

| | |
|-------------------------|---|
| 1. Record Nr. | UNINA9910483007803321 |
| Titolo | Bamboo Polymer Nanocomposites : Preparation for Sustainable Applications // edited by Md Rezaur Rahman |
| Pubbl/distr/stampa | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021 |
| ISBN | 3-030-68090-8 |
| Edizione | [1st ed. 2021.] |
| Descrizione fisica | 1 online resource (205 pages) : illustrations |
| Collana | Engineering Materials, , 1868-1212 |
| Disciplina | 620.115 |
| Soggetti | Nanoscience Surface chemistry Materials - Analysis Nanophysics Surface Chemistry Materials Characterization Technique |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references. |
| Nota di contenuto | Chapter 1: Introduction of Various Types of Bamboo Species and Its Nanocomposites Preparation -- Chapter 2: Impact of Poly(Ethylene-Alt-Maleic Anhydride) And Nanoclay on the Physicochemical, Mechanical, and Thermal Properties of Bamboo Nanocomposite -- Chapter 3: Formulation Optimization and Characterization of Bamboo/Polyvinyl Alcohol/Clay Nanocomposite by Response Surface Methodology -- Chapter 4: Impact of Polyvinyl Alcohol /Acrylonitrile on Bamboo Nanocomposite and Optimization of Mechanical Performance by Surface Response Methodology. |
| Sommario/riassunto | This book shows how to enhance some bamboo properties and the surface treatments for obtaining high strength nanocomposites. It describes the tensile, flexural and impact strength, surface behaviour, morphological analysis, infrared spectral functional analysis and thermal properties analysis of manufacture nanocomposites. It also investigates the optimization of fabrication techniques to prepare bamboo nanocomposites reinforced with various polymers. The book also describes environmental impact analysis of bamboo |

nanocomposites. This book concludes with the nano-enhancement on bamboo species to produce nanocomposites and possible usage of nanocomposites materials in terms of sustainability and economics. .
