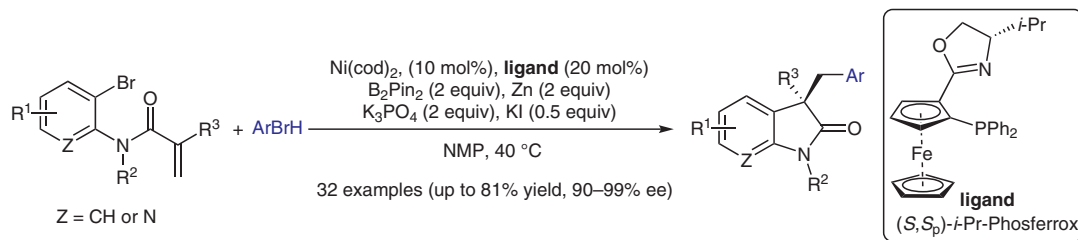
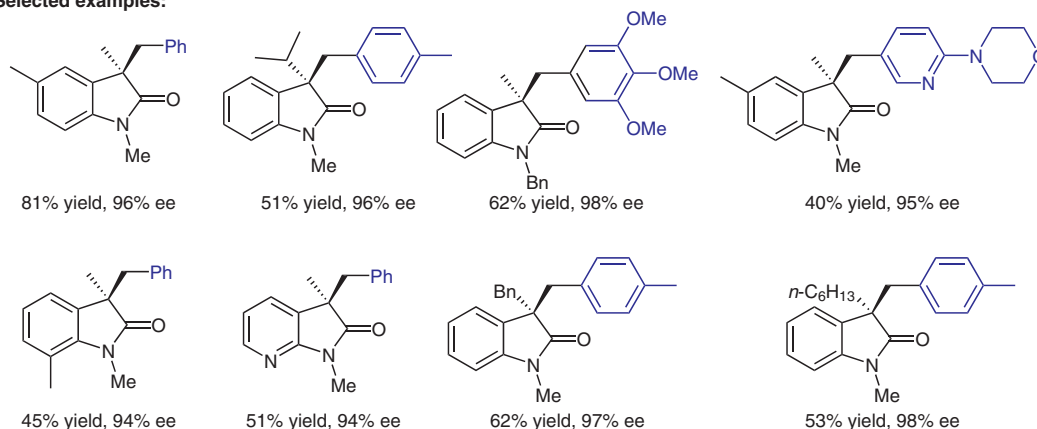


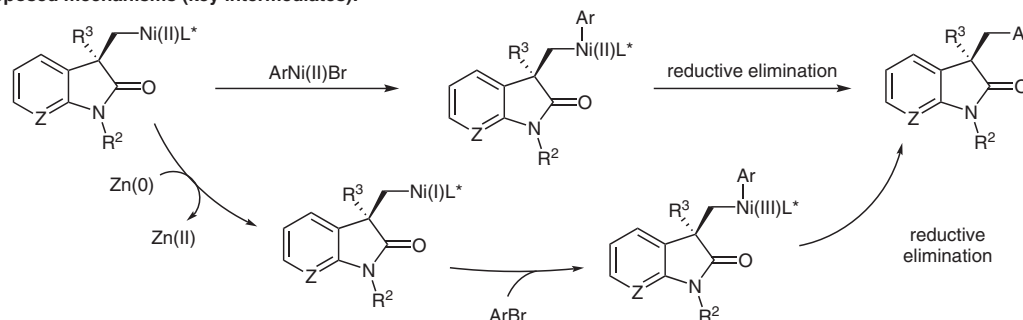
Nickel-Catalyzed Enantioselective Reductive Diarylation



Selected examples:



Proposed mechanisms (key intermediates):



Significance: The authors report a reductive diarylation of alkenes by using a nickel-catalyzed domino process employing two aryl electrophiles. This represents the first report of metal-catalyzed reductive coupling for the synthesis of oxindole scaffolds.

Comment: Following optimization of the reaction conditions, a broad substrate scope that included aryl bromides and alkenes was observed. An example of an azaoxindole was also demonstrated. The authors consider two possible pathways: One features two oxidative addition steps. The key step of the second pathway is a transmetalation between two nickel(II) species.