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Glass; Reaction Sintered LiAlON; Large Area EFGTM Sapphire for Transparent Armor; Relationship of Microstructure and Hardness for Al2O3 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 TiB2 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

Sommario/riassunto

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