1. Record Nr. UNINA9910483306503321 Bamboo fiber composites: processing, properties and applications // **Titolo** Mohammad Jawaid, Sanjay Mavinkere Rangappa, Suchart Siengchin, editors Gateway East, Singapore: ,: Springer, , [2021] Pubbl/distr/stampa ©2021 **ISBN** 981-15-8489-3 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XIII, 297 p. 121 illus., 88 illus. in color.) Collana Composites Science and Technology Disciplina 620.118 Soggetti Fibrous composites Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Developments in synthesis and characterization of Bamboo fiber Nota di contenuto composites -- Surface modification and characterization of Bamboo fiber composites -- Processing and characterization of Bamboo fiber/thermoset composites -- Synthesis and characterization of Bamboo fiber/thermoplastic composites -- Effect of synthetic fiber hybridization with Bamboo fiber hybrid composites -- Advancement in use of fillers in Bamboo fiber composites -- Morphological and mechanical aspects of Bamboo composites -- Tribological behavior of Bamboo fiber reinforced polymer composites -- Characterization and properties of biopolymer reinforced bamboo composites -- Influence of fabrication techniques on properties of bamboo composites -- Free vibration analysis of Bamboo fiber based polymer composite -- Flame Retardancy of Bamboo Fiber Composites -- Dielectric properties of Bamboo fiber thermoplastic and thermoset composites -- Lifecycle assessment of thermoplastic and thermosetting bamboo composites --Applications and drawbacks of Bamboo fiber composites. Sommario/riassunto This book summarizes many of the recent developments in the area of bamboo composites with emphasis on new challenges for the synthesis characterization, properties of bamboo composites and practical applications. The book provides an update of all the important areas of (synthesis, processing, properties and application) bamboo fibers and

its composites in a comprehensive manner. The chapters contributed

by leading researchers from industry, academy, government and private research institutions across the globe benefit academics, researchers, scientists, engineers and students in the field of natural fiber composites.