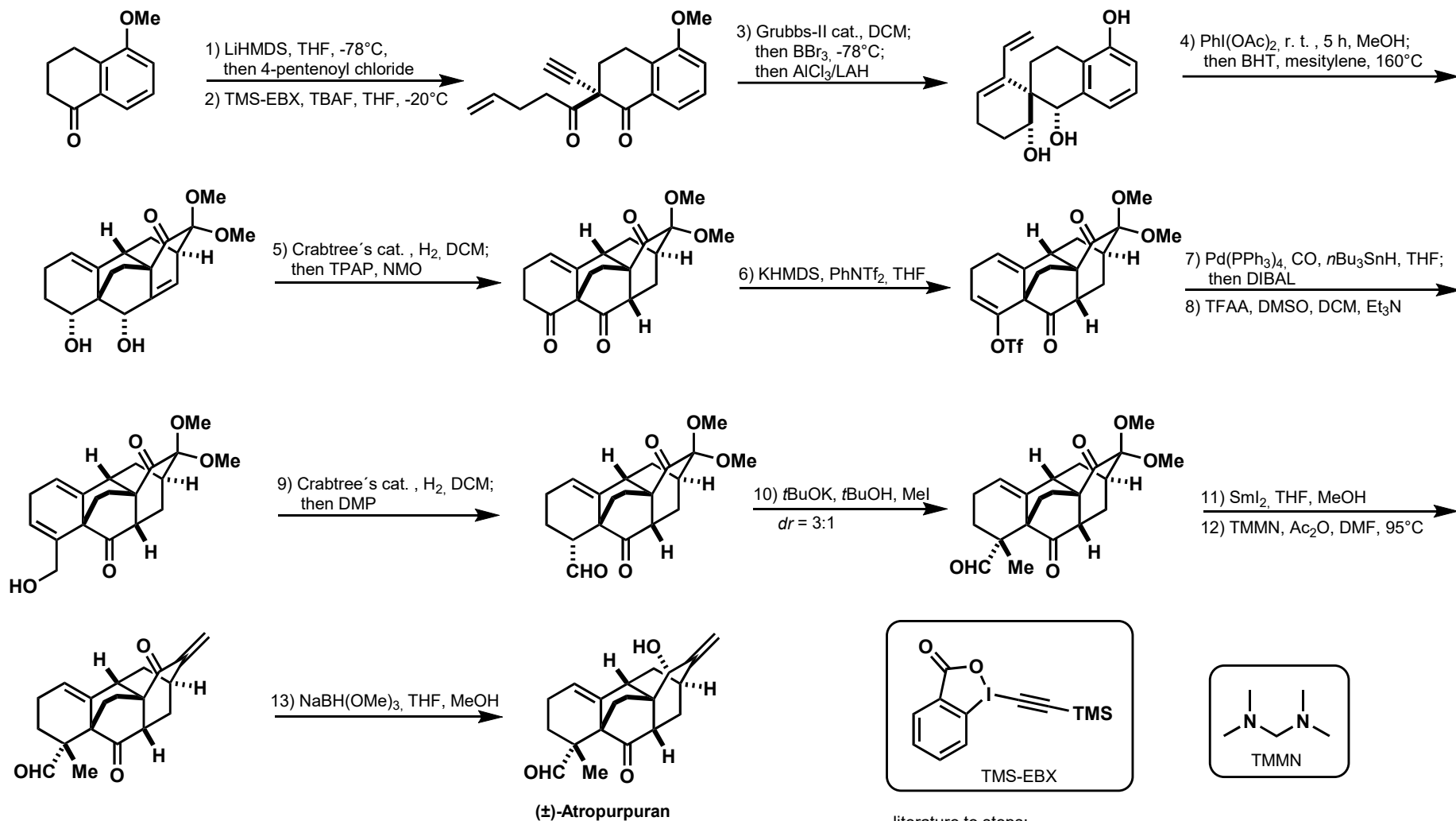


Total Synthesis of (±)-Atropurpuran

J. Xu *et al.*, *JACS* **2019**, *141*, 3435-3439



literature to steps:

step 2: Waser's reagent (electrophilic α -alkynylation)
Chem. - Eur. J. **2010**, *16*, 9457

step 12: modified Mannich reaction
JOC **1968**, *33*, 1719-1727; *JOC* **1976**, *41*, 2650-2651