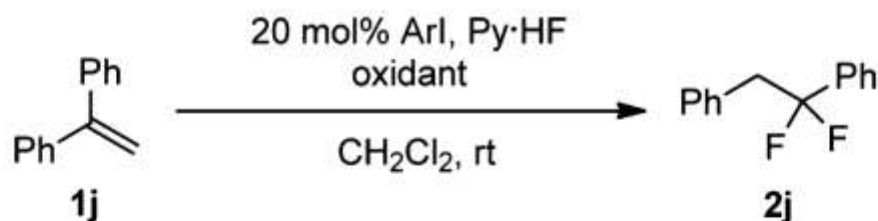


Hypervalent Iodine-Mediated Fluorination of Styrene Derivatives: Stoichiometric and Catalytic Transformation to 2,2-Difluoroethylarenes

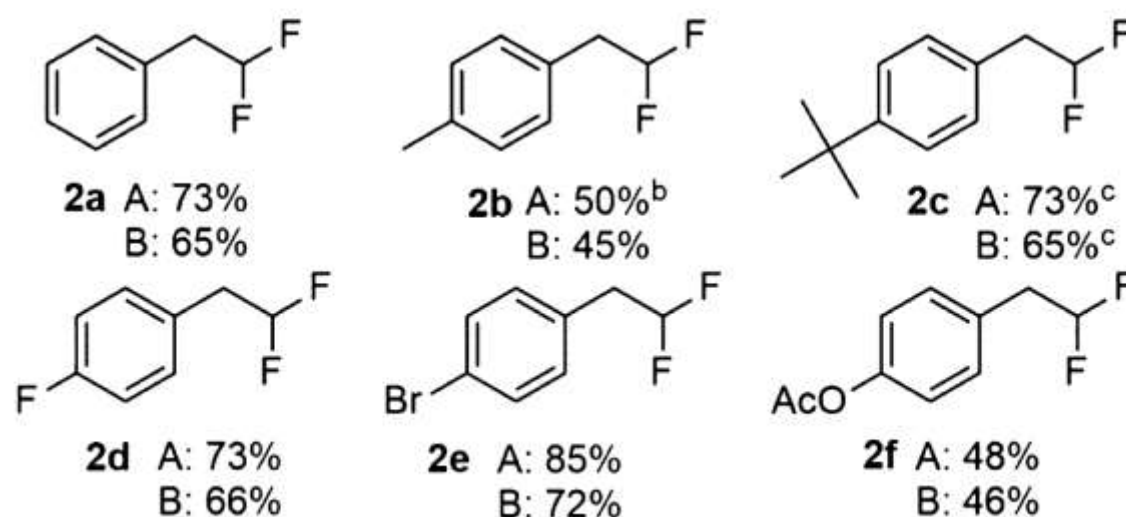
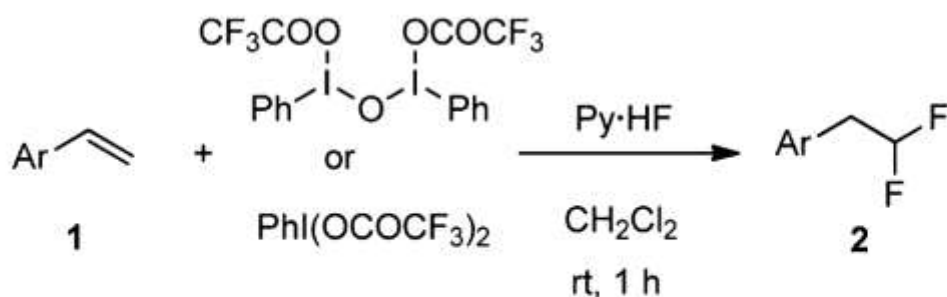
Tsugio Kitamura, Kensuke Muta, and Juzo Oyamada

J. Org. Chem. 2015, 80, 10431–10436



entry	iodoarene	oxidant	time (h)	yield (%) ^b
1	2-MeOC ₆ H ₄ I	<i>m</i> -CPBA	17	48
2	2-MeOC ₆ H ₄ I	NaClO·5H ₂ O	17	0
3	2-MeOC ₆ H ₄ I	30% H ₂ O ₂	17	0
4	2-MeOC ₆ H ₄ I	<i>t</i> -BuOOH	17	0
5	2,4,6-(MeO) ₃ C ₆ H ₂ I	<i>m</i> -CPBA	17	1
6	4-MeOC ₆ H ₄ I	<i>m</i> -CPBA	17	6
7	2,4,6-Me ₃ C ₆ H ₂ I	<i>m</i> -CPBA	17	45
8	2-MeC ₆ H ₄ I	<i>m</i> -CPBA	17	42
9	4-MeC ₆ H ₄ I	<i>m</i> -CPBA	17	49
10		<i>m</i> -CPBA	17	0
11 ^c	4-MeC ₆ H ₄ I	<i>m</i> -CPBA	17	49
12 ^d	4-MeC ₆ H ₄ I	<i>m</i> -CPBA	17	47
13	4-MeC ₆ H ₄ I	<i>m</i> -CPBA	3	49
14	4-MeC ₆ H ₄ I	<i>m</i> -CPBA	0.5	50

^aConditions: **1j** (0.5 mmol), ArI (0.1 mmol), Py·HF (10 mmol HF), and an oxidant (0.75 mmol) in CH₂Cl₂ (2 mL) at rt. ^bYields were determined by ¹⁹F NMR. ^cReaction was carried out at 40 °C. ^d*m*-CPBA (1.0 mmol) was used.

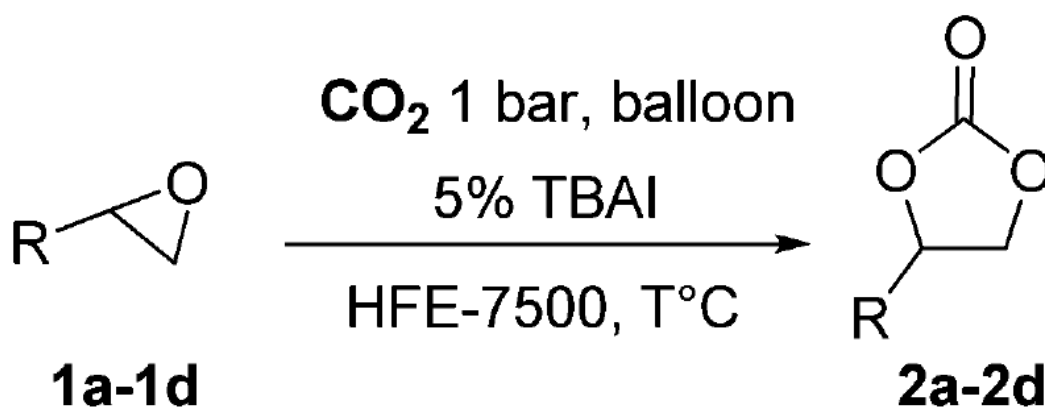


Chemical Communications

Reactivity of carbon dioxide in hydrofluoroethers: a facile access to cyclic carbonates

Marius Mamone, Thierry Milcent and Benoit Crousse

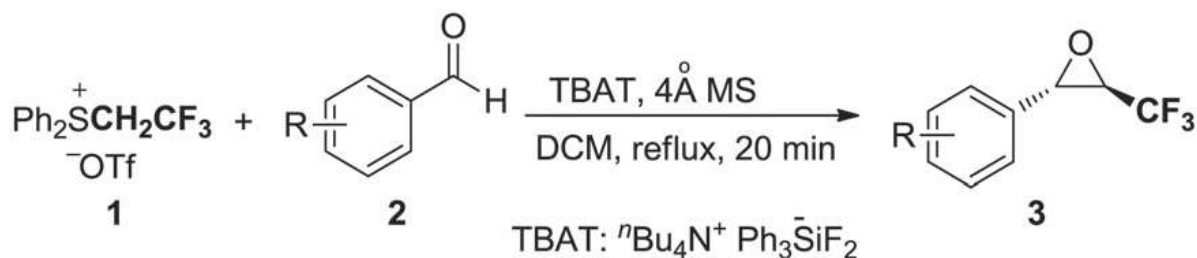
Chem. Commun., 2015, 51, 12736-12739



Diastereoselective Johnson–Corey–Chaykovsky trifluoroethylidenation

Yaya Duan, Bin Zhou, Jin-Hong Lin and Ji-Chang Xiao

Chem. Commun., 2015, 51, 13127-13130

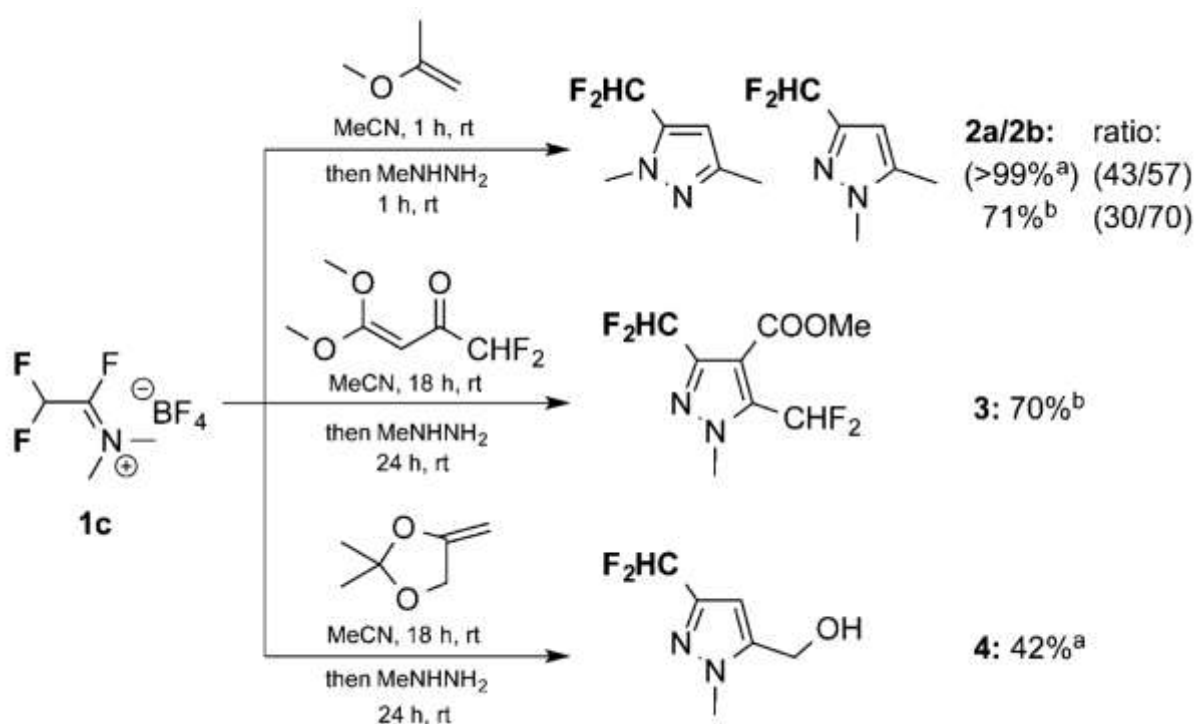


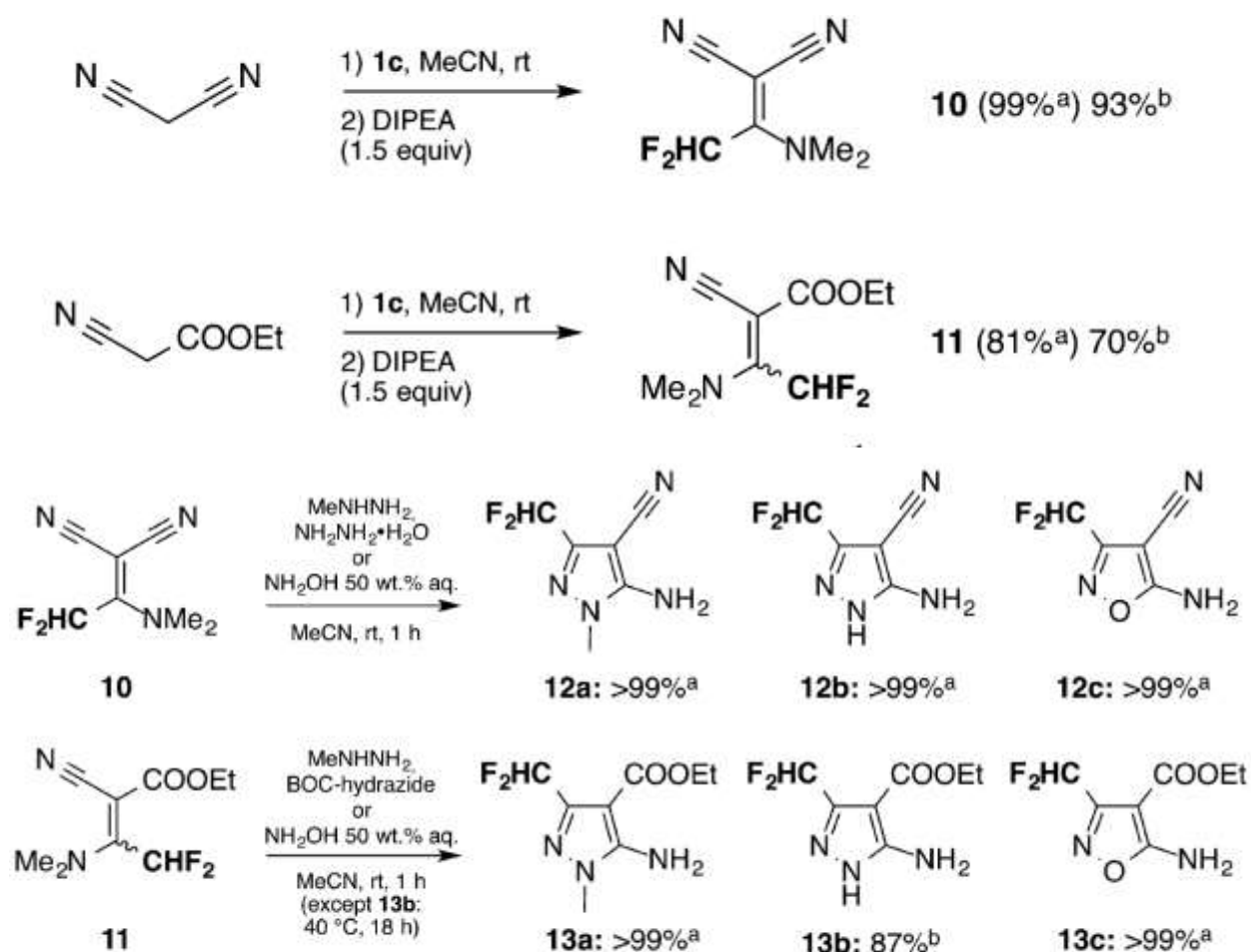
Organic Letters

In Situ Generated Fluorinated Iminium Salts for Difluoromethylation and Difluoroacetylation

Etienne Schmitt, Baptiste Rugeri, Armen Panossian, Jean-Pierre Vors, Sergii Pazenok, and Frédéric R. Leroux,

Org. Lett. 2015, 17, 4510–4513



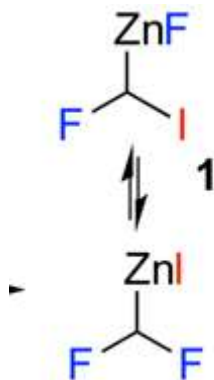


¹⁹F NMR yield using PhF as internal standard. ^bIsolated yield.

Diastereoselective Fluorocyclopropanation of Chiral Allylic Alcohols Using an α -Fluoriodomethylzinc Carbenoid

Chandrasekhar Navuluri and André B. Charette

Org. Lett. 2015, 17, 4288–4291

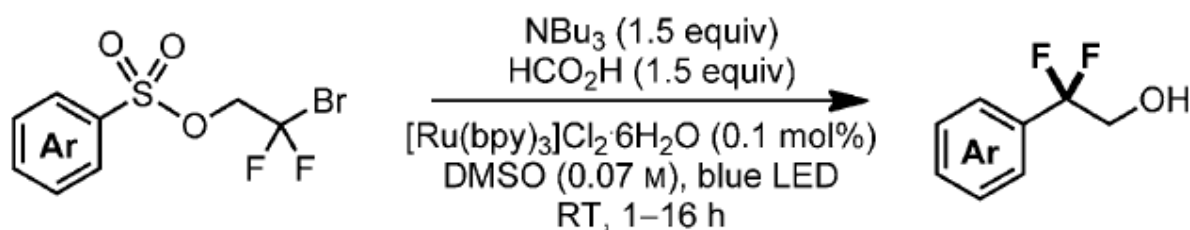


Angewandte Chemie International Edition

A Visible-Light-Mediated Radical Smiles Rearrangement and its Application to the Synthesis of a Difluoro-Substituted Spirocyclic ORL-1 Antagonist

James J. Douglas, Haley Albright, Martin J. Sevrin, Kevin P. Cole, and Corey R. J. Stephenson

Angew. Chem. Int. Ed. 2015, 54, 14898–14902



Angew. Chem. Int. Ed. 2015, 54, 15289–15293

Catalysis Communications

Catal. Comm. 2015, 71, 13–16