1. Record Nr. UNINA9910554251703321 Autore Bonrath Werner Titolo Catalysis for fine chemicals / / Werner Bonrath [and three others] Pubbl/distr/stampa Boston, Massachusetts:,: De Gruyter,, [2021] ©2021 **ISBN** 1-5231-5410-1 3-11-057118-8 Descrizione fisica 1 online resource (404 pages) Collana De Gruyter STEM Disciplina 660.2995 Soggetti Catalysis Chemical processes Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Frontmatter -- Preface -- Contents -- 1. Introduction and fundamental Nota di contenuto aspects -- 2 Heterogeneous hydrogenations -- 3 Homogeneous hydrogenations -- 4 Oxidations -- 5 Gas-phase reactions -- 6 C-Cbond and C-N-bond forming reactions (metal-catalysed) -- 7 Rearrangement reactions -- 8 Acid-base-catalysed reactions -- 9 Phase transfer catalysis (PTC) -- 10 Biocatalysis -- 11 New trends --Index Sommario/riassunto A wide range of chemical products (especially fine chemicals) are important for a healthy and enjoyable modern life; therefore efficient syntheses of these materials are essential. Traditional stoichiometric processes need to be replaced by modern catalytical methods in the change to sustainable chemistry and the production of lower amounts of waste. This book summarizes the wide variety of catalytic methods that have been developed and applied on an industrial scale in recent years to fulfill this goal. The synthesis of compound classes such as pharmaceuticals, agrochemicals, flavoring, and fragrance compounds as well as food additives such as vitamins exemplify the use of these modern catalytic methods in the modern chemical industry.