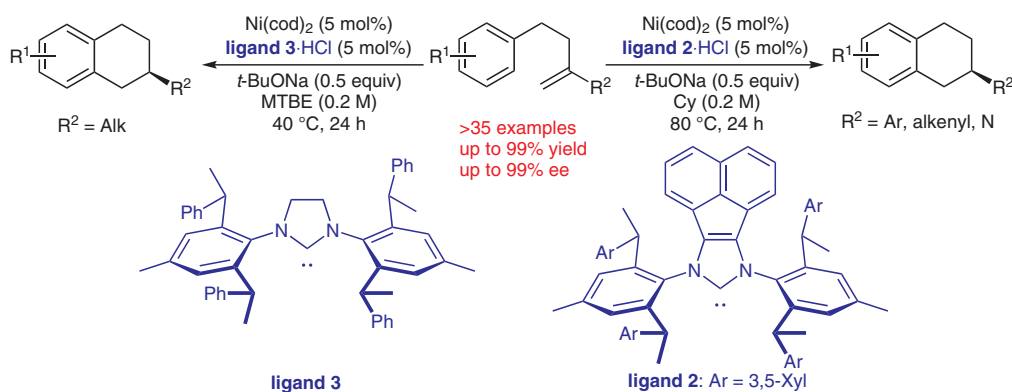
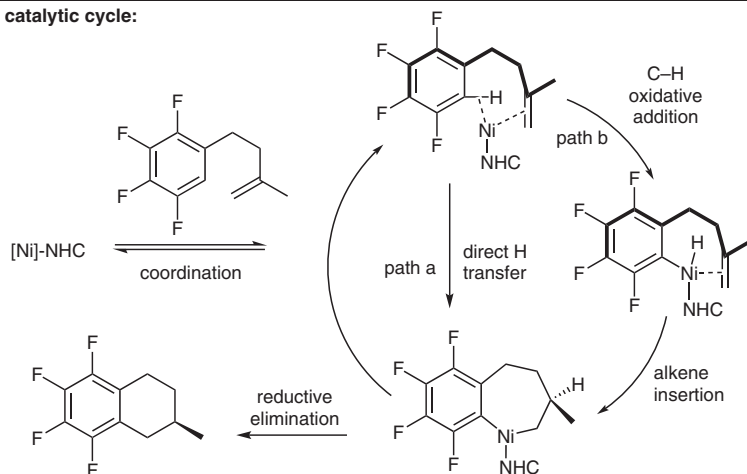


Y. CAI, X. YE, S. LIU, S.-L. SHI* (SHANGHAI INSTITUTE OF ORGANIC CHEMISTRY, P. R. OF CHINA)
 Nickel/NHC-Catalyzed Asymmetric C–H Alkylation of Fluoroarenes with Alkenes: Synthesis of Enantioenriched Fluorotetralins
Angew. Chem. Int. Ed. **2019**, *58*, 13433–13437.

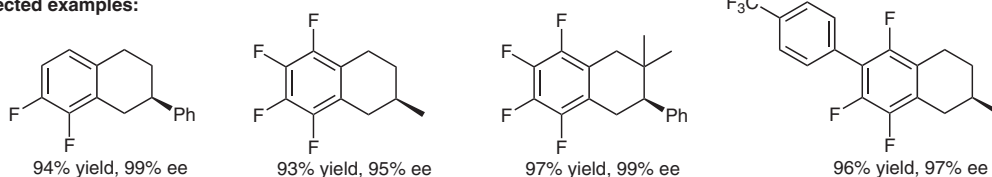
Asymmetric C–H Alkylation of Fluoroarenes with Alkenes via Nickel/NHC Catalysis



Proposed catalytic cycle:



Selected examples:



Significance: The authors demonstrate an unprecedented catalytic enantioselective C–H alkylation of polyfluoroarenes. The annulation displayed complete *endo* selectivity, with exclusive C–H over C–F activation, and excellent enantioselectivity.

Comment: In addition to conferring excellent enantioselectivity, the use of the rather bulky chiral N-heterocyclic carbene ligand for the nickel catalyst prevented any competition from C–F activation; as such, there was complete chemo- and regioselectivity.

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