Title:	Enantioselective Synthesis of Axially Chiral 1H- Indenes via Pd-Catalyzed Suzuki- Miyaura Cross- Coupling Reaction
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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 indenes 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 bromoindenes and boronic acids using a chiral BOX ligand to yield axially chiral atropisomeric compounds with high levels of enantioselectivity and high yield.
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