Record Nr. UNINA9910768475603321 Progress in Enantioselective Cu(I)-catalyzed Formation of Stereogenic **Titolo** Centers / / edited by Syuzanna R. Harutyunyan Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2016 **ISBN** 3-319-33414-X Edizione [1st ed. 2016.] 1 online resource (VII, 224 p. 292 illus., 47 illus. in color.) Descrizione fisica Topics in Organometallic Chemistry, , 1436-6002; ; 58 Collana Disciplina 546.652595 Soggetti Organometallic chemistry Catalysis Physical chemistry Organometallic Chemistry Physical Chemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Asymmetric allylic substitution using organolithium reagents -- 1,2-Versus 1,4- asymmetric addition of Grignard reagents to ketones and aldehydes -- Asymmetric addition of soft carbon nucleophiles --Asymmetric addition of silicon and boron nucleophiles -- Asymmetric cycloaddition and cascade addition-cyclisation reactions -- 1,2- Versus 1,4-asymmetric reduction of ketones -- Generating quaternary stereogenic centers via asymmetric conjugate addition. Sommario/riassunto The series Topics in Organometallic Chemistry presents critical overviews of research results in organometallic chemistry. As our understanding of organometallic structure, properties and mechanisms increases, new ways are opened for the design of organometallic compounds and reactions tailored to the needs of such diverse areas as organic synthesis, medical research, biology and materials science. Thus the scope of coverage includes a broad range of topics of pure and applied organometallic chemistry, where new breakthroughs are being achieved that are of significance to a larger scientific audience. The individual volumes of Topics in Organometallic Chemistry are

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