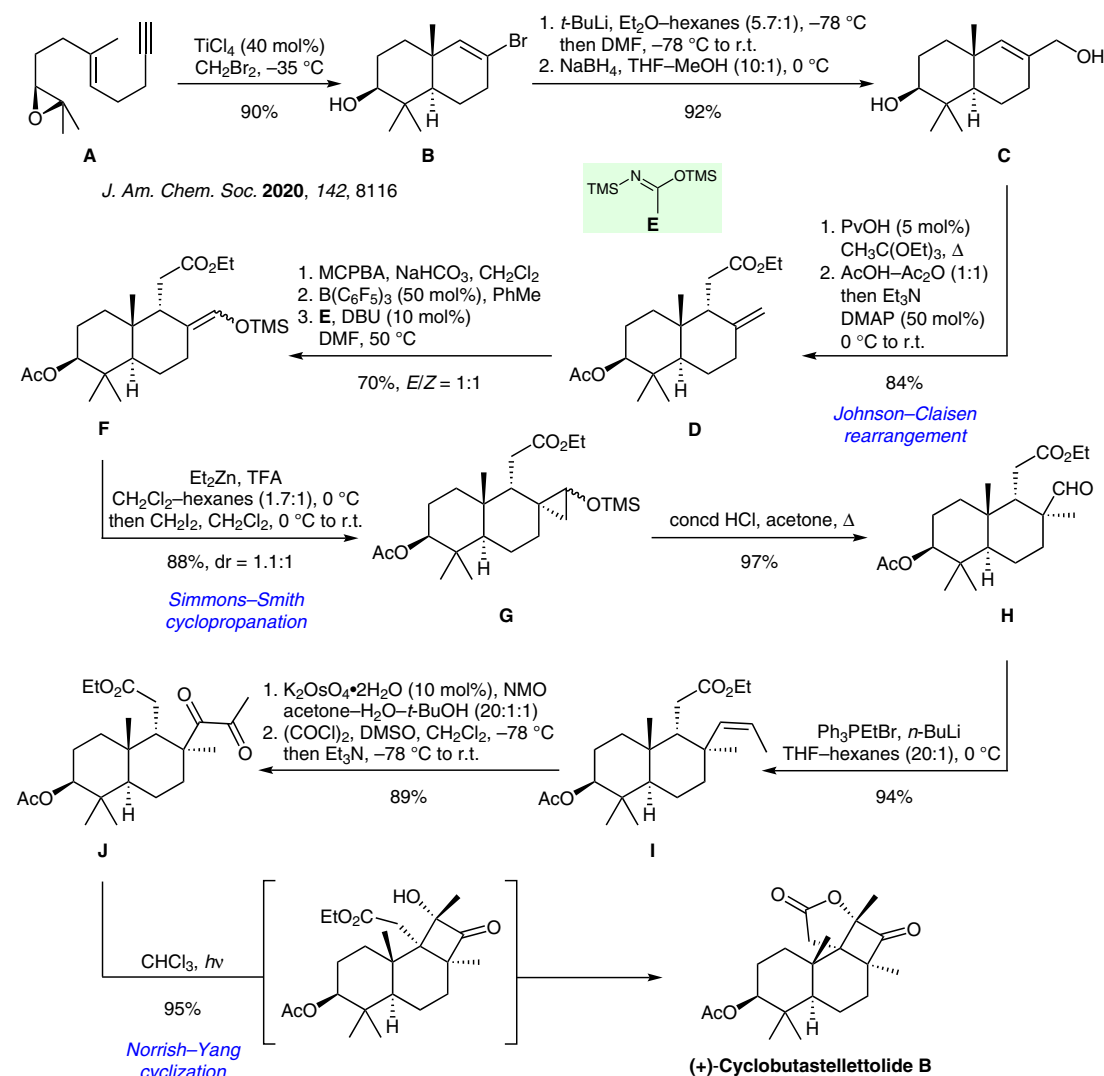


Synthesis of (+)-Cyclobutastellettolide B



Significance: (+)-Cyclobutastellettolide B is a natural product isolated in 2019 from a *Stelletta* sp. sponge (S. A. Kolesnikova et al. *J. Nat. Prod.* **2019**, *82*, 3196). It features a 6/6/4 fused tricyclic core, including a fully substituted cyclobutane, rendering it an interesting target for total synthesis.

Comment: Vinyl bromide **B** was rapidly elaborated into ester **D** using a Johnson-Claisen rearrangement. Installation of the α -tertiary aldehyde in **H** was achieved via ring opening of the cyclopropane in **G**. Wittig reaction followed by oxidation yielded diketone **J** which smoothly underwent the desired Norrish-Yang cyclization, followed by lactonization, to yield the natural product.