Ni-Catalyzed Enantioselective Reductive Diarylation of Activated Alkenes by Domino Cyclization/Cross-Coupling


**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.