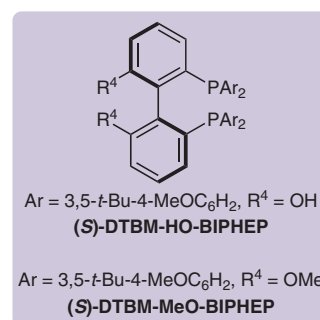
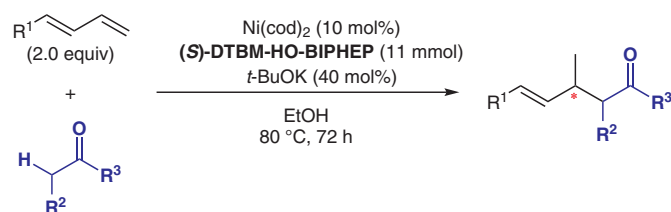


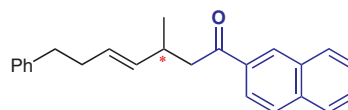
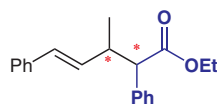
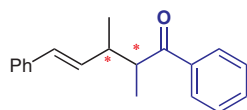
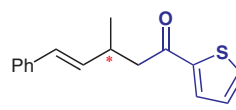
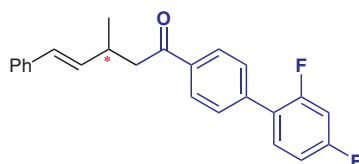
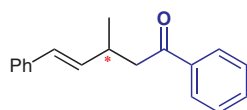
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Nickel(0)-Catalyzed Hydroalkylation of 1,3-Dienes with Simple Ketones  
*J. Am. Chem. Soc.* **2018**, *140*, 11627–11630.

## Nickel-Catalyzed Enantioselective Hydroalkylation of 1,3-Dienes

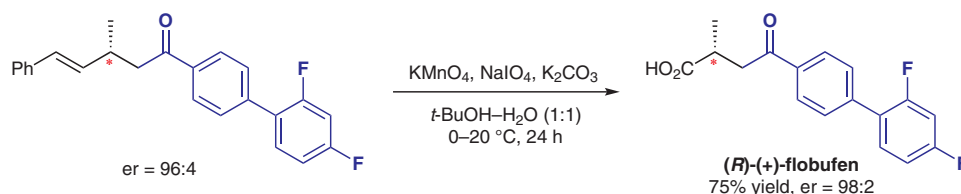


### Selected examples:



<sup>a</sup> (S)-DTBM-HO-BIPHEP was employed. <sup>b</sup> Performed with (S)-DTBM-MeO-BIPHEP and reacted at 90 °C.

### Derivatization:



**Significance:** Transition-metal-catalyzed asymmetric addition of enols or enolates to unsaturated hydrocarbons remains an unanswered challenge. The authors have developed a regio- and stereoselective hydroalkylation of 1,3-dienes by nickel catalysis.

**Comment:** This catalytic reaction provides a wide range of  $\gamma,\delta$ -unsaturated ketones or esters in good yields and with high enantioselectivities. One product was easily converted into the nonsteroidal anti-inflammatory drug (*R*)-flobufen, which also exhibits immunomodulatory properties.

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