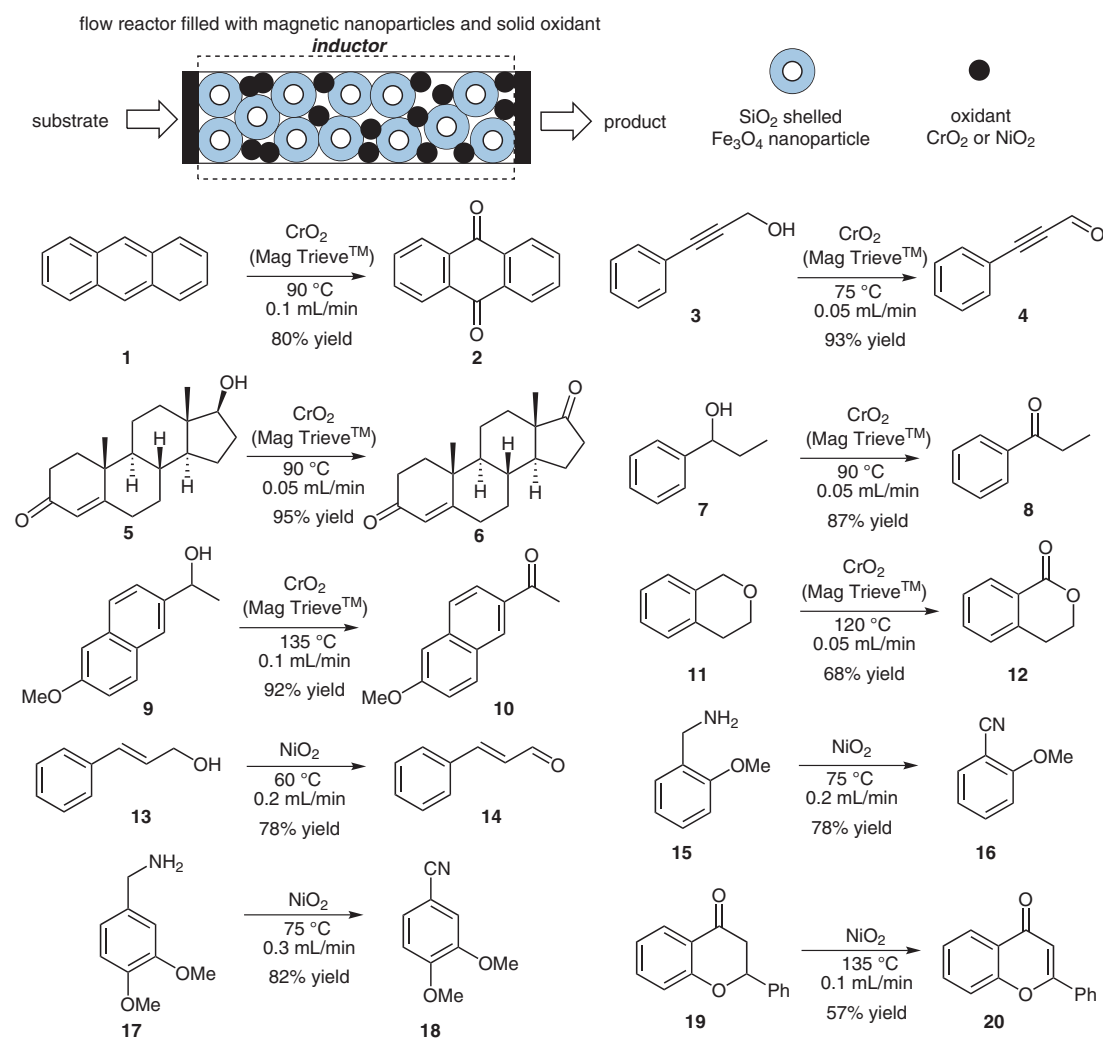


Facile Oxidations under Flow Conditions in Fixed-Bed Reactors



Significance: Flow oxidation with inductive heating inside flow reactors was described. The oxidation reactions of various substrates were carried out in glass flow reactors charged with superparamagnetic nanoparticles and solid oxidants, which were exposed to a magnetic field with an inductive frequency of 25 kHz at 40 psi backpressure to afford the corresponding products.

Comment: The flow oxidation of substrates **9**, **11** or **19** was performed by using a PEEK (polyether ether ketone) reactor at 100 psi backpressure. The authors previously reported the first application of ferromagnetic materials like magnetic nanoparticles Fe₃O₄ coated with a silica shell (10–40 nm) as heating media in flow reactions (*Angew. Chem. Int. Ed.* **2008**, 47, 8950).

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Synfacts 2010, 11, 1313–1313 Published online: 21.10.2010

DOI: 10.1055/s-0030-1258824; Reg-No.: Y11010SF