Indan derivatives

Q 1050

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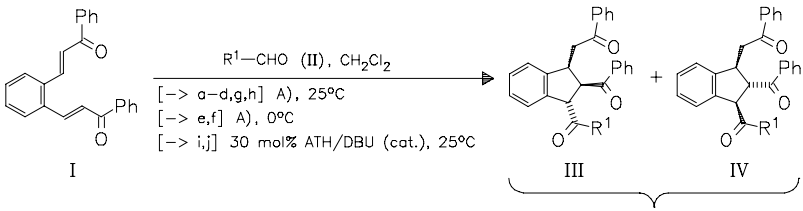
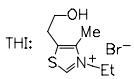
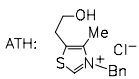
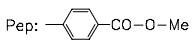
Diastereoselective Synthesis of Indans via a Domino Stetter—Michael Reaction. — A new approach to highly substituted indans like (III), (IV), (VIII), and (IX) is described. These compounds can smoothly be converted into polycyclic pyrroles. — (SANCHEZ-LARIOS, E.; GRAVE*, M.; J. Org. Chem. 74 (2009) 19, 7536-7539; Dep. Chem., Univ. Saskatchewan, Saskatoon, Sask. S7N 5C9, Can.; Eng.) — Jannicke



A): 30 mol% THI/DBU (cat.)







a R^1: —Ph 64% (80:20)
b R^1: —Tol 34% (86:14)
c R^1: —C6H4—O—Me 17% (83:17)
d R^1: —C6H4—Br 77% (77:23)
e R^1: —C6H4—CF_3 81% (80:20)
f R^1: —Pep 74% (87:13)
g R^1:  <5% (–)
h R^1:  74% (80:20)
i R^1: —Et 15% (52:48)
j R^1: —$(CH_2)_2$—Ph 33% (52:48)