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Title:	Indium-assisted aluminium-based stereoselective allylation of prostereogenic $\alpha,\alpha$ -disubstituted cycloalkanones and imines
Authors:	Reddy, C. (/jspui/browse?type=author&value=Reddy%2C+C.) Babu, S.A. (/jspui/browse?type=author&value=Babu%2C+S.A.) Aslam, N.A. (/jspui/browse?type=author&value=Aslam%2C+N.A.)
Keywords:	Cycloalkanones Stereo-selective Prostereogenic
Issue Date:	2014
Publisher:	Royal Society of Chemistry
Citation:	RSC Advances, 4(76), pp.40199-40213.
Abstract:	The use of a catalytic amount of InCl <sub>3</sub> in combination with AlO for the allylation of a variety of prostereogenic $\alpha,\alpha$ -disubstituted (hindered) cycloalkanones, 1,2-dione-based systems and various imino systems (C[double bond, length as m-dash]N functional groups) is reported. The stereoselective InCl <sub>3</sub> -catalyzed Al-based allylation of various 2-substituted-2-carbethoxycycloalkanones gave the corresponding products with moderate to excellent diastereoselectivity. The allylation and propargylation of imines including $\alpha$ -imino esters using a catalytic amount of InCl <sub>3</sub> in combination with AlO gave the corresponding allylated and propargylated compounds in moderate to good yields. If $\gamma$ -substituted allylic halides were added to imino compounds, low to very good diastereoselectivity was obtained. The allylation of chiral N-tert-butylsulfinyl imine systems gave the corresponding products in moderate yields with good to excellent diastereoselectivity.
URI:	<a href="https://pubs.rsc.org/en/content/articlelanding/2014/RA/c4ra04293j#!divAbstract">https://pubs.rsc.org/en/content/articlelanding/2014/RA/c4ra04293j#!divAbstract</a> ( <a href="https://pubs.rsc.org/en/content/articlelanding/2014/RA/c4ra04293j#!divAbstract">https://pubs.rsc.org/en/content/articlelanding/2014/RA/c4ra04293j#!divAbstract</a> ) <a href="http://hdl.handle.net/123456789/3107">http://hdl.handle.net/123456789/3107</a> ( <a href="http://hdl.handle.net/123456789/3107">http://hdl.handle.net/123456789/3107</a> )
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