1. Record Nr. UNINA9910140882003321

Titolo	Advances in ceramic armor VI : a collection of papers presented at the 34th International Conference on Advanced Ceramics and Composites, January 24-29, 2010, Daytona Beach, Florida / / edited by Jeffrey J. Swab ; volume editors, Sanjay Mathur, Tatsuki Ohji ; The American Ceramic Society
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2010 ©2010
ISBN	1-299-18627-0 0-470-94400-5 0-470-94399-8
Descrizione fisica	1 online resource (276 p.)
Collana	Ceramic Engineering and Science Proceedings, 5 ; ; v.529
Disciplina	620.14
Soggetti	Ceramic materials Armor-plate - Materials Composite materials Electronic books.
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 at the end of each chapters and index.
Nota di contenuto	Advances in Ceramic Armor VI; Contents; Preface; Introduction; Inspecting Composite Ceramic Armor Using Advanced Signal Processing Together with Phased Array Ultrasound; A Comparison of NDE Methods for Inspection of Composite Ceramic Armor; NDT Characterization of Boron Carbide for Ballistic Applications; Advanced Nondestructive Ultrasound Characterization of Transparent Spinel; Optimization of a Portable Microwave Interference Scanning System for Nondestructive Testing of Multi-Layered Dielectric Materials Corrective Techniques for the Ultrasonic Nondestructive Evaluation of Ceramic MaterialsQuantitative Evaluation of Structural Damage in Lightweight Armor Materials Via XCT; Static and Dynamic Properties of Mg/Ceramic MMCs; Impact Study of AIN-AION Composite; Ballistic Evaluation and Damage Characterization of Metal-Ceramic

Interpenetrating Composites for Light Armor Applications; Effect of an Interface on Dynamic Crack Propagation; Dynamic Equation of State and Strength of Boron Carbide; Multiscale Modeling of Armor Ceramics; Future Transparent Materials Evaluated through Parametric Analysis Nano-Processing for Larger Fine-Grained Windows of Transparent SpinelExperimental Methods for Characterization and Evaluation of Transparent Armor Materials; Method for Producing SiC Armor Tiles of Higher Performance at Lower Cost; Development of Biomorphic SiSiC- and C/SiSiC-Materials for Lightweight Armor; Influence of Impurities on Stacking Fault Dynamics in SiC under External Loading; Evolution of the AIN Distribution during Sintering of Aluminium Nitride Doped Silicon Carbide; Microstructure, Mechanical Properties, and Performance of Magnesium Aluminum Boride (MgAIB14)
Microstructural Development and Phase Changes in Reaction Bonded Boron CarbideAuthor Index

Sommario/riassunto

The Armor Ceramics Symposium was held January 25-27, 2010 in Daytona Beach, FL as part of the 34th International Conference & Exposition on Advanced Ceramics and Composites. The 8th edition of this symposium consisted of over 65 oral and poster presentations on topics such as Impact, Penetration and Material Modeling, Boron Carbide, Silicon Carbide, Dynamic Material Behavior, Transparent Materials and NDE Applications. The symposium continues to foster discussion and c