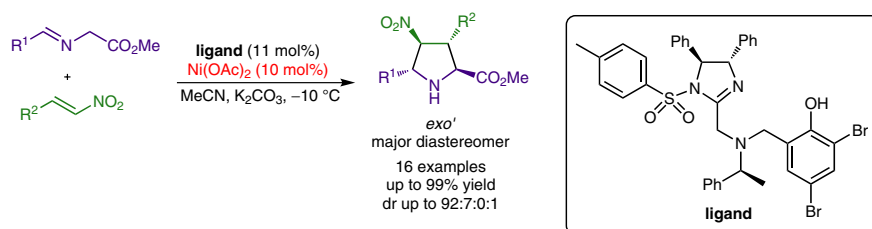


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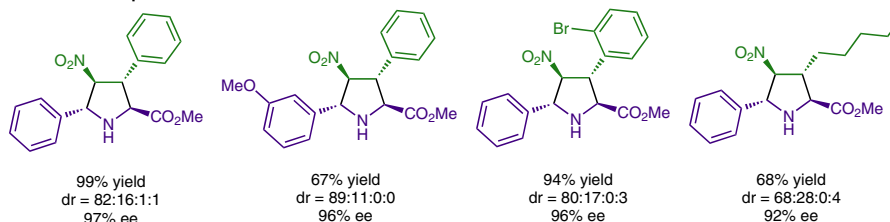
Catalytic Asymmetric *exo'*-Selective [3+2] Cycloaddition of Iminoesters with Nitroalkenes

*Angew. Chem. Int. Ed.* **2010**, *49*, 7895-7898.

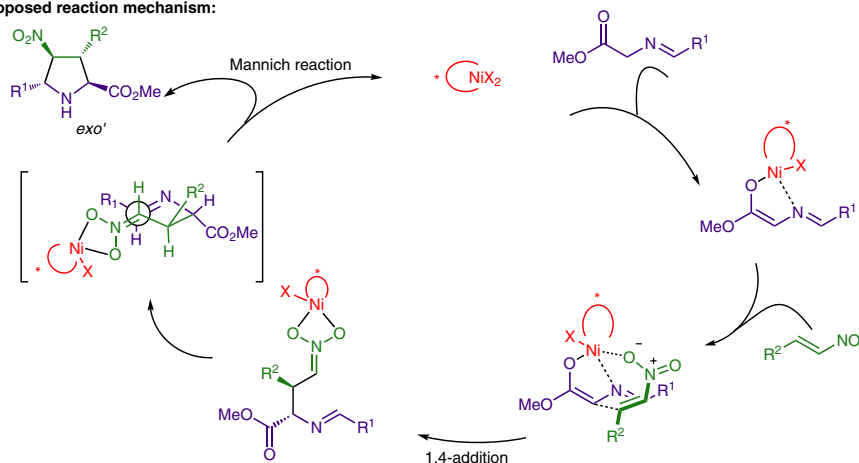
## Stereoselective [3+2] Cycloaddition of Imino Esters with Nitroalkenes



### Selected examples:



### Proposed reaction mechanism:



**Significance:** A library of solid-phase imidazole-amine-phenol/metal catalysts was prepared and a high-throughput screening method employing analysis by circular dichroism spectroscopy was used to find the most selective catalyst. This is the first method to generate *exo'* products in high diastereoselectivity and with excellent ee values.

**Comment:** The *exo'* stereochemistry suggests that the mechanism is not a concerted [3+2] cycloaddition. The authors propose a stepwise mechanism that involves 1,4-addition followed by a Mannich-type reaction as shown above.

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