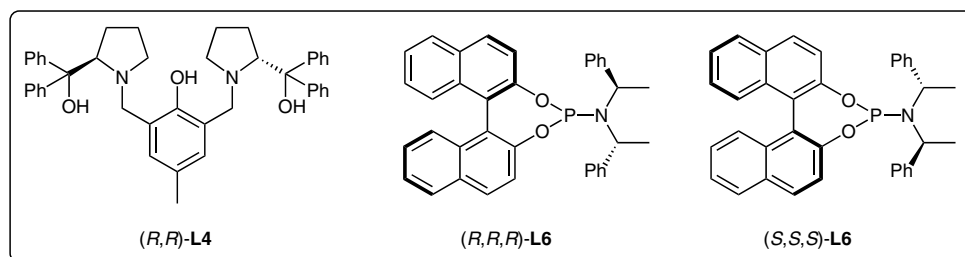
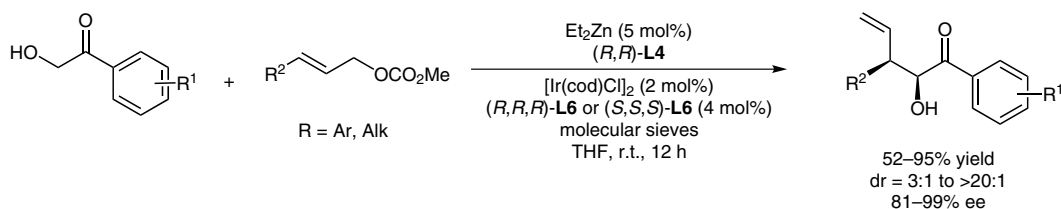


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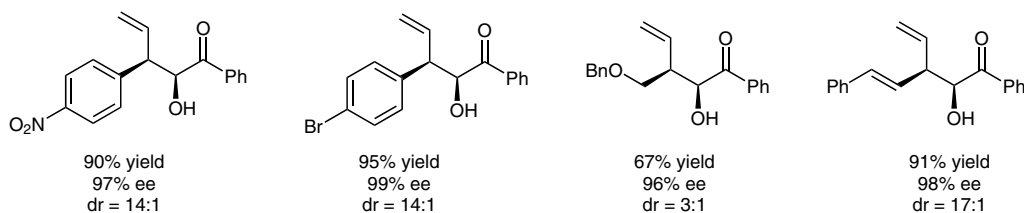
An Ir/Zn Dual Catalysis for Enantio- and Diastereodivergent  $\alpha$ -Allylation of  $\alpha$ -Hydroxyketones

*J. Am. Chem. Soc.* **2016**, *138*, 11093–11096.

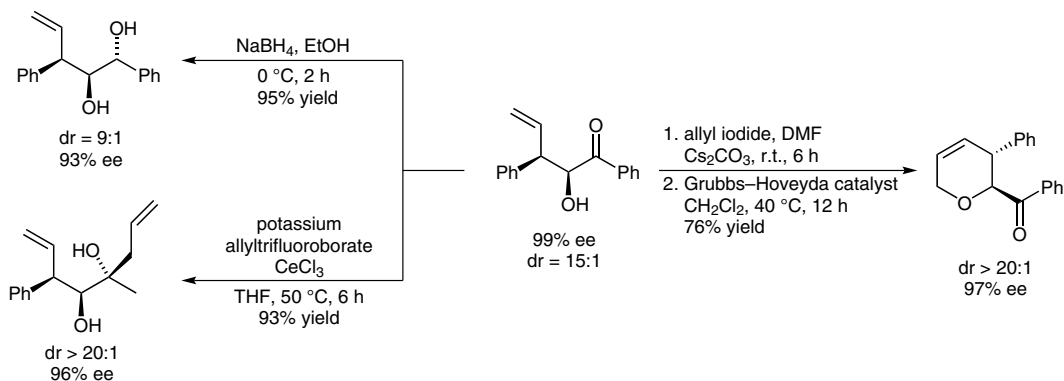
## Enantio- and Diastereoselective $\alpha$ -Allylation



### Selected examples:



### Derivatization:



**Significance:** A dual metal-catalyzed asymmetric allylation of  $\alpha$ -hydroxyketones is described. Chiral iridium and zinc complexes are employed for this transformation to furnish stereodefined  $\alpha$ -hydroxyketones.

**Comment:** Multi-metal asymmetric catalysis is a newly emerging field in catalysis. Exploitation of the preferential binding affinity of chiral ligands to specific metal centers allows chemo- and stereoselective formation of the desired products.

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Synthesis and  
Stereoselective  
Reactions

Key words

$\alpha$ -hydroxyketones  
dual metal catalysis  
asymmetric  
allylation

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1153