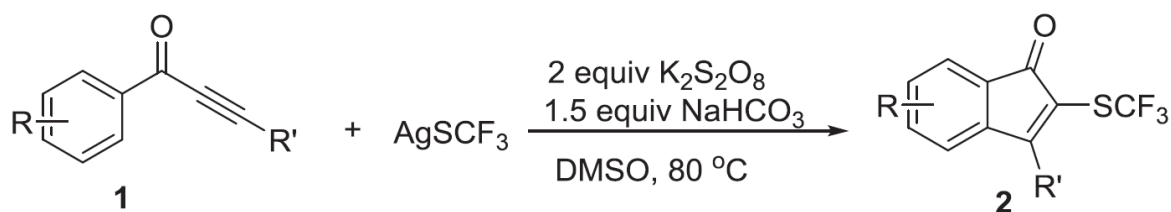


Tetrahedron

Synthesis of 2-(trifluoromethylthio)-indenones by silver-mediated cascade trifluoromethylthiolation/cyclization of arylpropynones

Yi-Kang Song, Peng-Cheng Qian, Fan Chen *, Chen-Liang Deng, Xing-Guo Zhang

Tetrahedron, 2016, 72, 7589-7593

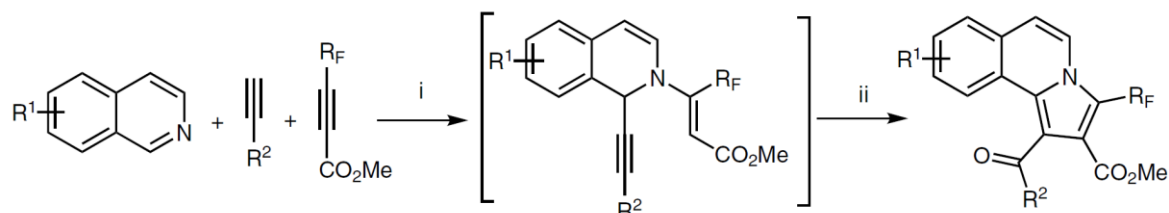


Synthesis

Copper-Catalyzed Cyclization/Oxidation/Aromatization Cascade: Efficient Synthesis of Trifluoromethylated Pyrrolo[2,1-a]isoquinolines

Lili Tao, Zhiliang Xu, Jing Han, Hongmei Deng, Min Shao, Jie Chen, Hui Zhang, Weiguo Cao

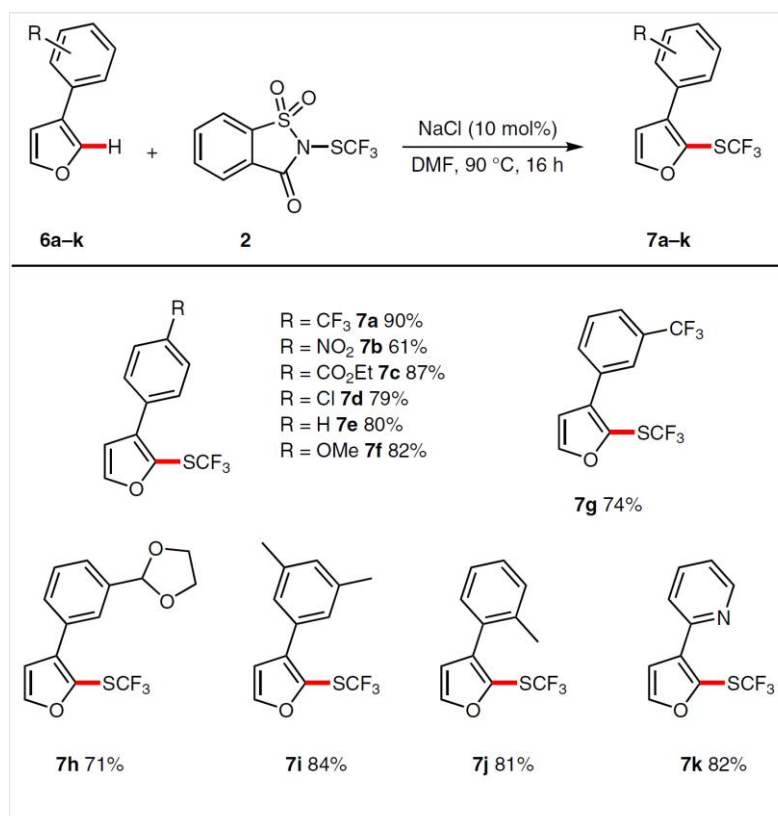
Synthesis, 2016, 48, 4228-4236



Sodium Chloride Catalyzed Regioselective Trifluoromethylthiolation of Furans

Johannes B. Ernst, Lena Rakers, Frank Glorius

Synthesis, 2017, 49, 260-268



Synlett

One-Pot Synthesis of Trifluoromethylated Iodoisoxazoles via the Reaction of Trifluoroacetylhydroximoyl Chloride with Terminal Alkynes and *N*-Iodosuccinimide

Yuwei Guoa, Xiaojun Wang, Zhentong Zhu Jianmin Zhang Yongming Wu

Synlett, 2016, 27, 2259-2263

