Category

Metal-Mediated Synthesis

Key words

nickel

fluorination

palladium

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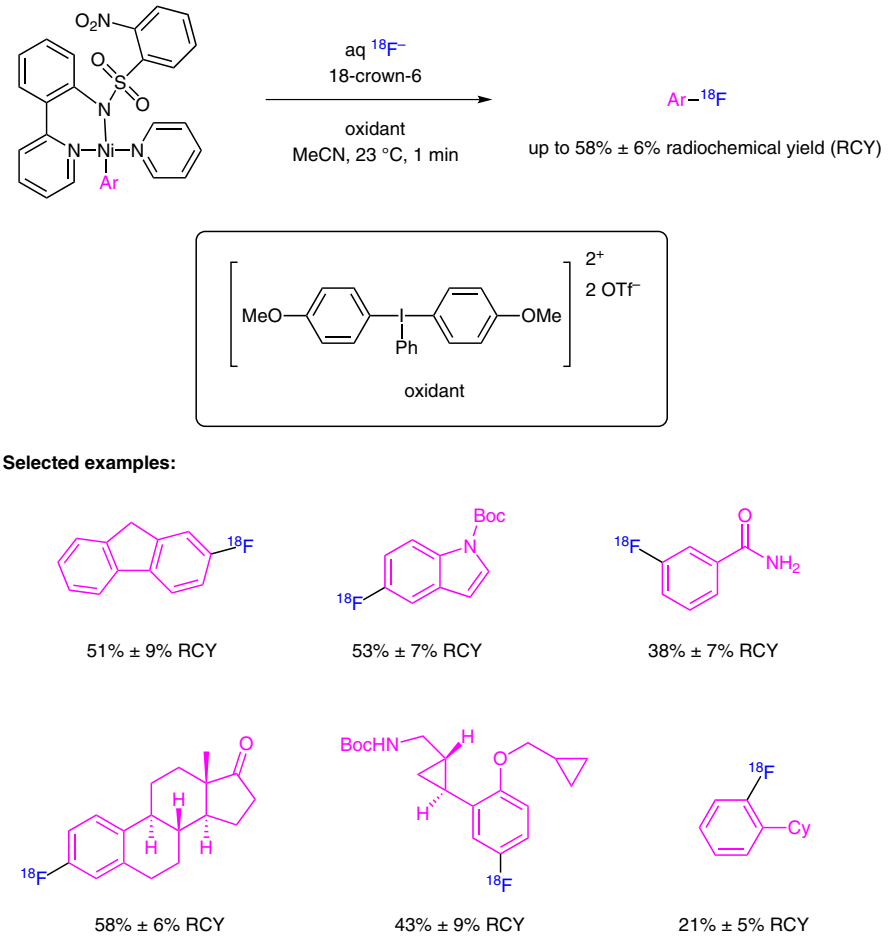
Nickel-Mediated Oxidative Fluorination for PET with Aqueous [^{18}F]Fluoride

J. Am. Chem. Soc. **2012**, *134*, 17456–17458.

Fluorination of Nickel(II)–Aryl Complexes with [^{18}F]Fluoride



Significance: The authors report a one-step oxidative fluorination of arylnickel complexes which enables a straight-forward and practical ^{18}F late-stage fluorination of molecules. Therefore, ^{18}F-labeled substances of high specific activity for PET imaging can be synthesized.

Comment: As the protocol can be performed using aqueous fluoride solutions, extensive drying procedures of fluoride, which are typical for radiochemistry, are not required. Furthermore, direct use of aqueous fluoride solutions increases the yield and prevents radioactive decay.

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Synfacts 2013, 9(1), 0090 Published online: 17.12.2012
DOI: 10.1055/s-0032-1317742; **Reg-No.:** P16412SF