

1. Record Nr.	UNINA9910163994103321
Titolo	Characterization of Minerals, Metals, and Materials 2017 / / edited by Shadia Ikhmayies, Bowen Li, John S. Carpenter, Jian Li, Jiann-Yang Hwang, Sergio Neves Monteiro, Donato Firrao, Mingming Zhang, Zhiwei Peng, Juan P. Escobedo-Diaz, Chenguang Bai, Yunus Eren Kalay, Ramasis Goswami, Jeongguk Kim
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-51382-6
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XXIX, 872 p. 480 illus.)
Collana	The Minerals, Metals & Materials Series, , 2367-1696
Disciplina	620.11
Soggetti	Materials - Analysis Building materials Materials Characterization and Analytical Technique Structural Materials Materials Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Part 1: Soft Materials -- Charpy Toughness Behavior of Fique Fabric Reinforced Polyester Matrix Composites -- Comparative Analysis of Curaua Fiber Density Using the Geometric Characterization and Pycnometry Technique -- Izod impact tests in polyester matrix composites reinforced with blanket of the malva and jute fibers -- Tensile Behavior of Epoxy Matrix Composites Reinforced With Eucalyptus Fibers -- The dimensional characterization of jute fabric strips for reinforcement in composite polymeric -- Izod Toughness Behavior of Continuous PALF Fibers Reinforced Polyester Matrix Composites -- Mechanical, thermal, morphology and barrier properties of flexible film based on polyethylene-ethylene vinyl alcohol blend reinforced with graphene oxide -- Radiation Effects on Crosslinking of Butyl Rubber Compounds -- Part 2: Clays and Ceramics -- Effect of Skin-Core Hierarchical Structure on Dielectric Constant of Injection

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SUBSTITUTE IN FINE AGGREGATE -- Synthesis and structural characterization of BaTiO₃ doped with Gd³⁺ -- Texture analysis and anisotropic properties of a rolled CuZn36 brass alloy -- The influence of titanium content on the sinter ore phase structure and the crack -- The use of Network Simplex method for planning the incorporation of recycled paper mill sludge in manufacturing of ceramic bodies -- USE OF ALKALINE SOLID WASTES FROM KRAFT PULP AND PAPER MILLS, DREGS AND GRITS IN CEMENT PRODUCTION -- Wood-to-concrete joints using steel connectors: experimental evaluation.

Sommario/riassunto

This collection gives broad and up-to-date results in the research and development of materials characterization and processing. Coverage is well-rounded from minerals, metals, and materials characterization and developments in extraction to the fabrication and performance of materials. In addition, topics as varied as structural steels to electronic materials to plant-based composites are explored. The latest research presented in this wide area make this book both timely and relevant to the materials science field as a whole. The book explores scientific processes to characterize materials using modern technologies, and focuses on the interrelationships and interdependence among processing, structure, properties, and performance of materials. Topics covered include ferrous materials, non-ferrous materials, minerals, ceramics, clays, soft materials, method development, processing, corrosion, welding, solidification, composites, extraction, powders, nanomaterials, advanced materials, and several others.
