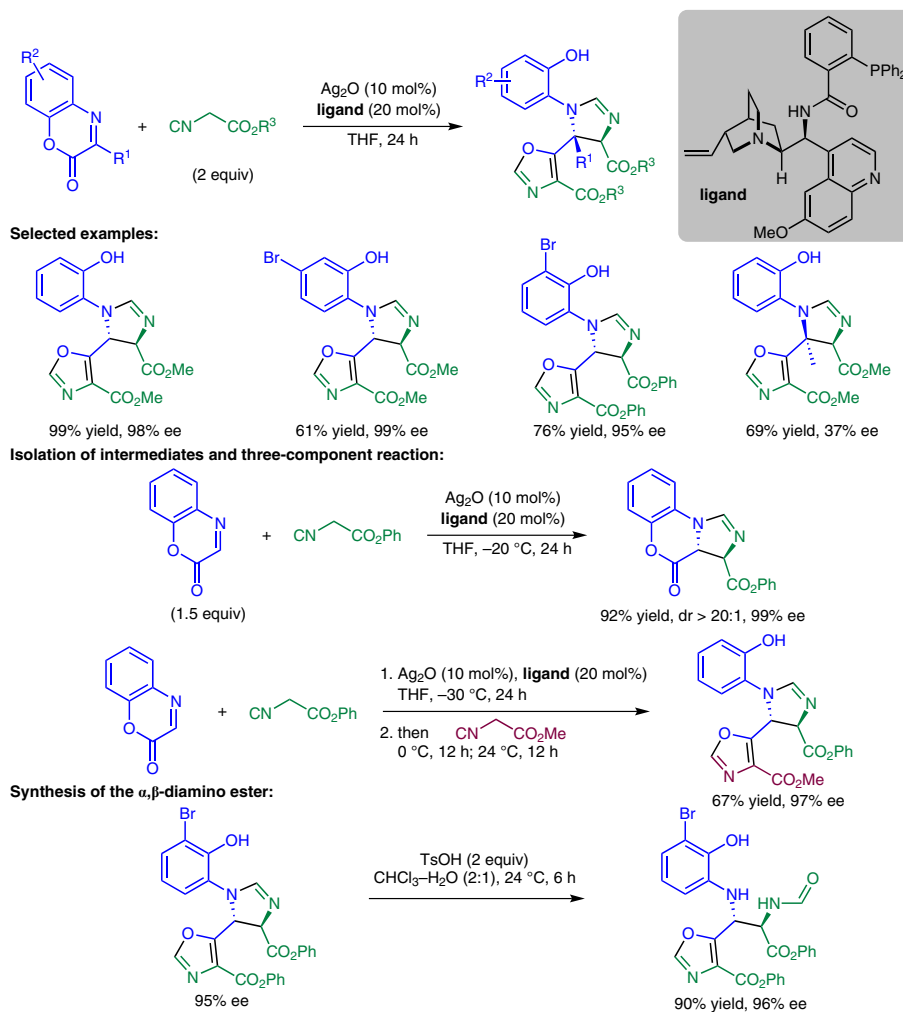


P.-L. SHAO, J.-Y. LIAO, Y. A. HO, Y. ZHAO* (NATIONAL UNIVERSITY OF SINGAPORE, SINGAPORE)

Highly Diastereo- and Enantioselective Silver-Catalyzed Double [3+2] Cyclization of α -Imino Esters with Isocyanoacetate

Angew. Chem. Int. Ed. **2014**, *53*, 5435–5439.

Silver-Catalyzed [3+2] Cyclization of α -Imino Esters with Isocyanoacetate



Significance: The authors present a double [3+2] cyclization of α -amino esters with isocyanates to produce highly functionalized oxazole-imidazoles. Therefore, a silver oxide quinine derived amino phosphine ligand was used. For the pioneering work regarding isocyanates using a gold catalyst, see: Y. Ito, M. Sawamura, T. Hayashi *J. Am. Chem. Soc.* **1986**, *108*, 6405–6406.

SYNFACTS Contributors: Hisashi Yamamoto, Biplab Maji
Synfacts 2014, 10(8), 0846 Published online: 18.07.2014
DOI: 10.1055/s-0034-1378419; **Reg-No.:** H07914SF

Comment: Kinetic studies identified two cyclization processes to be step-wise. The intermediates, mono-[3+2] cyclization products, were isolated. The products can be hydrolyzed to yield functionalized α,β -diamino esters.