1. Record Nr. UNINA9910687981903321 Titolo Characteristics and Applications of Boron / / Chatchawal Wongchoosuk, editor Pubbl/distr/stampa London:,:IntechOpen,,2022 Descrizione fisica 1 online resource (228 pages) Disciplina 669 Soggetti Metallurgy Physical metallurgy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Boron is a chemical element with three valence electrons for forming covalent bonds, resulting in many compounds. Doping/integration of boron atoms into other atoms provides new wonder materials with unique physical, chemical, and electrical properties. This book provides an overview of the research and developments of boron-based materials such as boron nitride, boron clusters, boron doping, boron compounds, and so on. Chapters cover all aspects of boron-based materials including theoretical backgrounds of structure and properties, computer simulation, synthesis techniques, device fabrication, characterizations, and current state-of-the-art

applications.