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Titolo	Advances in ceramic armor II : a collection of papers presented at the 30th International Conference on Advanced Ceramics and Composites, January 22-27, 2006, Cocoa Beach, Florida / / editor, Lisa Prokurat Franks; general editors, Andrew Wereszczak, Edgar Lara-Curzio
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Altri autori (Persone)	Prokurat FranksLisa WereszczakAndrew Lara-CurzioEdgar <1963->
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Nota di contenuto	Advances in Ceramic Armor II; Contents; Preface; Introduction; A Review of Computational Ceramic Armor Modeling; Biomorphic SiSiC-Materials for Lightweight Armour; Evaluation of Sic Armor Tile Using Ultrasonic Techniques; Spherical Indentation of Sic1; Damage Modes Correlated to the Dynamic Response of SIC-N; Grain Boundary Chemistry of Sic-Based Armor; Effect of Microstructure and Mechanical Properties on the Ballistic Performance of Sic-Based Ceramics; Addition of Excess Carbon to Sic to Study its Effect on Silicon Carbide (SIC) Armor

Analysis of Time-Resolved Penetration of Long Rods into Glass Targets-IIResponse and Characterization of Confined Borosilicate Glass: Intact and Damaged; Constitutive Model for Damaged Borosilicate Glass; Reaction Sintered LiAlON; Large Area EFGTM Sapphire for Transparent Armor; Relationship of Microstructure and Hardness for Al<sub>2</sub>O<sub>3</sub> Armor Materials; Root Causes of the Performance of Boron Carbide Under Stress; Analysis of Texture in Controlled Shear Processed Boron Carbide; Progress in the Nondestructive Analysis of Impact Damage in TiB<sub>2</sub> Armor Ceramics

Elastic Property Determination of WC Spheres and Estimation of Compressive Loads and Impact Velocities That Initiate Their Yielding and CrackingOn the Role of Impact Damage in Armor Ceramic Performance; The Indentation Size Effect (ISE) for Knoop Hardness in Five Ceramic Materials; Influence of Microstructure on the Indentation-Induced Damage in Silicon Carbide; Author Index

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**Sommario/riassunto**

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These proceedings contain current research from industry, academia and government organizations, working on opaque and transparent ceramic armor. Papers on novel materials concepts for both vehicle and body armors are included, as well as papers that explore the relationship between computational modeling and property testing. These papers were presented at the Proceedings of the 30th International Conference on Advanced Ceramics and Composites, January 22-27, 2006, Cocoa Beach, Florida. Organized and sponsored by The American Ceramic Society and The American Ceramic Society's Engineeri

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