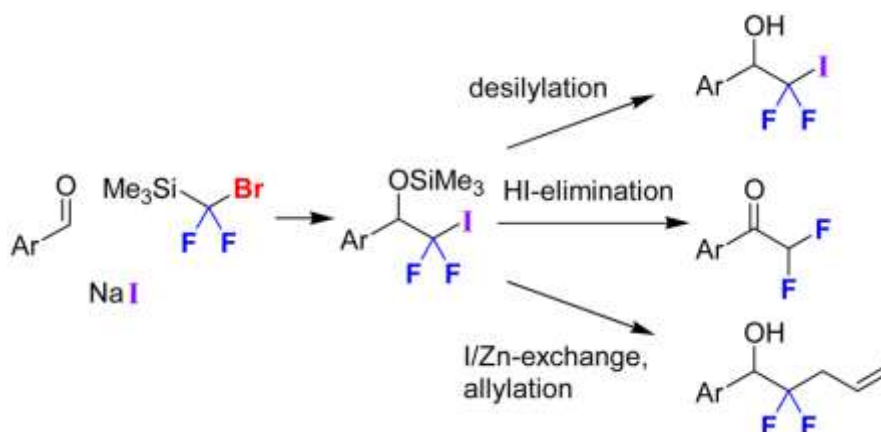


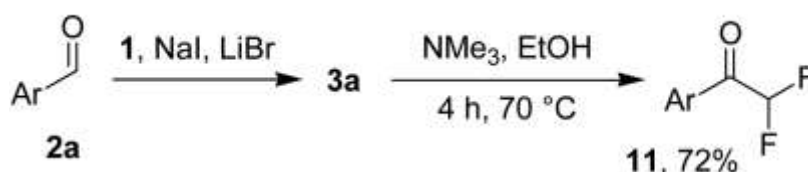
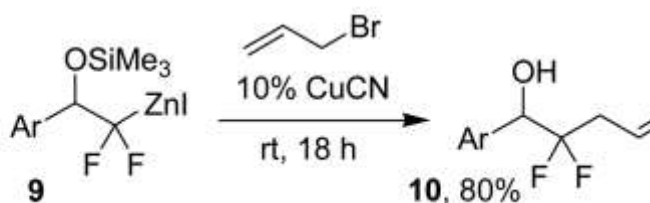
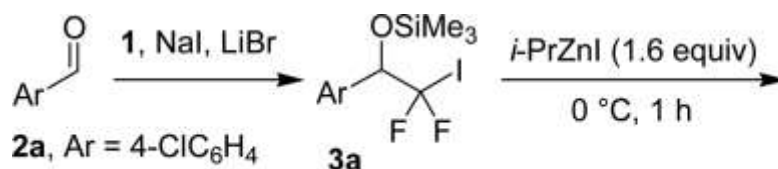
Nucleophilic Iododifluoromethylation of Aldehydes Using Bromine/Iodine Exchange

Vitalij V. Levin, Vladimir O. Smirnov, Marina I. Struchkova, and Alexander D. Dilman

J.Org.Chem., 2015, 80, 9349-9353



Synthesis of Fluorinated Compounds

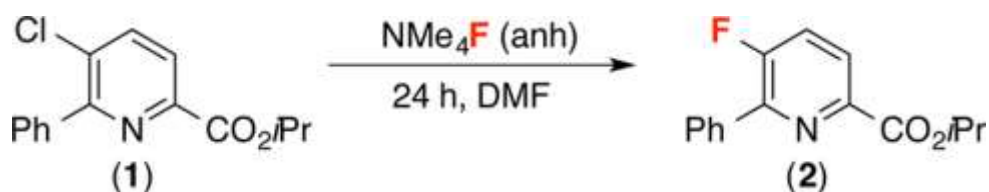


Anhydrous Tetramethylammonium Fluoride for Room-Temperature S_NAr Fluorination

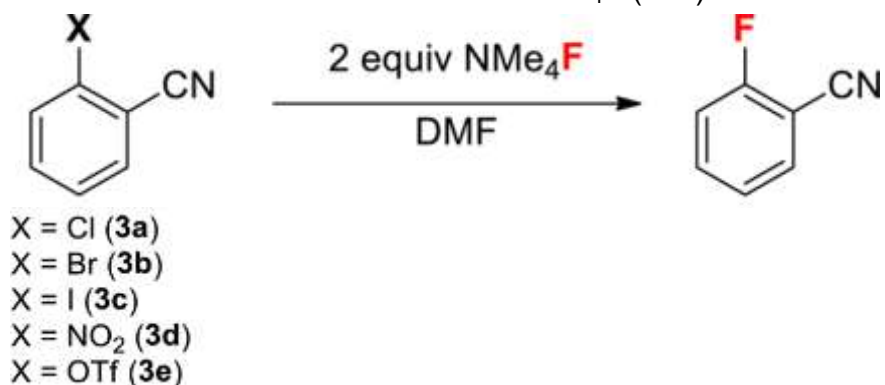
Sydonie D. Schimler,[†] Sarah J. Ryan,[†] Douglas C. Bland,[‡] John E. Anderson,[‡] and Melanie S. Sanford^{*,†}

J.Org.Chem.,2015, 80, 12137-12145

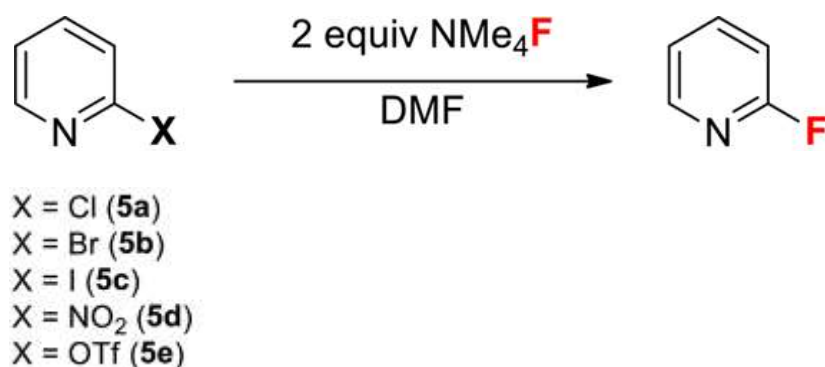
S_NAr Fluorination of 1 with NMe₄F (anh)



Reactions of 3a–e with NMe₄F (anh)



Reactions of 5a–e with NMe₄F

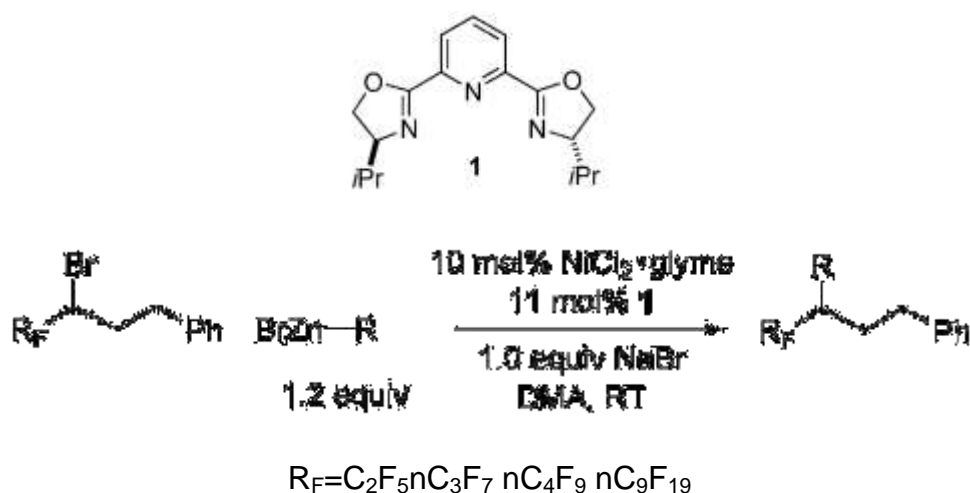


Nickel-Catalyzed Alkyl–Alkyl Cross-Couplings of Fluorinated Secondary Electrophiles: A General Approach to the Synthesis of Compounds having a Perfluoroalkyl Substituent**

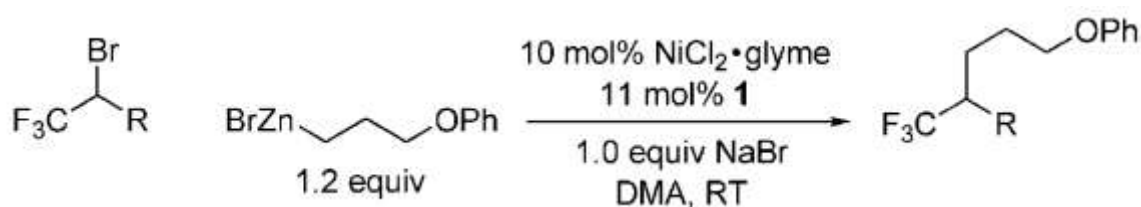
Yufan Liang and Gregory C. Fu*

Angew. Chem. Int. Ed., 2015, 54, 9047-9051

Alkyl–alkyl cross-couplings of fluorinated secondary electrophiles



Alkyl–alkyl cross-couplings to generate trifluoromethyl-substituted products

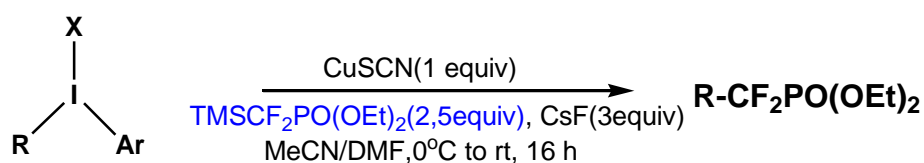


Copper-Mediated Formation of Aryl, Heteroaryl, Vinyl and Alkynyl Difluoromethylphosphonates: A General Approach to Fluorinated Phosphate Mimics

Maria V. Ivanova, Alexandre Bayle, Tatiana Besset, Thomas Poisson,* and Xavier Pannecoucke

Angew. Chem. Int. Ed., 2015, 54, 13406-13410

Addition of CuCF₂PO(OEt)₂ to the iodonium salts



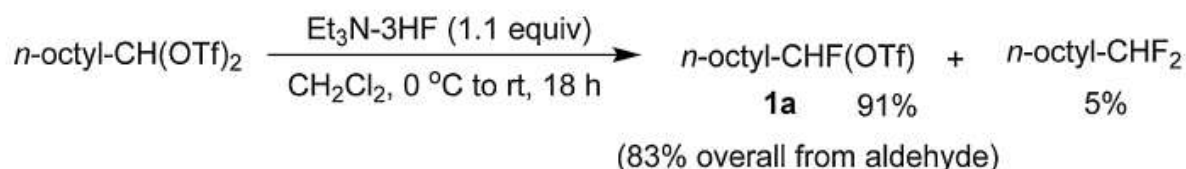
X=OTf, BF₄ R=aryl, vinyl, alkynyl, heteroaryl
Ar=mesityl, phenyl or R

Journal of Fluorine Chemistry

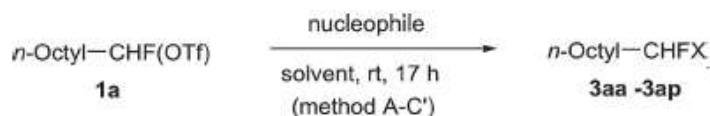
Reactions of 1-fluoroalkyl triflates with nucleophiles and bases

William R. Dolbier Jr.*, Masamune Okamoto

Journal of Fluorine Chemistry 179 (2015) 33–41



Reactions of 1-fluorononyl triflates with nucleophiles.

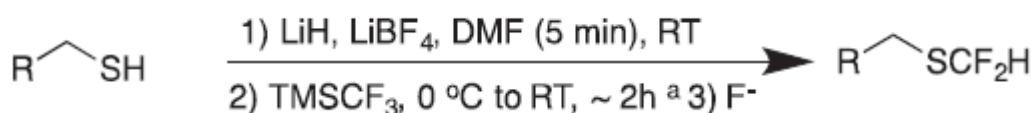
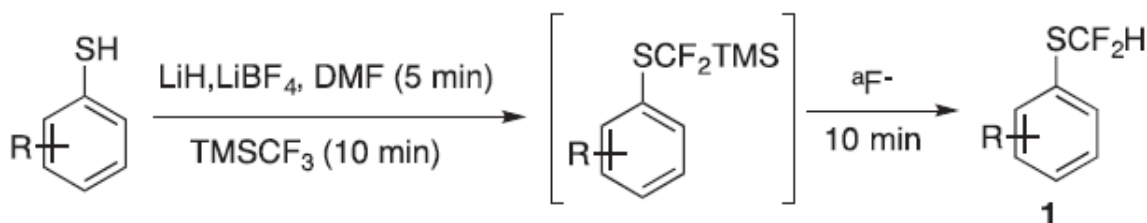


X	Reagent [nucleophile]	Method	Product (%) ^a
CN	<i>n</i> -Bu ₄ N ⁺ ⁻ CN	A	3ab (77)
N ₃	<i>n</i> -Bu ₄ N ⁺ ⁻ N ₃	A	3ac (88)
OAc	K ⁺ ⁻ OAc	C'	3ad (98)
OCOH	HCO ₂ H/Et ₃ N [⁻ OCHO]	C	3ae (98)
OPh	K ⁺ ⁻ OPh	C'	3af (95) ^b
SPh	HSPH/Et ₃ N [⁻ SPh]	C	3ag (98) ^b
OCH(CF ₃) ₂	(CF ₃) ₂ CHOH/Et ₃ N [(CF ₃) ₂ CHO ⁻]	C	3ah (82)
SCSOEt	K ⁺ ⁻ SCSOEt	C'	3ai (86)
Ph ₃ P ⁺	Ph ₃ P	B	3aj (87) ^c
Benzimidazole-1-yl	Benzimidazole/Et ₃ N	C	3ak (77)
Benztriazole-1-yl	Benztriazole/Et ₃ N	C	3al (87) ^d
H	<i>n</i> -Bu ₄ N ⁺ ⁻ BH ₄	A	3am (78)
F	<i>n</i> -Bu ₄ N ⁺ ⁻ F	A	3aa (98)
Cl	<i>n</i> -Bu ₄ N ⁺ ⁻ Cl	C	3an (99)
Br	<i>n</i> -Bu ₄ N ⁺ ⁻ Br	A	3ao (98)
I	<i>n</i> -Bu ₄ N ⁺ ⁻ I	A	3ap (98)

Direct S-difluoromethylation of thiols using the Ruppert–Prakash reagent

G.K. Surya Prakash *, Sankarganesh Krishnamoorthy, Sayan Kar, George A. Olah

Journal of Fluorine Chemistry 180 (2015) 186–191



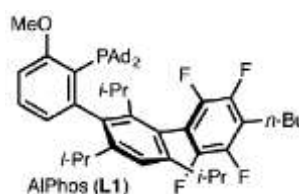
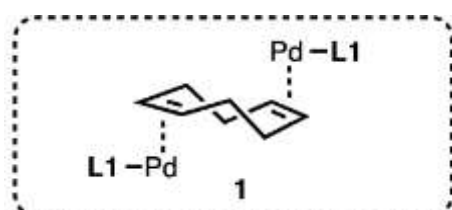
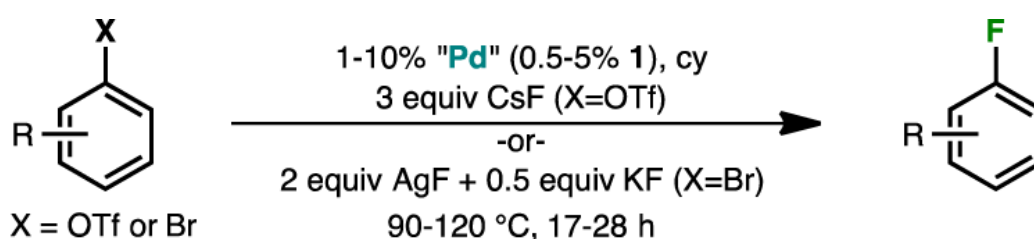
J. Am. Chem. Soc.

A Fluorinated Ligand Enables Room-Temperature and Regioselective Pd-Catalyzed Fluorination of Aryl Triflates and Bromides

Aaron C. Sather, † Hong Geun Lee, † Valentina Y. De La Rosa, † Yang Yang, †, ‡ Peter Müller, † and Stephen L. Buchwald*, †

J. Am. Chem. Soc. 2015, 137, 13433-13438

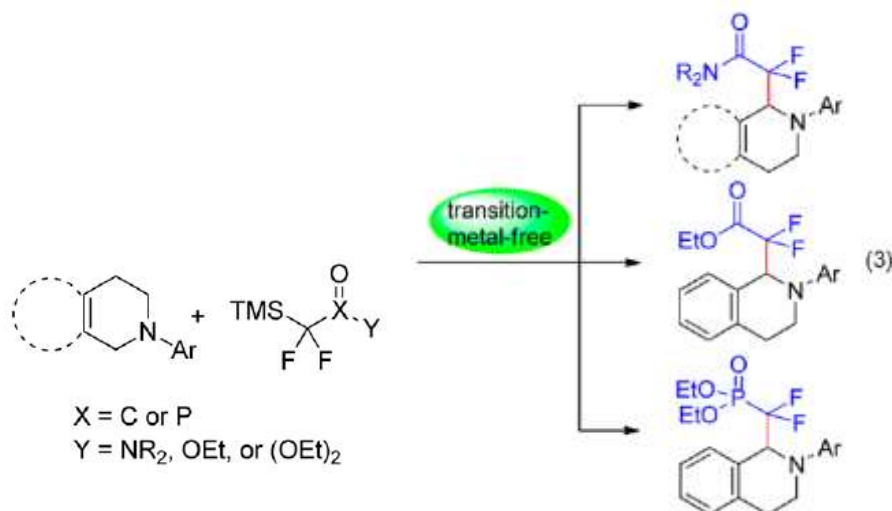
Regioselective Fluorination



Transition-Metal-Free Dehydrosilylative Difluoroamidation of Tetrahydroisoquinolines under Mild Conditions

Qiao Chen, Jiawei Zhou, Yanan Wang, Chao Wang, Xihong Liu, Zhaoqing Xu,* Li Lin, and Rui Wang*

Org. Lett. 2015, 17, 4212–4215



Photoredox-Catalyzed Tandem Insertion/Cyclization Reactions of Difluoromethyl and 1,1-Difluoroalkyl Radicals with Biphenyl Isocyanides

Zuxiao Zhang, Xiaojun Tang, and William R. Dolbier, Jr

Org. Lett. 2015, 17, 4401–4403

