

1. Record Nr.	UNINA9910786397403321
Titolo	Advanced materials for applied science and technology II : selected, peer reviewed papers from the 9th International Bhurban Conference on Applied Sciences and Technology, January 9-12, 2012, Islamabad, Pakistan / / edited by Arshad Munir and Zaffar M. Khan
Pubbl/distr/stampa	Zurich-Durnten : , : Trans Tech, , [2012] ©2012
ISBN	3-03813-899-1
Descrizione fisica	1 online resource (118 p.)
Collana	Advanced materials research, , 1022-6680 ; ; 570
Altri autori (Persone)	KhanZaffar M MunirArshad
Disciplina	620.11
Soggetti	Composite materials Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Advanced Materials for Applied Science and Technology II; Foreword, Introduction and Committees; Table of Contents; Characterization of Hyperelastic (Rubber) Material Using Uniaxial and Biaxial Tension Tests; Fatigue Crack Growth Behaviour of AISI 50100 Precipitation Hardened Steel after Welding; Thermo-Mechanical Testing of Epoxy Shape Memory Polymer Composites; Prediction of Delamination Crack Growth in Carbon/Fiber Epoxy Composite Laminates Using a Non-Local Cohesive Zone Modeling; Microstructure Study of Propellant Binder Microstructure and Corrosion Resistance of Dissimilar Welded Joints between Duplex Stainless Steel and Austenitic Stainless SteelDesign of Tape Wound Composite Cylindrical Shells Incorporating Different Failure Criteria and Winding Kinematics; Effects of Stitching Parameters on Tensile Strength of FRPs under Hygrothermal Conditions; Modeling Lamb Wave Propagation in Damaged Structures Based upon Spectral Element Method; Sintering and Morphology of Porous Structure in NiTi Shape Memory Alloys for Biomedical Applications; Hydroentangled Polymer-Glass Bi-Layer Fibrous Composites Study on Preparation and Mechanical Properties of Ti-PEEK-Cf LaminatesKeywords Index; Authors Index

Sommario/riassunto

The design and market forces driving the never-ending quest for improved materials for aerospace vehicles include lower weight, improved corrosion and fatigue resistances and lower acquisition and operating costs. The application of composite materials to commercial aircraft, and their extrapolation to next-generation aircraft, has led to significant overall weight-savings; which translate into enhanced range, payload and endurance. The most significant current barriers to an increased use of composite materials are high manufacturing costs, poor reliability in estimating design and developmen
