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Nota di contenuto	Advances in Ceramic Armor X; Contents; Preface; Introduction; TESTING METHOD FOR CERAMIC ARMOR AND BARE CERAMIC TILES; ABSTRACT; INTRODUCTION; Depth of Penetration test method; Projectile-ceramic interaction phases; Alternative test method; Estimation of the Dwell-time; EXPERIMENTS; Test series 1; Test series 2; Test series 3; RESULTS AND DISCUSSION; CONCLUSION; ACKNOWLEDGEMENT; REFERENCES; EFFECTS OF NOVEL GEOMETRIC DESIGNS ON THE BALLISTIC PERFORMANCE OF CERAMICS; ABSTRACT; USE OF CERAMICS IN ARMOR: BENEFITS AND LIMITATIONS; LARGE, COMPLEX-SHAPED CERAMIC COMPONENTS FOR ARMOR USE OF NOVEL DESIGNS IN METALLIC SYSTEMS AND APPLICABILITY TO CERAMICS FABRICATION AND BALLISTIC TESTING OF CERAMIC TILES

WITH NOVEL DESIGNS; SUMMARY AND CONCLUSIONS;  
ACKNOWLEDGEMENT; REFERENCES; SURFACE MODIFICATION OF  
BALLISTIC CERAMIC AND COMPOSITE MATERIALS BY USE OF  
ATMOSPHERIC PRESSURE PLASMA; ABSTRACT; INTRODUCTION;  
EXPERIMENTAL; Material Preparation and Surface Treatment; Surface  
Characterization; Adhesion and Strength Testing; Ballistic Testing;  
RESULTS; Wettability and Surface Characterization; Ballistic Experiment;  
CONCLUSION; ACKNOWLEDGEMENT; REFERENCES  
EVALUATING THE ROCK STRIKE RESISTANCE OF TRANSPARENT ARMOR  
MATERIALSABSTRACT; INTRODUCTION; TEST METHODS & EQUIPMENT;  
Ballistic Aluminum Projectile; Dropped Aluminum Indenter; Ballistic  
Ceramic Ball; EXPERIMENTAL RESULTS; Ballistic Aluminum Projectile;  
Dropped Aluminum Indenter; Ballistic Ceramic Ball; DISCUSSION;  
Evaluation of Test Methods; RSR Trends in Materials; Effect of RSR  
Requirements on TA Designs; CONCLUSION; ACKNOWLEDGMENTS;  
REFERENCES; BALLISTIC DAMAGE OF ALUMINA CERAMICS - LEARNING  
FROM FRAGMENTS; ABSTRACT; INTRODUCTION; EXPERIMENTAL  
DETAILS AND ANALYSIS TECHNIQUE  
EXPERIMENTAL RESULTS; DISCUSSION; SUMMARY; ACKNOWLEDGEMENTS;  
REFERENCES; CHARACTERIZATION OF SILICON CARBIDE  
MICROSTRUCTURE USING NONDESTRUCTIVE ULTRASOUND  
TECHNIQUES; ABSTRACT; INTRODUCTION; EXPERIMENTAL; RESULTS  
AND DISCUSSION; Pressure Variations; Temperature Variations; Dwell  
Time Variations; CONCLUSIONS; ACKNOWLEDGEMENTS; REFERENCES;  
DYNAMIC ELECTROMECHANICAL RESPONSE OF 4H AND 6H SINGLE  
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TRANSPORT; CONCLUSION; REFERENCES; ASSESSING THE CARBON  
CONCENTRATION IN BORON CARBIDE: A COMBINED X-RAY  
DIFFRACTION AND CHEMICAL ANALYSIS; ABSTRACT; INTRODUCTION;  
EXPERIMENTAL APPROACH; RESULTS AND DISCUSSION; CONCLUSIONS;  
REFERENCES  
THE EFFECT OF SiO<sub>2</sub> AND B<sub>2</sub>O<sub>3</sub> ADDITIVES ON THE MICROSTRUCTURE  
AND HARDNESS OF HOT-PRESSED BORON CARBIDE

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**Sommario/riassunto**

A collection of 14 papers from the Armor Ceramics symposium held during The American Ceramic Society's 38th International Conference on Advanced Ceramics and Composites, held in Daytona Beach, Florida, January 26-31, 2014.

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