

ADVANCED FUNCTIONAL MATERIALS

Supporting Information

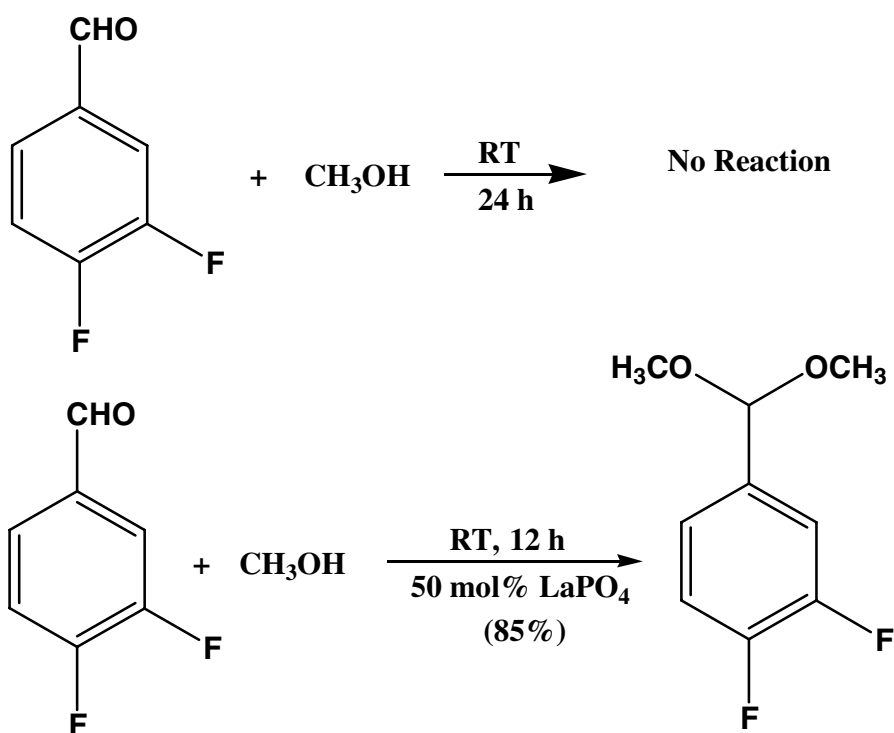
for

Advanced Functional Materials, adfm.200600794

© Wiley-VCH 2007
69451 Weinheim, Germany

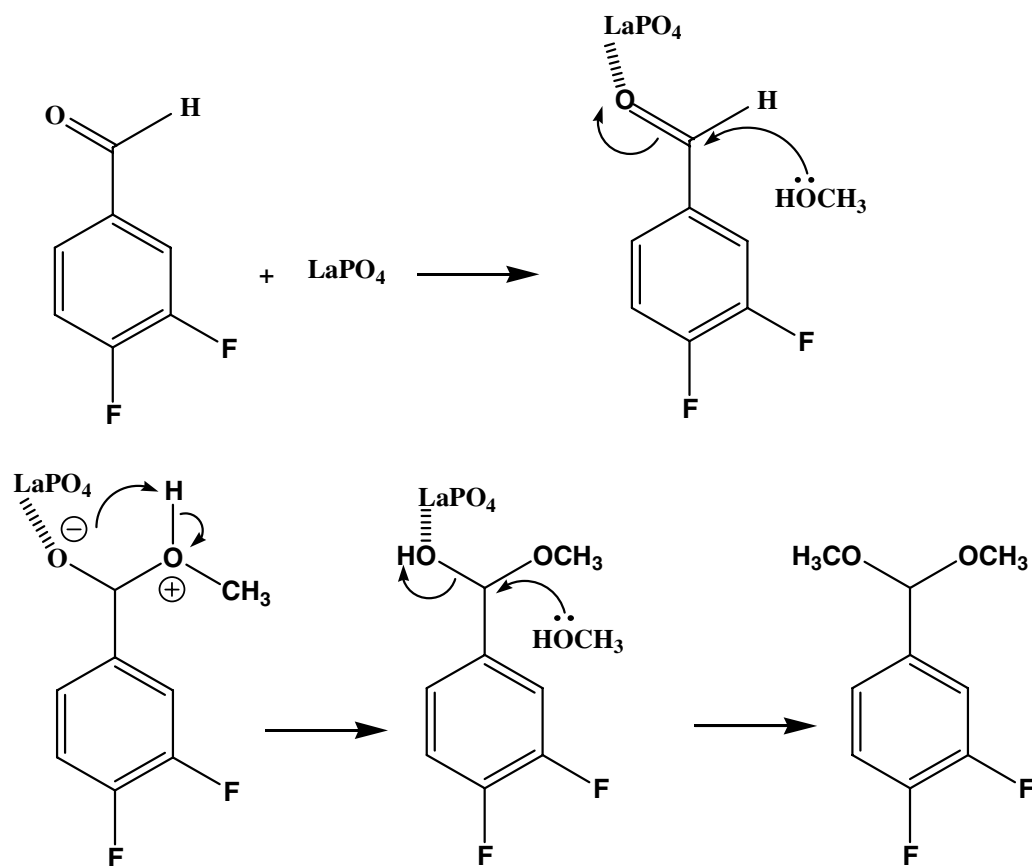
Supplementary Data 1

The reaction of 3,4 difluorobenzaldehyde (Aldrich, 99.99%) and dry methanol (S.D.Fine) in the presence of 50 mol% of lanthanum phosphate powder calcined at 400 °C in Argon atmosphere afforded 4-(dimethoxymethyl)-1,2-difluoro benzene in 85% yield (Scheme 1). The product was characterized using ^1H NMR (Bruker FT NMR spectrometer 300 MHz). A blank reaction was also carried out in which there was no acetal formation. The reactions were conducted using oven dried glasswares at room temperature. The reaction conditions have not been optimised and the reaction may take place at lesser amount of catalyst and lesser time.



Scheme 1

A tentative mechanism for acetal formation using lanthanum phosphate can be explained as follows (Scheme 2).



Scheme 2