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Ceramics of High Strength and High Transparency; OPAQUE CERAMICS; Recent Results on the Fundamental Performance of a Hot-Pressed Silicon Carbide Impacted by Sub-Scale Long-Rod Penetrators; Instrumented Hertzian Indentation Study of Two Commercial Silicon Carbides; Apparent Yield Strength of Hot-Pressed SiCs; Microstructural Examination and Quasi-Static Property Determination of Sintered Armor Grade SiC  
Quantitative Characterization of Localized Amplitude Variations in Silicon Carbide Ceramics using Ultrasound C-Scan Imaging  
Grain Boundary Engineering of Silicon Carbide by Means of Coprecipitation; The Possible Roles of Stoichiometry, Microstructure, and Defects on the Mechanical Behavior of Boron Carbide; A Review of Ceramics for Armor Applications; NOVEL EVALUATION AND CHARACTERIZATION; A Portable Microwave Scanning Technique for Nondestructive Testing of Multilayered Dielectric Materials; Ballistic Damage Assessment of a Thin Compound Curved B4C Ceramic Plate using XCT  
Evaluation of Ballistically-Induced Damage in Ceramic Targets by X-Ray Computed Tomography  
Automated Nondestructive Evaluation System for Hard Armor Protective Inserts of Body Armor; Analysis of Hardness Indentation Size Effect (ISE) Curves in Ceramics: A New Approach to Determine Plasticity; Author Index

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Sommario/riassunto

This volume provides a one-stop resource, compiling current research on ceramic armor and addressing the challenges facing armor manufacturers. It is a collection of papers from The American Ceramic Society's 32nd International Conference on Advanced Ceramics and Composites, January 27-February 1, 2008. Topics include novel materials concepts for both vehicle and body armors, transparent ceramics for impact resistance, and more. This is a valuable, up-to-date resource for researchers in industry, government, or academia who are working with ceramic armor.

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