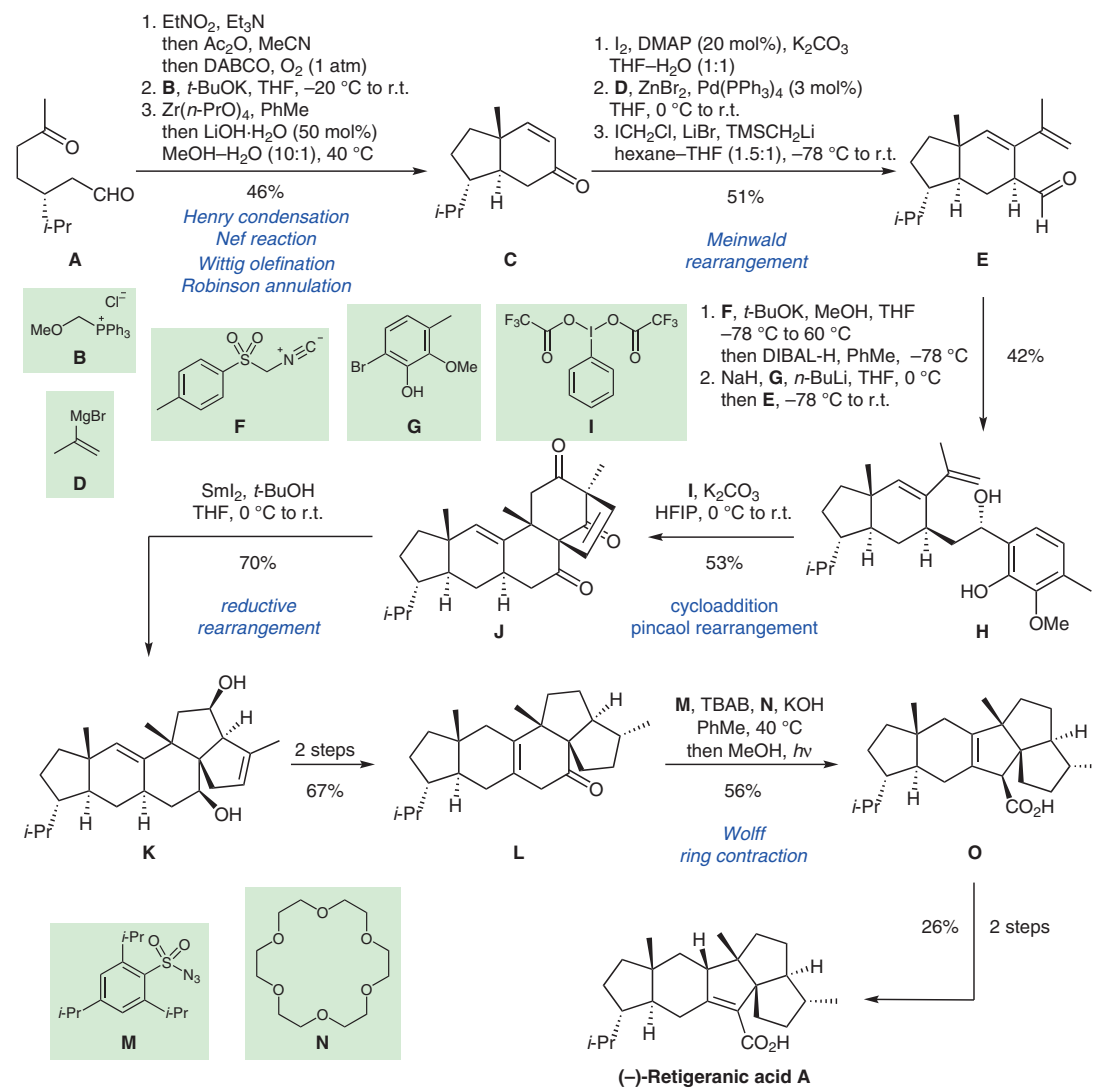


Synthesis of (–)-Retigeranic Acid A



Significance: Ding and co-workers present a total synthesis of (–)-retigeranic acid A, isolated in 1965 from lichens of the *Lobaria retigera*. The pentacyclic carbon framework contains a unique *trans*-hyrindane-fused angular triquinane.

Comment: The *trans*-hyrindane is assembled from keto aldehyde **A** featuring a Henry condensation and Nef reaction under oxidative conditions. Homologation and addition of aryl bromide **G** led to benzylic alcohol **H**, that underwent cycloaddition and pinacol rearrangement. From triketone **J**, the carbon skeleton of (–)-retigeranic acid A was accessed via reductive rearrangement and Wolff ring contraction.