

1. Record Nr.	UNINA9910746970303321
Titolo	Processing and Characterization of Materials : Select Proceedings of ICPCM 2021 // edited by Krishna Dutta, Archana Mallik, H. R. Kotadia, S. Das
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	981-9955-09-2
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (VIII, 159 p. 75 illus., 59 illus. in color.)
Collana	Springer Proceedings in Materials, , 2662-317X ; ; 26
Disciplina	620.112
Soggetti	Materials - Analysis Materials Catalysis Force and energy Materials Characterization Technique Materials for Devices Materials for Energy and Catalysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	In-house electrochemical synthesis of graphene and its exploration as an anticorrosive coating on copper -- A Comprehensive Review of Adaptive Antibacterial Coatings for Implants, Metallic and Herbal Coating Materials, and Implant Biomaterial Characterization -- An Efficient Method for the Synthesis of Reinforced Hydroxyapatite Nanocomposite: Electrodeposition Route -- Evaluation of Tensile Strength for 3D-printed PLA Specimens -- Osteogenicity and antibacterial property of polarised HAUHMWPE composites as orthopedic implant biomaterial -- Applications of ionic liquids in solvent extraction of optically active metals Gallium and Indium-An overview -- Multi Parametric Investigation for Improvement in Machining Characteristics on Aluminium Boron Carbide Composite in WEDM -- The Effect of Reinforcement Composition and Sintering Temperature on Microstructure and Properties of Al-SiC-Fly Ash Composite -- The Application of Microwave and Infrared Drying in Agglomeration Plants of Iron Ore Briquette -- The Effect of thermal

aging on the wear behavior of glass fiber-epoxy matrix composite with SiC as filler material -- First principle study of defect induced band structure in Cu substituted Bi₂Te₃ topological insulator -- An effective way of reducing the wax pattern shrinkage to improve the dimensional accuracy of the investment castings -- Polarized chitosan with Cu substituted hydroxyapatite composite exhibits enhanced osteogenicity and antibacterial efficacy in vitro -- Role of Slag Composition on Slag Flow Characteristics in Blast Furnaces -- Self-lubricating composite: A new generation Metal Matrix composite for efficient tribological application.

Sommario/riassunto

This book presents select proceedings of the International Conference on Processing and Characterization of Materials (ICPCM 2021) organized by the Department of Metallurgical and Materials Engineering, National Institute of Technology, Rourkela. Various topics covered in this book include materials processing, materials characterization, mineral concentration, metal extraction and refining, surface engineering, thin films and coatings, materials for nuclear, aviation and defence applications, advanced and smart materials, composites, mechanical behaviour, modelling and simulation, materials for energy applications and corrosion and environmental degradation. This book is of interest to researchers and professionals working in the different areas of material science.
