

1. Record Nr.	UNINA9910786394503321
Titolo	Advanced structural and functional materials for protection // edited by William Lau [and four others]
Pubbl/distr/stampa	Switzerland, Uk, Usa : , : Trans Tech Publications, , [2008] ©2008
ISBN	3-03813-198-9
Descrizione fisica	1 online resource (202 p.)
Collana	Diffusion and defect data. Pt. B. Solid state phenomena, , 1012-0394 ; ; volume 136
Altri autori (Persone)	LauWilliam K. M
Disciplina	623.38
Soggetti	Smart materials Textile fabrics - Technological innovations
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 index.
Nota di contenuto	Advanced Structural and Functional Materials for Protection, 2008; Preface; Table of Contents; Can the Activated Carbon that is Currently Used in the NBC Protective Wear Be Replaced; RF Plasma Synthesis of Boron Carbide Nanoparticles; Self Healing of Epoxy Composite for Aircraft's Structural Applications; Mechanical Properties of Carbon Nanotubes Reinforced Ultra High Molecular Weight Polyethylene; Skin-Core Micro-Structure and Surface Orientation of Carbon Nanotube Composites by Injection Molding Process; Synthesis of Nano-Sized Co-Sb Compounds through Solvothermal Routes Development of Lead-Free PiezoceramicGrowth of PLZT Thick Films by Polymer Modified Sol-Gel Processing for Optical Shutting; A Study on the Electrodeposition Behavior of Cobalt Antimonides in Citric Based Solutions; Studies on the Fabrication and Stab Resistance Characterization of Novel Thermoplastic-Kevlar Composites; Functional Graded Material with Nano Coating for Protection; Three-Body Abrasive Wear Behaviour of Fiber Reinforced Vinyl Ester Composites; Delamination Buckling of Kevlar and Twaron Stitched Glass\Epoxy Composite Laminates by Experiments Dynamic Response of Two-Core Sandwich Composite Structures under ImpactEvaluation of Interfacial Fracture Behavior of HVAS Coating/Substrate System Using a Local Approach; Growth of (Zr,Ti)N

Thin Films by Ion-Assisted Dual D.C. Reactive Magnetron Sputtering; Structural and Magnetic Properties of Off-Stoichiometric Ni-Mn-Al Heusler Alloy Thin Film; Sprayed-On Polymer as Concrete Spall Shield; Surface Roughness and Morphology Analysis Using an Atomic Force Microscopy of Polycrystalline Diamond Coated Si<sub>3</sub>N<sub>4</sub> Deposited by Microwave Plasma Assisted Chemical Vapor Deposition Studies on Effect of Nano-Talc Filler on Nucleation, Crystal Morphology and Crystallization Behaviour of Semi-Crystalline Plastics Sonochemical Synthesis of Poly (Methyl Acrylate); Application of Power Ultrasound in Cavitation Erosion Testing of Nano-Ceramic Particle/Polymer Composites; Keywords Index; Authors Index

---

Sommario/riassunto

This very special volume on 'Advanced Structural and Functional Materials for Protection' focuses on the choice of materials intended for the specific task of protecting civilians and soldiers against the effects of blast, fragmentation weapons and unconventional attacks, and also covers multi-functional materials intended for the enhancement of soldier performance. Protective materials represent one of the greatest challenges to synthesis and processing; due to the extreme requirements of the application. An understanding of the various mechanisms & sciences behind the behavior of materials w

---