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Nota di contenuto	Front Cover; ABOUT THE EDITORS; CONTENTS; LIST OF CONTRIBUTORS; LIST OF ABBREVIATIONS; LIST OF SYMBOLS; PREFACE; Chapter 1: SPIDER SILK BIOCOMPOSITES: FROM RECOMBINANT PROTEIN TO FIBERS; Chapter 2: BIOGENIC HYDROXYAPATITE BASED IMPLANT MATERIALS; Chapter 3: LIQUID CRYSTALS AND CELLULOSE DERIVATIVES COMPOSITES; Chapter 4: BIOCOMPOSITES COMPOSED OF BIO-BASED EPOXY RESINS, BIO-BASED POLYPHENOLS AND LIGNOCELLULOSIC FIBERS; Chapter 5: BIOCOMPOSITE STRUCTURES AS SOUND ABSORBER MATERIALS; Chapter 6: BIOCOMPOSITES FOR INDUSTRIAL NOISE CONTROL Chapter 7: COMPLEX SHAPE FORMING OF FLAX FABRICS: ANALYSIS OF THE SOLUTIONS TO PREVENT DEFECTSChapter 8: INJECTION MOLDING OF NATURAL FIBER REINFORCED COMPOSITES; Chapter 9: DEVELOPMENT AND PROPERTIES OF SUGAR PALM FIBER REINFORCED POLYMER COMPOSITES; Chapter 10: BIOCOMPOSITES BASED ON NATURAL FIBERS AND POLYMER MATRIX-FROM THEORY TO INDUSTRIAL PRODUCTS; Chapter 11: FIRE RESISTANCE CELLULOSIC FIBERS FOR

BIOCOMPOSITES; Chapter 12: REINFORCING FILLERS AND COUPLING AGENTS' EFFECTS FOR PERFORMING WOOD POLYMER COMPOSITES Chapter 13: PROPERTIES OF DRIED DISTILLERS GRAINS WITH SOLUBLES, PAULOWNIA WOOD, AND PINE WOOD REINFORCED HIGH DENSITY POLYETHYLENE COMPOSITChapter 14: THE MULTIFUNCTIONAL CHEMICAL TUNABILITY OF WOOD-BASED POLYMERS FOR ADVANCED BIOMATERIALS APPLICATIONS; Chapter 15: LDPE/WHEAT GLUTEN HUSK BIOCOMPOSITES APPLIED TO BENZOPHENONE ABSORPTION: DETERMINATION OF PROPERTIES USING COMPUTATIONAL CHEMIST; Chapter 16: NANO-CELLULOSE REINFORCED CHITOSAN NANOCOMPOSITES FOR PACKAGING AND BIOMEDICAL APPLICATIONS; Chapter 17: BIONANOCOMPOSITES: A GREENER ALTERNATIVE FOR FUTURE GENERATION; Back Cover

Sommario/riassunto

Keeping in mind the advantages of bio-based materials, this book focuses on the potential efficacy of different biocomposites procured from diverse natural resources and the preparation and processing of the biocomposites to be used for a variety of applications. Each chapter gives an overview on a particular biocomposite material and its processing and successful utilization for selected applications. The chapters summarize recently developed research on such topics as: Spider silk biocomposites Biogenic hydroxyapatite-based implant biocomposites Liquid crystals and cellulose derivatives bioc