1. Record Nr. UNINA9911018661803321 Autore Lichtenberg Crispin Titolo Advances in Bismuth Chemistry / / edited by Crispin Lichtenberg Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 3-031-96130-7 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (355 pages) Structure and Bonding, , 1616-8550; ; 189 Collana 546 Disciplina Soggetti Chemistry, Inorganic Catalysis Microclusters Pharmaceutical chemistry **Inorganic Chemistry** Atomic and Molecular Clusters **Medicinal Chemistry** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Molecular Bismuth Compounds Ligand Design and Reactivity --Nitrogen Based Ligands in the Coordination Sphere of Bismuth --Geometrically Constrained Bismuth Compounds -- Bismuthinidenes --Low Valent Molecular Bismuth Compounds Neutral Bi(I) and Bi(II) Species, Molecular Bi Clusters and Radicals -- Cationic Species and Catalysis -- Green Chemistry Using Bismuth Compounds. Sommario/riassunto This volume provides a comprehensive exploration of the diverse facets of bismuth chemistry. It covers topics such as the influence of nitrogen-based ligands on bismuth coordination chemistry, the structural constraints affecting bismuth compounds, and the reactivity of bismuthinidenes. Additionally, the book presents the properties and significance of low-valent molecular bismuth species, including neutral Bi(I) and Bi(II) species, molecular Bi-clusters, and radicals, as well as their potential applications in catalysis. Furthermore, it examines the role of bismuth compounds in endeavors towards more sustainable organic synthesis. This book is a valuable resource to researchers, graduate students and professionals interested in inorganic chemistry

at the interface with organic synthesis, particularly those focusing on

bismuth chemistry, ligand design, and reactivity studies.