

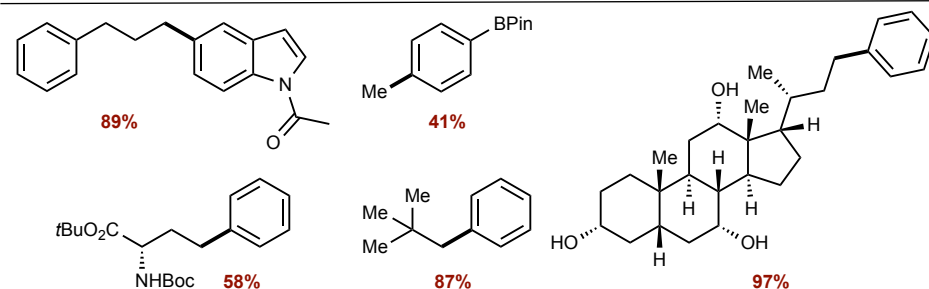
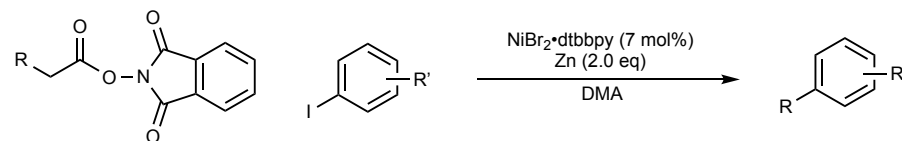
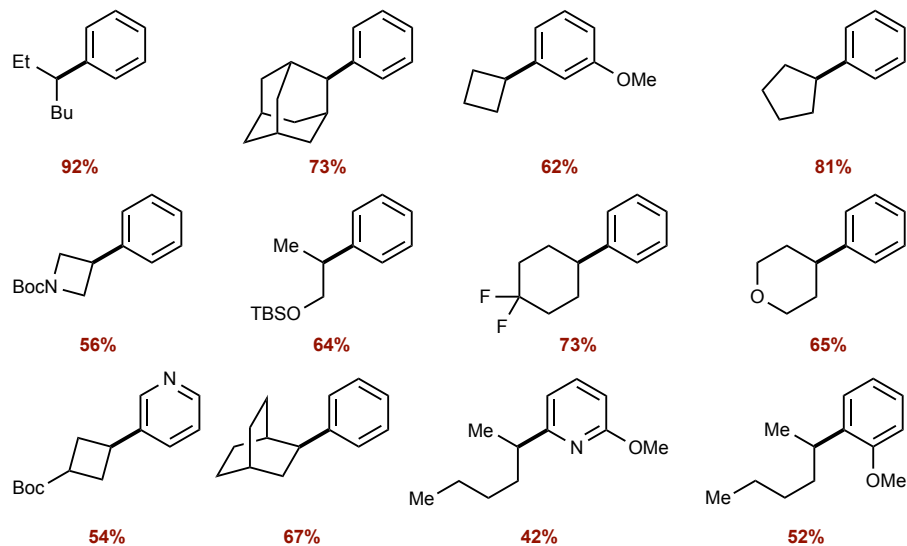
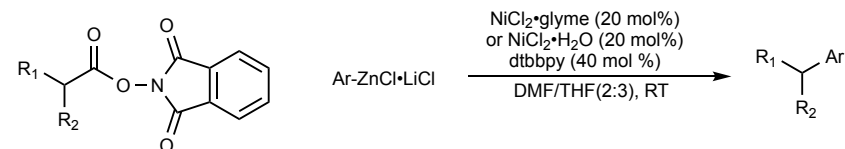
C-C Bond Forming:

Csp³-Csp³
Csp³-Csp²
Csp³-Csp

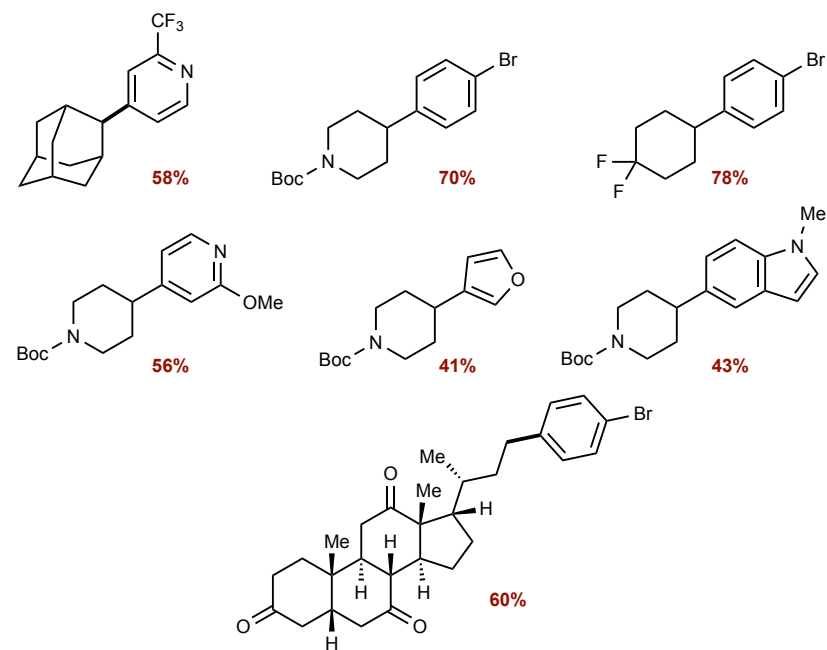
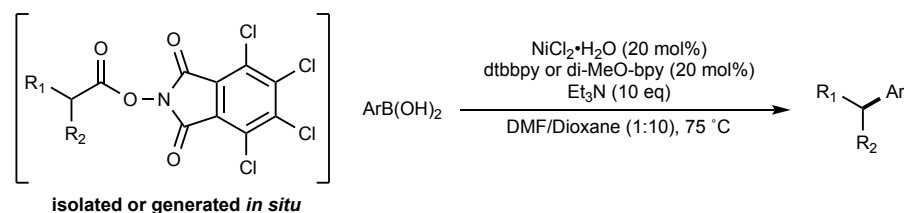
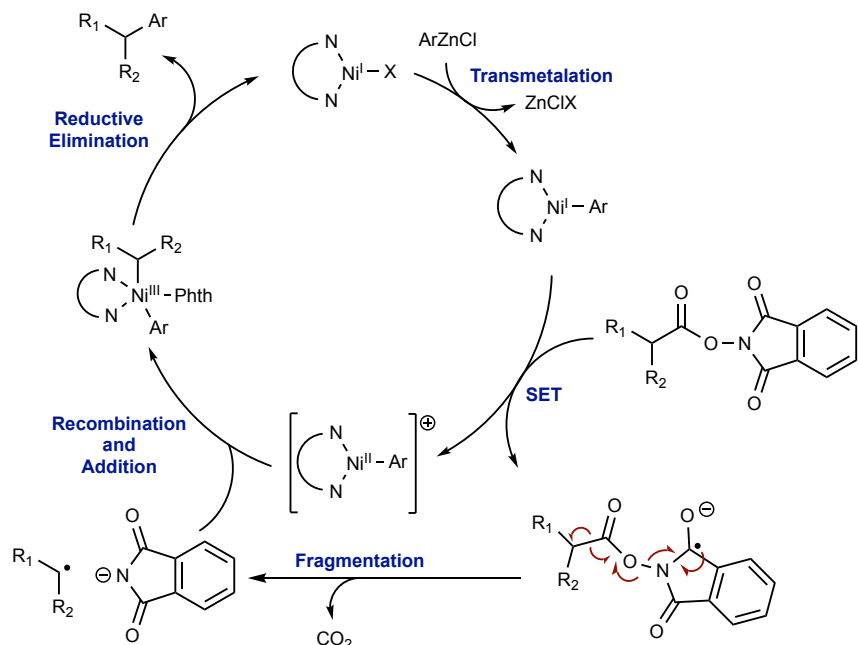
C-X Bond Forming:

Csp³-H (Decarboxylation)
Csp³-N
Csp³-O
Csp³-B
Csp³-Si

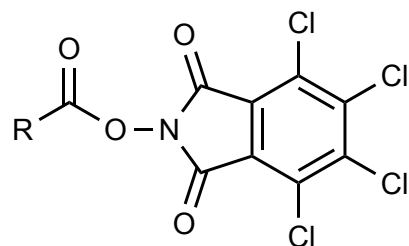
Nickel Catalyzed C-C Bond formation



Liao, X.; *Synthesis*, **2020**, <https://doi.org/10.1055/s-0040-1707273>.
Huo, C.; *Eur. J. Org. Chem.* **2020**, 36, 5801 <https://doi.org/10.1002/ejoc.202000525>.
Baran, P.S.; *J. Am. Chem. Soc.* **2016**, 138, 2174 <https://doi.org/10.1021/jacs.6b00250>
Weix, D.; *J. Am. Chem. Soc.* **2016**, 138, 5016 <https://doi.org/10.1021/jacs.6b01533>

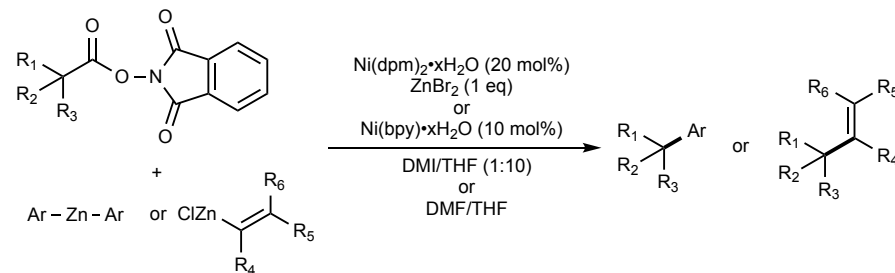


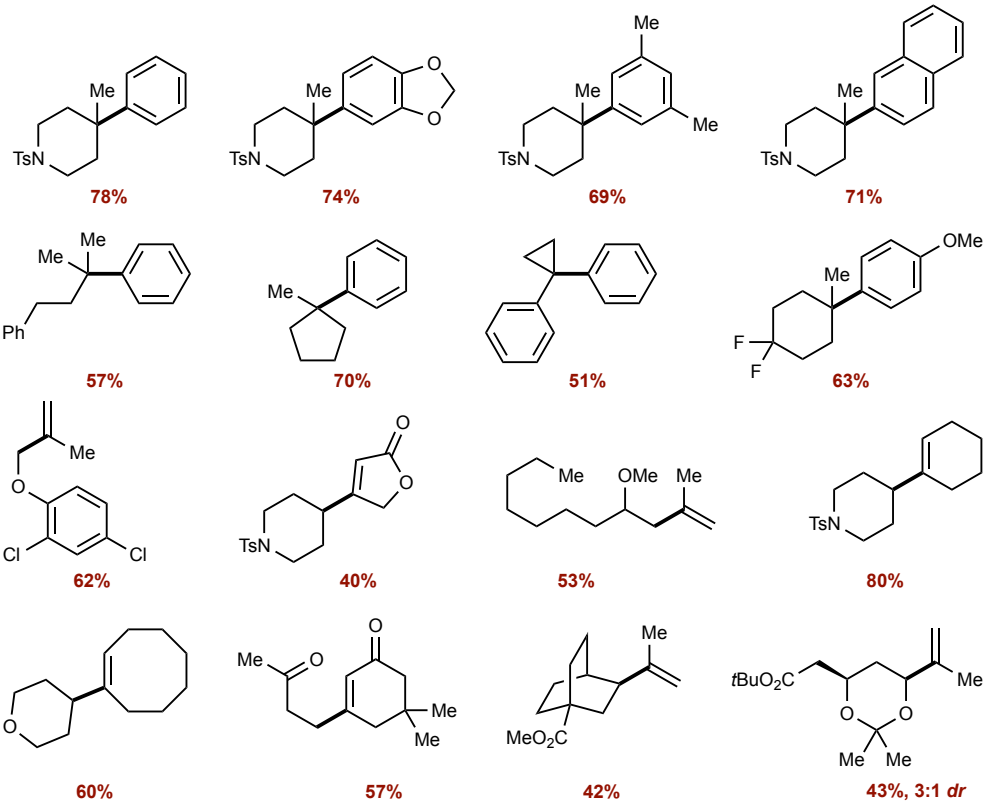
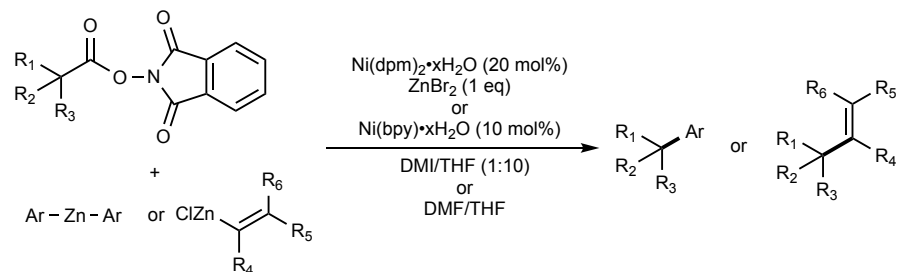
N-Hydroxytetrachlorophthalamide (TCNHPI)



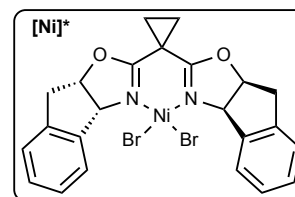
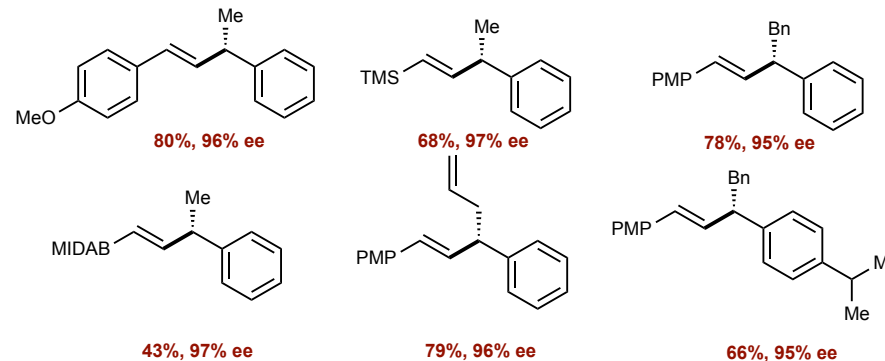
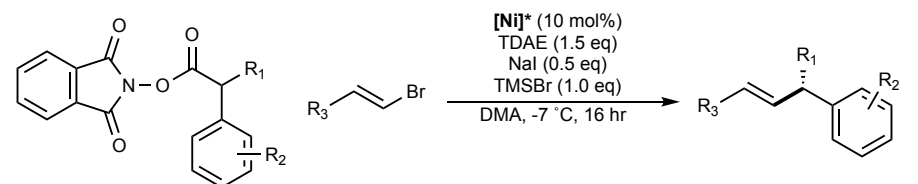
- More general RAEs
- Better compatibility
- Can be generated in situ

Tertiary Acid coupling

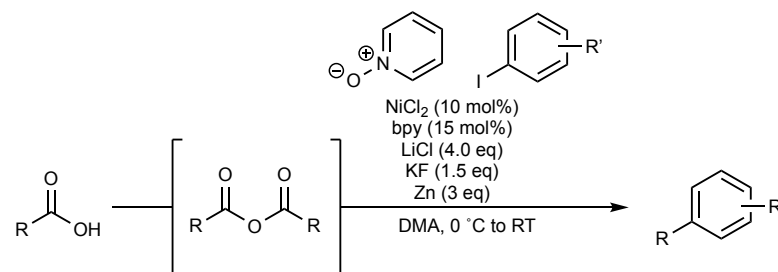


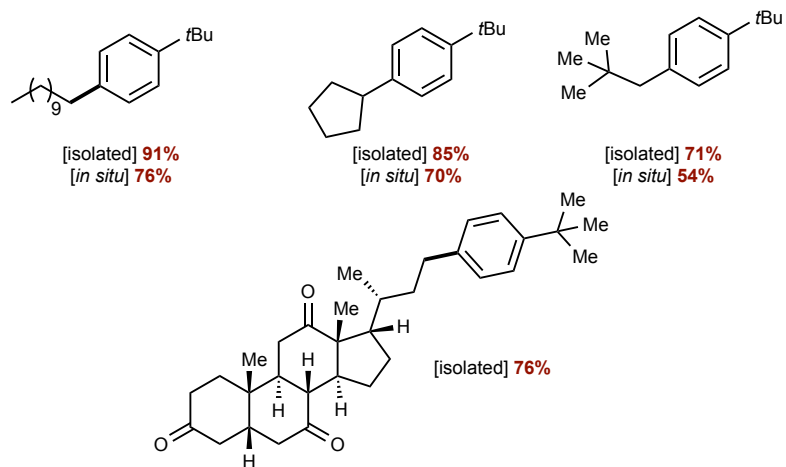
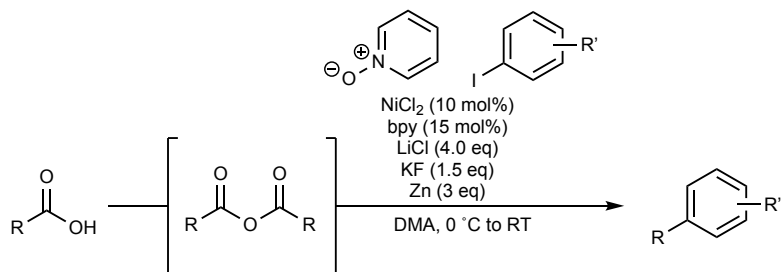


Enantioselective Variant

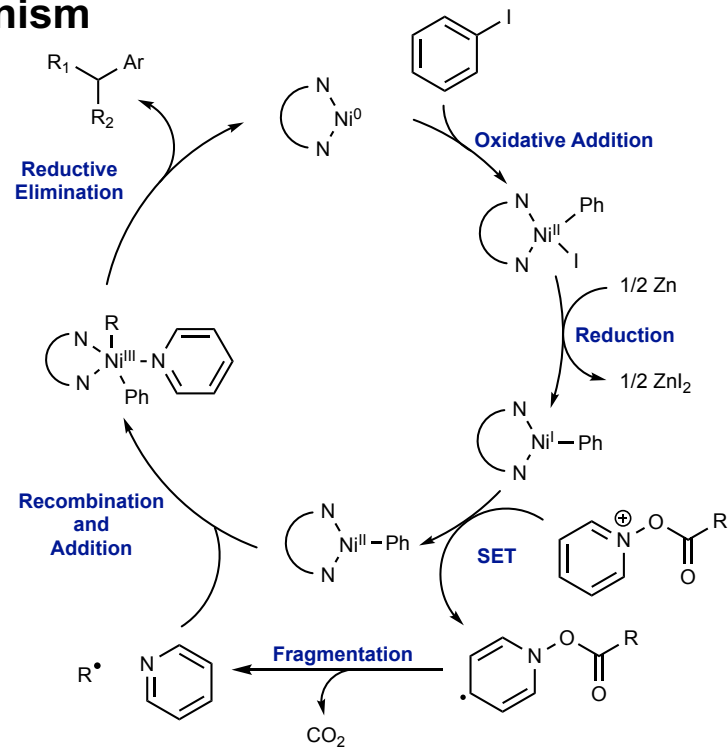


Anhydrides as RAEs

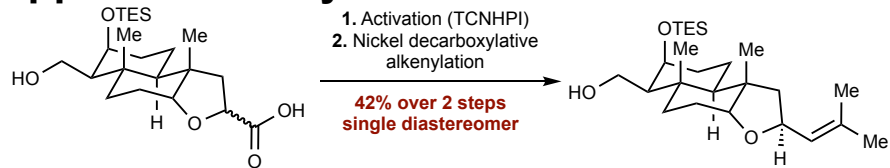




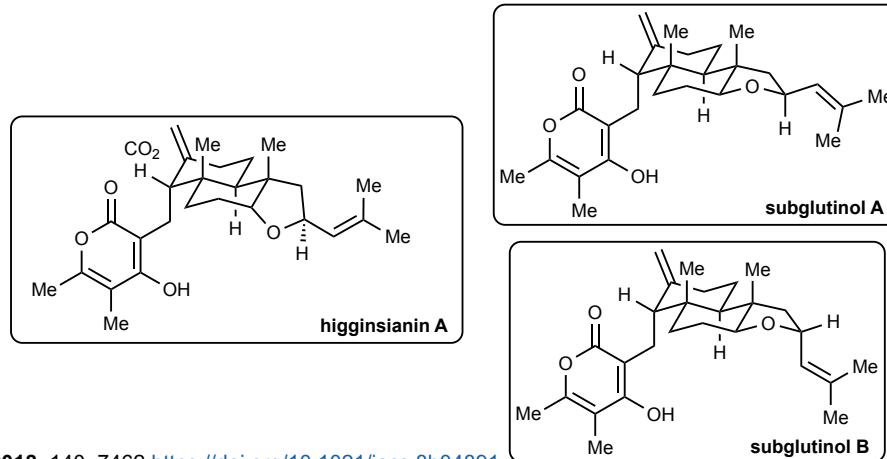
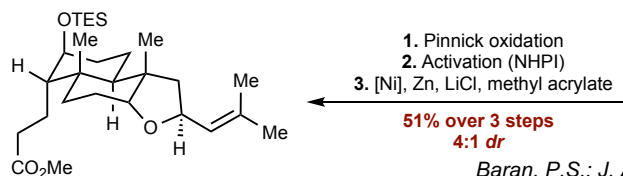
Mechanism



Application in Synthesis



Mixture of diastereomers



Baran, P.S.; *J. Am. Chem. Soc.* **2018**, *140*, 7462 <https://doi.org/10.1021/jacs.8b04891>