Stereoselective construction of (E,Z)-1,3-dienes and its application in natural product synthesis.

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Details

Abstract

The E,Z-configured 1,3-diene unit is a common motif in numerous bioactive natural products. Although several powerful methods are available to produce these motifs with high levels of selectivity, their construction within a complex, polyfunctionalised structure, such as a natural product, requires well-defined strategies to avoid undesirable reactions and low-to-moderate selectivities. The aim of this review is to provide a full account of the stereoselective strategies for building E,Z-configured 1,3-dienes, as well as to highlight selected total syntheses that employ them between α -lithiated epoxides and Grignard reagents

Involved units

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