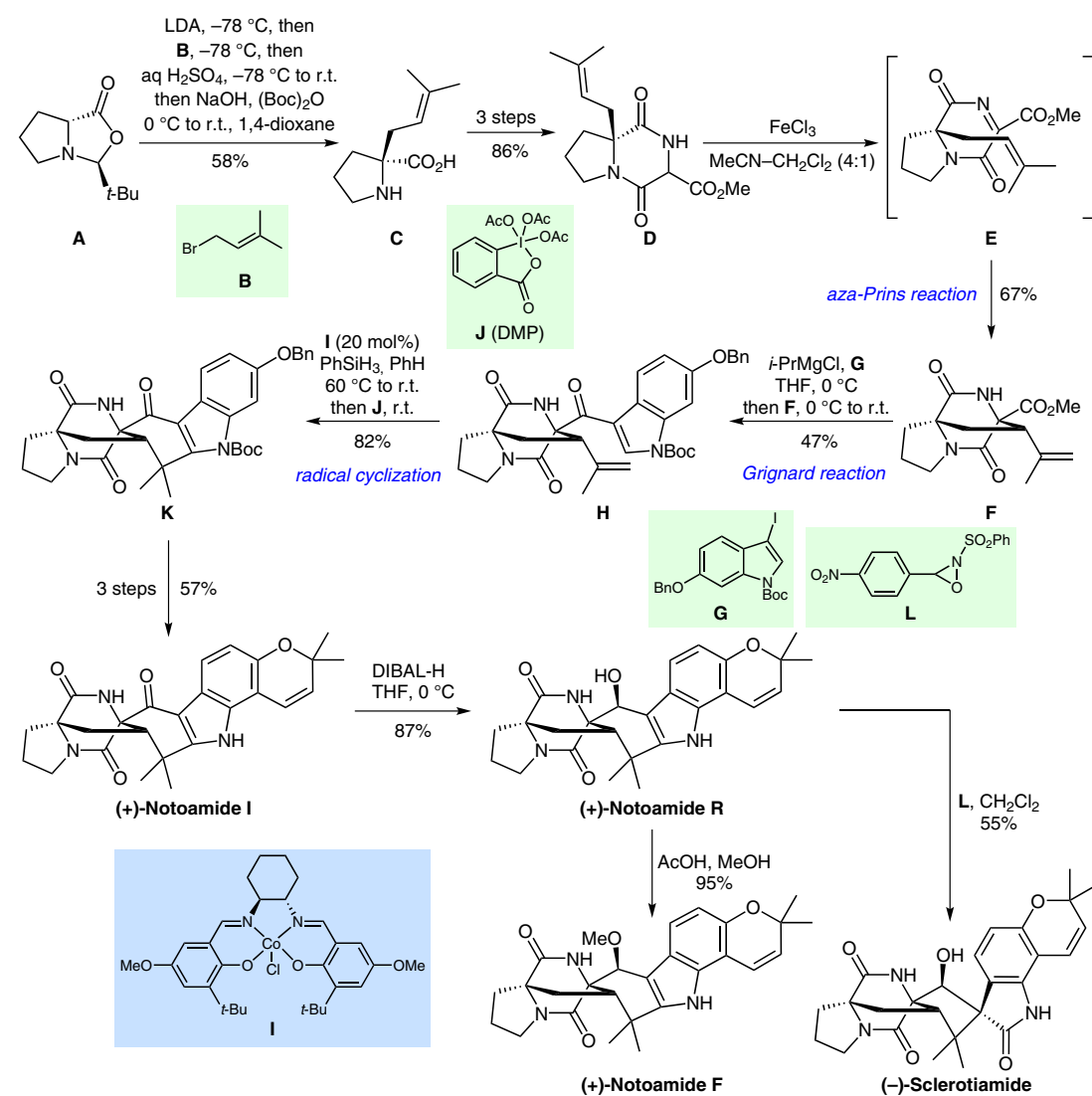


## Synthesis of (+)-Notoamides F, I, and R and (–)-Sclerotiamide



**Significance:** Herein, the authors describe the first total synthesis of (+)-notoamides F, I, and R, and (–)-sclerotiamide, isolated from the marine fungi *Aspergillus* sp. The synthetic strategy relies on a cobalt-mediated radical cycloisomerization and an aza-Prins cyclization to construct the bicyclo[2.2.2]diazaoctane core.

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**Comment:** Treatment of diamide **D** with  $\text{FeCl}_3$  induces an oxidative aza-Prins cyclization to give ester **F** in 67% yield. After Grignard addition of indole **G**, cobalt-mediated radical cyclization delivers **K**, which can be further transformed into (+)-notoamide **I** in three steps. From there, the other three natural products can be accessed.