C. PALO-NIETO, A. SAU, M. C. GALAN\* (UNIVERSITY OF BRISTOL, UK) Gold(I)-Catalyzed Direct Stereoselective Synthesis of Deoxyglycosides from Glycals J. Am. Chem. Soc. 2017, 139, 14041-14044.

## Gold(I)-Catalyzed Stereoselective Synthesis of Deoxyglycosides

## Selected examples:

## Proposed mechanism:

Significance: Deoxyhexose structures can be found in a wide range of natural products. The authors have developed an  $\alpha$ -stereoselective catalytic synthesis of deoxyglycosides from glycals by using Au(I)/AgOTf.

Comment: The reaction can be applied to a broad range of glycals and alcohols to give  $\alpha$ -deoxyglycosides in high yields and with excellent selectivity. The utility of the reaction was demonstrated by the synthesis of oligosaccharides through the coupling reaction followed by deprotection.

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**Metal-Catalyzed** Asymmetric Synthesis and Stereoselective

Category

## Key words

Reactions

gold catalysis deoxyglycosides glycals alkoxylation

