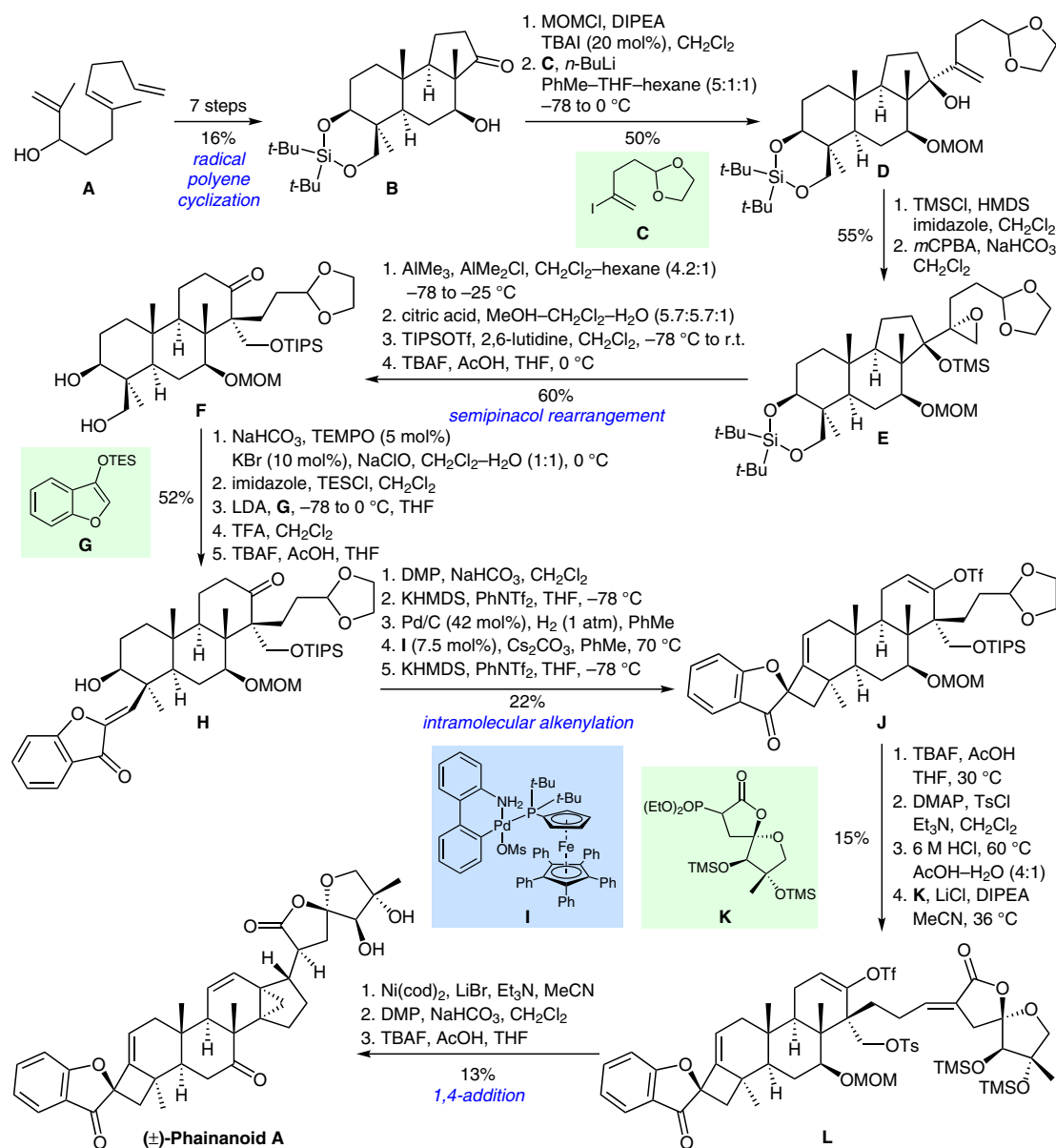


Total Synthesis of (±)-Phainanoid A



Significance: Dong and co-workers report the total synthesis of (±)-phainanoid A, a dammarane-type triterpenoid featuring a complex scaffold consisting of ten rings and 13 chiral centers.

Comment: The cyclobutane moiety in J was accessed via Pd-catalyzed intramolecular alkenylation. The five-membered ring in the natural product was achieved with a 1,4-addition, which was followed by homoallylic elimination to form the three-membered ring.