



Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali / Thesis & Dissertation / Master of Science / MS-18

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/5462>

Title:	Enantioselective Synthesis of Axially Chiral 1H- Indenes via Pd-Catalyzed Suzuki- Miyaura Cross- Coupling Reaction
Authors:	Mohanta, Jyotiranjana
Keywords:	Enantioselective Synthesis Axially Chiral 1H- Indenes Pd-Catalyzed Suzuki- Miyaura
Issue Date:	May-2023
Publisher:	IISER Mohali
Abstract:	Atropisomers are a privileged class of compounds whose applications covers the fields of medicinal chemistry, catalysis, and materials science. Atropisomeric biaryls are well known and are used in many fields of chemistry, and many synthetic methods are known for them but the synthesis of vinyl-aryl-based atropisomers is very much challenging because normally they have very less half-life. Axially chiral indenenes are cyclic vinyl-aryl-containing atropisomers whose enantioselective synthesis is not well explored, but they are of increasing value and interest across several fields. Here, we disclose Pd-catalyzed enantioselective synthesis of axially chiral indene via Suzuki Miyaura cross-coupling reaction between bromoindenenes and boronic acids using a chiral BOX ligand to yield axially chiral atropisomeric compounds with high levels of enantioselectivity and high yield.
URI:	http://hdl.handle.net/123456789/5462
Appears in Collections:	MS-18

Files in This Item:

File	Description	Size	Format	
embargo period.pdf		6.04 kB	Adobe PDF	View/Open

Show full item record



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

Theme by



Customized & Implemented by - Jivesna Tech