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Convergent and Biomimetic Enantioselective Total Synthesis of (–)-Communesin F
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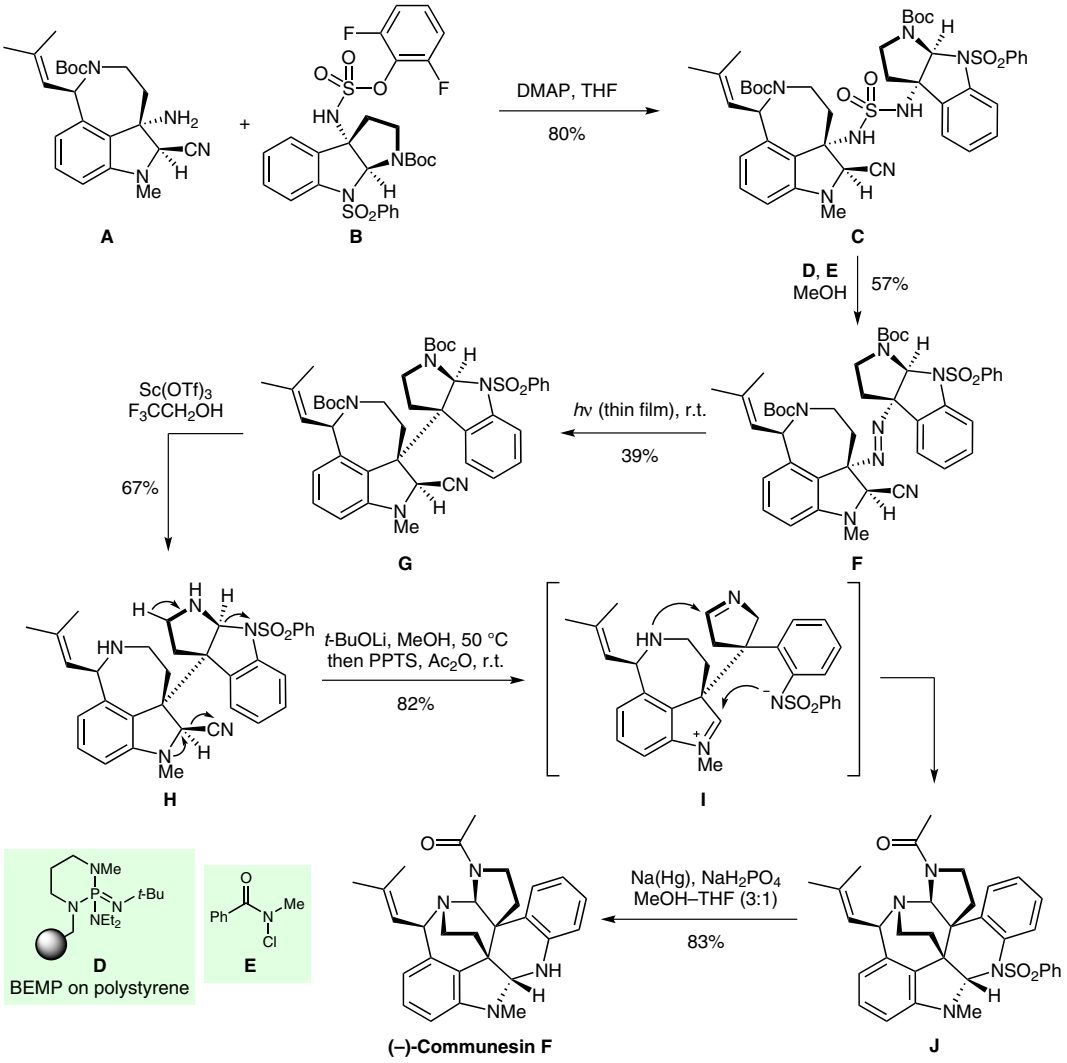
Total Synthesis of (–)-Communesin F



Significance: The communesin alkaloids feature a fused heptacylic ring system containing two adjacent quaternary carbons. Movassaghi and coworkers describe an enantioselective synthesis of (–)-communesin F, a member of this intriguingly complex natural product family. Highlights include the biomimetic heterodimerization of **A** and **B**, and aminal exchange from **H** to **J**.

Comment: Building blocks **A** and **B** were unified through displacement at the sulfamate, followed by oxidation to diazene **F**. The diazene was irradiated to give **G** as a single diastereomer under extrusion of nitrogen. After deprotection of the Boc groups, the aminal exchange was induced by *t*-BuOLi. The natural product was then obtained after deprotection.

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