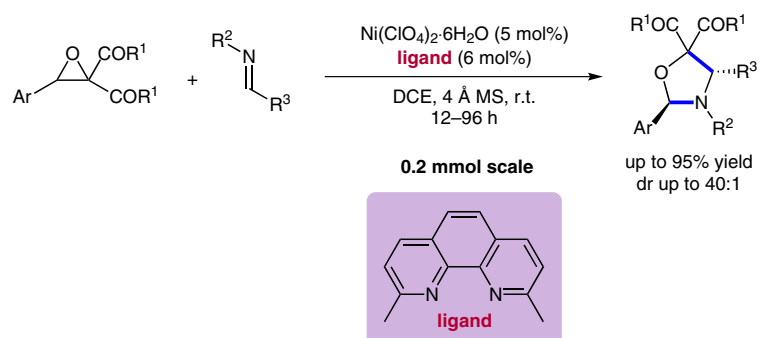
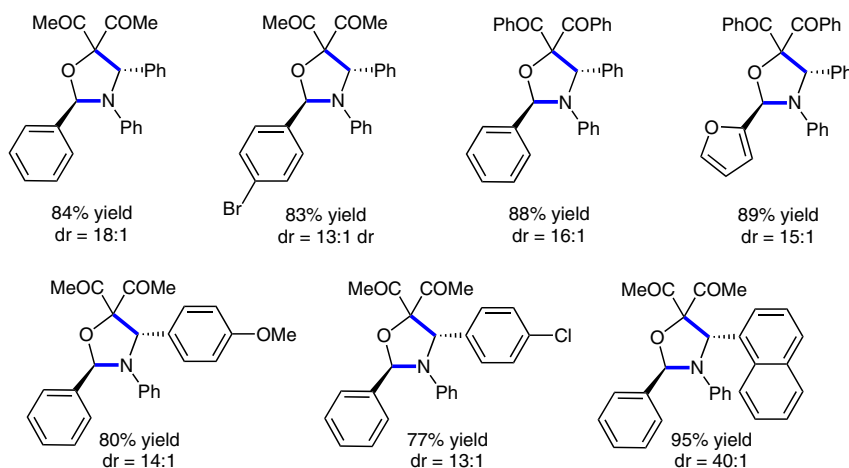


Ni-Catalyzed Annulation of Donor–Acceptor Oxiranes with Imines



Selected examples:



Significance: The use of donor–acceptor oxiranes as 1,3-dipole equivalents in cycloaddition reactions is a useful strategy for the construction of highly substituted heterocycles in a stereoselective fashion. The authors report a diastereoselective synthesis of 2,4-*trans*-oxazolidines via a nickel-catalyzed [3+2] cycloaddition of donor–acceptor oxiranes and imines.

Comment: A previous report demonstrated that donor–acceptor aziridines and aldehydes can undergo a [3+2] cycloaddition using a nickel catalyst, which furnishes 2,5-*cis*-oxazolidines (A. Hennig, A. Hoffmann, H. Borchertding, T. Thiele, U. Schedler, U. Resch-Genger *Chem. Commun.* **2011**, 47, 7842). The current report represents a complementary approach towards oxazolidine scaffolds. The authors demonstrate that two electron-withdrawing groups on the oxirane are required for reactivity, suggesting that chelation to the nickel catalyst is crucial for C–C bond cleavage.