



Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali (/jspui/)

/ Publications of IISER Mohali (/jspui/handle/123456789/4)

/ Research Articles (/jspui/handle/123456789/9)


Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/175>

Title:	Indium-mediated addition of γ -substituted allylic halides to N-aryl α -imino esters: Diastereoselective production of β,β' -disubstituted α -amino acid derivatives with two contiguous stereocenters
Authors:	Aslam, N.A. (/jspui/browse?type=author&value=Aslam%2C+N.A.) Rajkumar, V. (/jspui/browse?type=author&value=Rajkumar%2C+V.) Reddy, C. (/jspui/browse?type=author&value=Reddy%2C+C.) Babu, S.A. (/jspui/browse?type=author&value=Babu%2C+S.A.)
Keywords:	Allylation Amino acids Diastereoselectivity;
Issue Date:	2012
Publisher:	WILEY-VCH Verlag GmbH & Co
Citation:	European Journal of Organic Chemistry, (23), pp. 4395-4411
Abstract:	Chelation-controlled Barbier-type indium-mediated addition of γ -substituted allylic halides to N-aryl (including N-PMP) α -imino- and N-acylhydrazono esters and highly diastereoselective tailoring of functionalized γ,δ -unsaturated β,β' -disubstituted N-aryl α -amino acid derivatives, bearing two contiguous stereocenters is reported. Further N-allylation of the resulting γ,δ -unsaturated β,β' -disubstituted N-aryl amino acid derivatives followed by ring closing metathesis (RCM) led to the synthesis of 2,3-disubstituted N-aryltetrahydropyridine derivatives bearing two contiguous stereocenters. The stereochemistry of the key products was unequivocally established from X-ray structure analyses. Highly diastereoselective C-C bond formation through Barbier-type indium-mediated addition of γ -substituted allylic halides to N-aryl α -imino and α -hydrazono esters was established. Diastereoselective production of γ,δ -unsaturated β,β' -disubstituted N-aryl (including N-PMP) α -amino acid- and 2,3-disubstituted N-aryltetrahydropyridine derivatives bearing two contiguous stereocenters was accomplished.
Description:	Only IISERM authors are available in the record.
URI:	http://onlinelibrary.wiley.com/doi/10.1002/ejoc.201200254/full (http://onlinelibrary.wiley.com/doi/10.1002/ejoc.201200254/full) DOI: 10.1002/ejoc.201200254 (DOI: 10.1002/ejoc.201200254) http://hdl.handle.net/123456789/175 (http://hdl.handle.net/123456789/175)
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File	Description	Size	Format
------	-------------	------	--------

Untitled 1.odt (/jspui/bitstream/123456789/175/1/Untitled%201.odt)	8.44 kB	OpenDocument Text	View/Open (/jspui/bitstream/123456789/175)
---	------------	----------------------	---

Show full item record (/jspui/handle/123456789/175?mode=full)	 (/jspui/handle/123456789/175/statistics)
---	---

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.