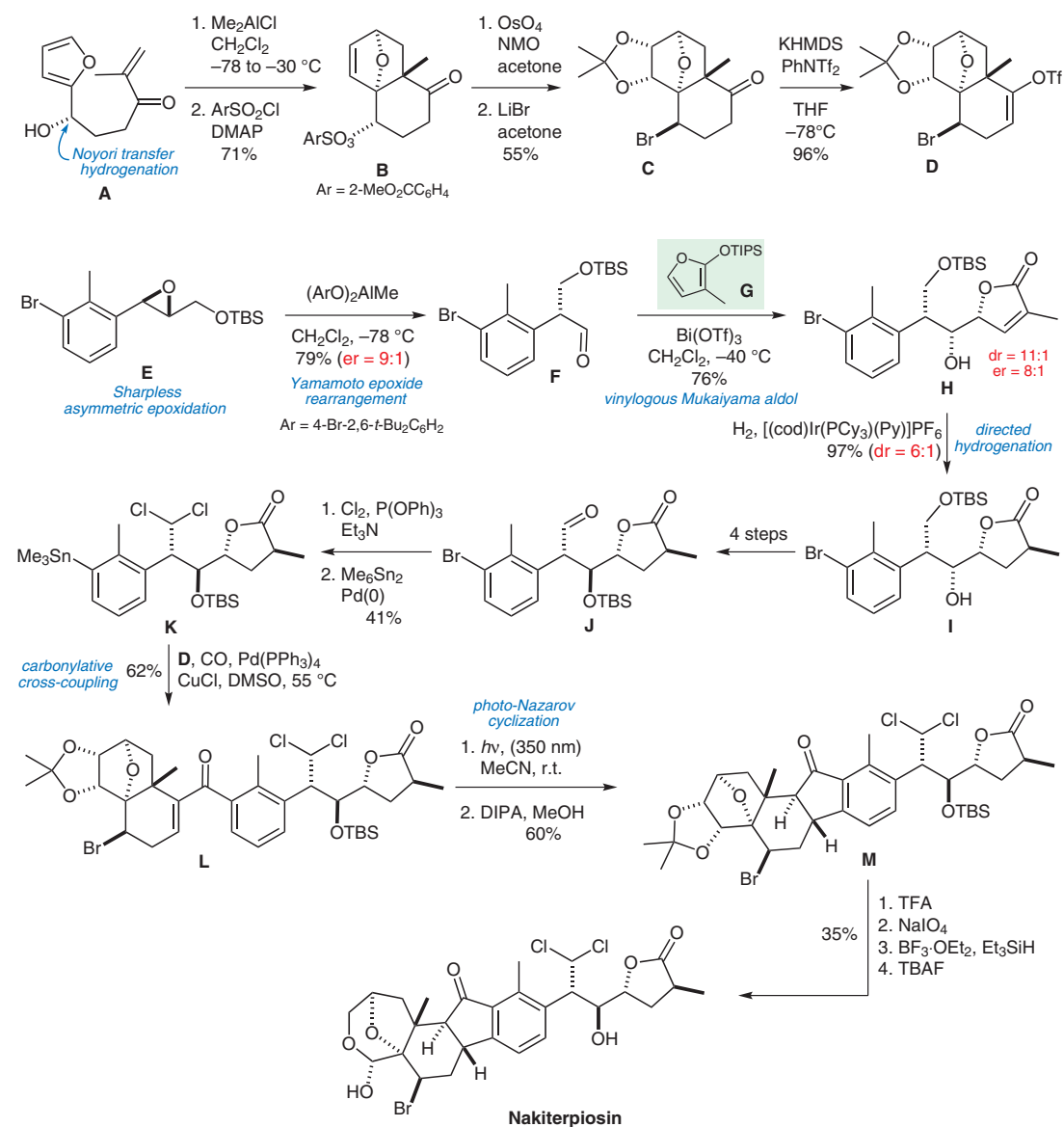


Synthesis of Nakiterpiosin



Significance: The synthesis of nakiterpiosin, a cytotoxic sponge metabolite, features a Pd-catalyzed carbonylative cross-coupling (**K** → **L**) followed by a photo-Nazarov cyclization (**L** → **M**) to create the indanone moiety.

Comment: The photo-Nazarov cyclization entails a thermal electrocyclozation induced by photoisomerization of the enone **L**. Lewis acid catalyzed variants were too harsh. CuCl and DMSO dramatically enhanced the rate of the cross-coupling **K** → **L**.