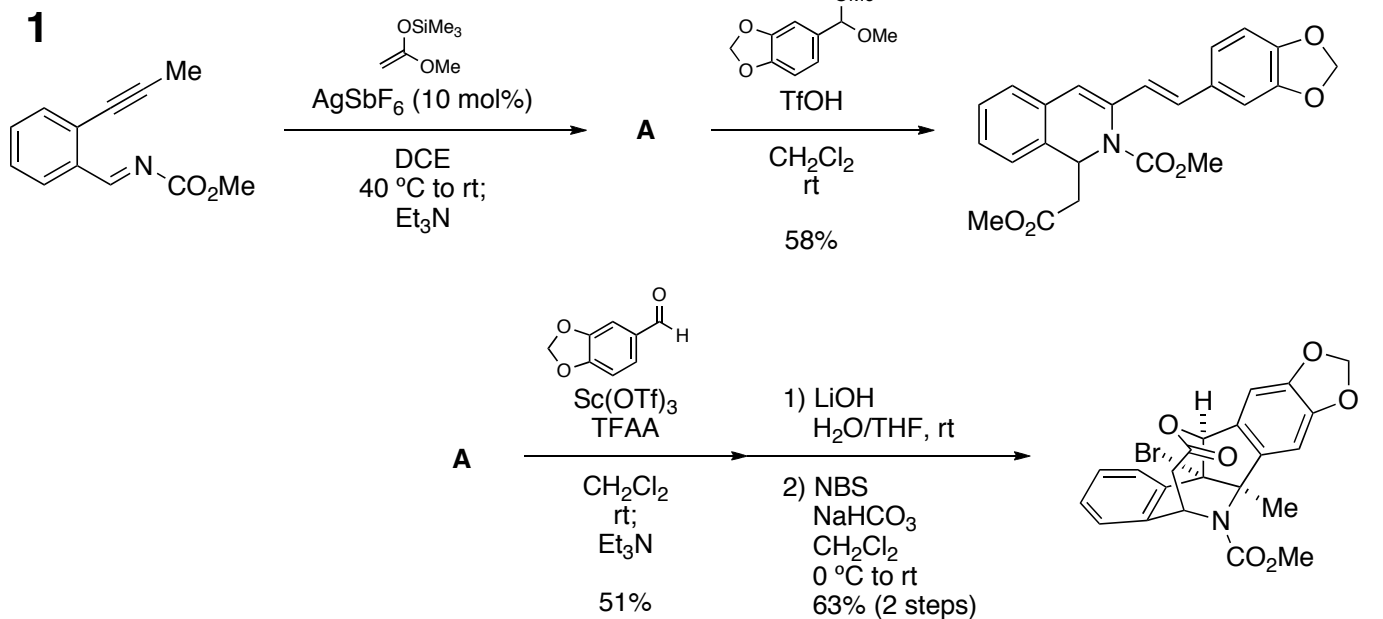
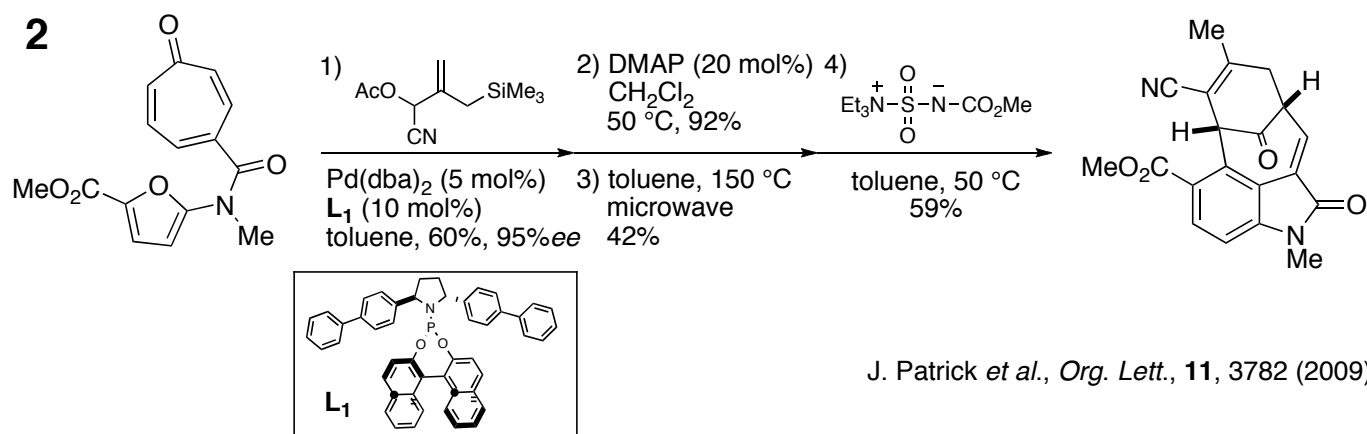


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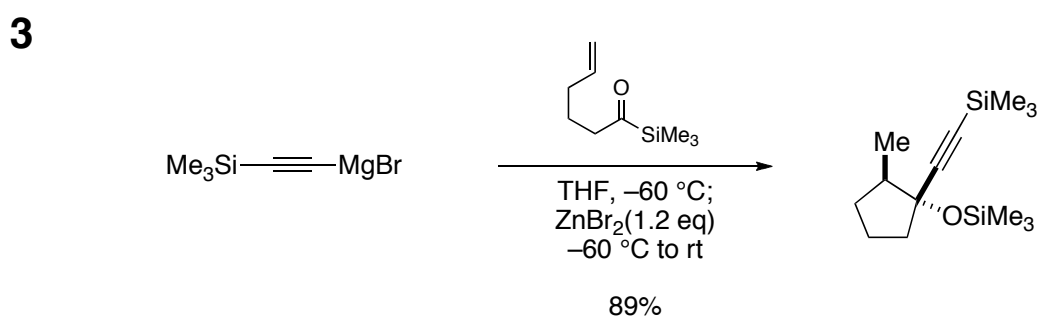
12/05/2009



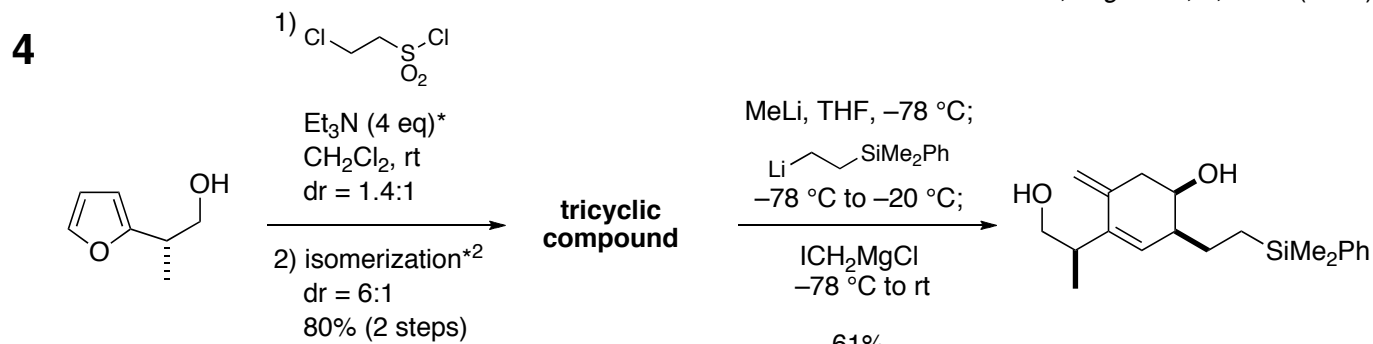
J. A. Porco, Jr. *et al.*, *Org. Lett.*, **9**, 4983 (2007)



J. Patrick *et al.*, *Org. Lett.*, **11**, 3782 (2009)



I. Marek *et al.*, *Org. Lett.*, **7**, 5313 (2005)



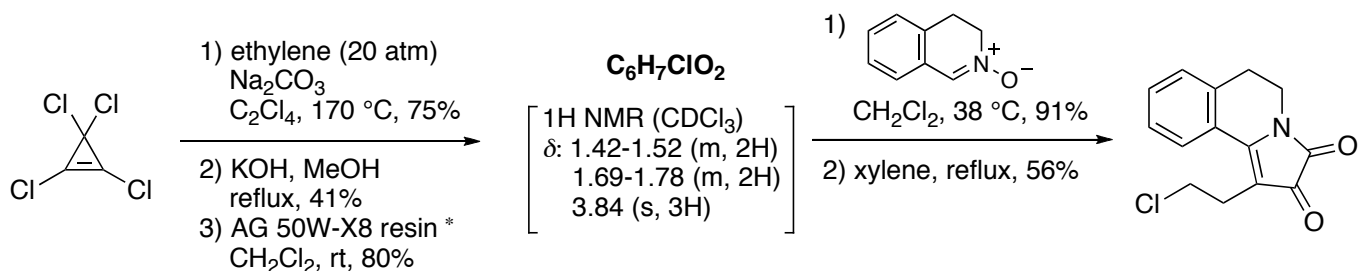
*theoretically 2 eq
 *²BHT (cat.), AcOEt, MW, 120 °C

P. Metz *et al.*, *Eur. J. Chem.*, 1144 (2006)

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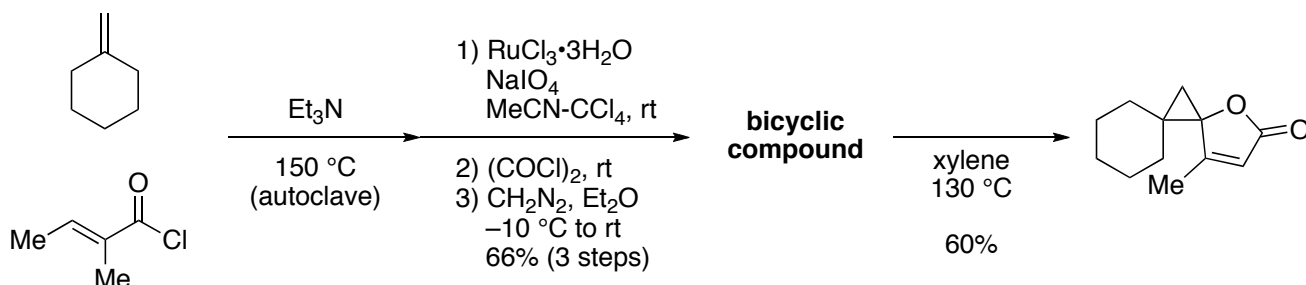
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1



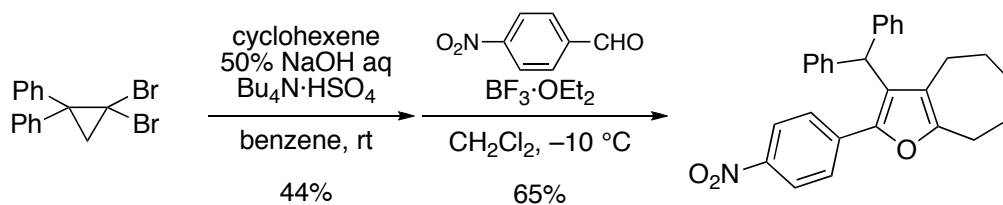
Armin de Meijere *et al.*, *Org. Synth.*, Vol. 69, 144 (1990)
 Armin de Meijere *et al.*, *J. Org. Chem.*, **64**, 755 (1999)

2



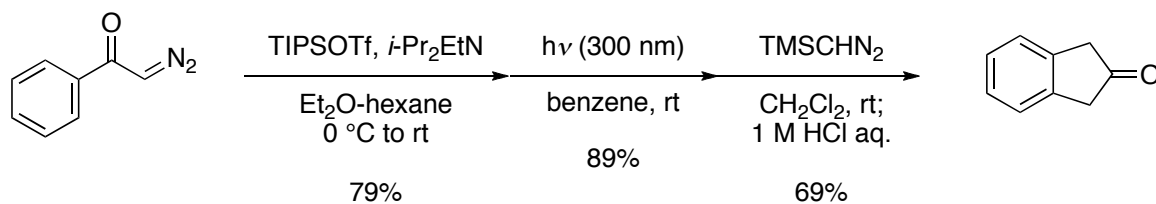
R. D. Miller *et al.*, *J. Org. Chem.*, **56**, 1453 (1991)

3



K. Isagawa *et al.*, *J. Chem. Soc., Perkin Trans. I*, 2283 (1991)
 X. Huang *et al.*, *Adv. Synth. Cat.*, **351**, 135 (2009)

4



R. L. Danheiser *et al.*, *Org. Lett.*, **4**, 2465 (2002)