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Nota di contenuto	Advanced Ceramic Coatings and Materials for Extreme Environments: A Collection of Papers Presented at the 35th International Conference on Advanced Ceramics and Composites January 23-28, 2011 Daytona Beach, Florida; Contents; Preface; Introduction; ADVANCED COATING CHARACTERIZATION METHODS AND NON-DESTRUCTIVE EVALUATION; Monitoring Delamination of Thermal Barrier Coatings during Interrupted High-Heat-Flux Laser Testing using Upconversion Luminescence Imaging; Thermal Imaging Measurement Accuracy for Thermal Properties of Thermal Barrier Coatings ADVANCED COATING PROCESSING AND NANOSTRUCTURED COATING SYSTEMSHigh Velocity Suspension Flame Sprayed (HVSFS) Hydroxyapatite Coatings for Biomedical Applications; COATINGS TO RESIST WEAR, EROSION, AND TRIBOLOGICAL LOADINGS; Ceramic/Metal-Polymer Multilayered Coatings for Tribological

Applications Under Dry Sliding Conditions; Application of HVOF for High Performance Cylinder Liner Coatings; Multilayer Coatings for Anti-Corrosion Applications; ENVIRONMENTAL BARRIER COATINGS FOR TURBINE ENGINES AND EXTREME ENVIRONMENTS
Plasma Spray-Physical Vapor Deposition (PS-PVD) of Ceramics for Protective Coatings An Yb₂Si₂O₇ Oxidation Resistance Coating for C/C Composites by Supersonic Plasma Spray; FUNCTIONALLY GRADED COATINGS AND INTERFACES; Development of Oxide Ceramic APS Coatings for Microwave Absorption; THERMAL BARRIER COATINGS; Hot Corrosion of Potential Thermal Barrier Coating Material (Sm_{1-x}Y_b)₂Zr₂O₇ by V₂O₅ and Na₂SO₄; Variation of Creep Properties and Interfacial Roughness in Thermal Barrier Coating Systems
MATERIALS FOR EXTREME ENVIRONMENTS: ULTRA HIGH TEMPERATURE CERAMICS (UHTCS) AND NANOLAMINATED TERNARY CARBIDES AND NITRIDES (MAX PHASES) Temperature and Strain-Rate Dependent Plasticity of ZrB₂ Composites from Hardness Measurements; Nano-Crystalline Ultra High Temperature HfB₂ and HfC Powders and Coatings Using a Sol-Gel Approach; Pressureless Sintering and Hot-Pressing of Ti₂AlN Powders Obtained by SHS Process; Diffraction Study of Self-Recovery in Decomposed Al₂TiO₅ during Vacuum Annealing; Kinetics of Phase Decomposition in Ti₄AlN₃ and Ti₂AlN-A Comparative Diffraction Study; Author Index

Sommario/riassunto

This book is a collection of papers from The American Ceramic Society's 35th International Conference on Advanced Ceramics and Composites, held in Daytona Beach, Florida, January 23-28, 2011. This issue includes papers presented in the Advanced Ceramic Coatings for Structural, Environmental, and Functional Applications and Materials for Extreme Environments symposia on topics such as Coatings to Resist Wear, Erosion and Tribological Loadings; Environmental Barrier Coatings; Functionally Graded Coatings and Interfaces; Thermal Barrier Coatings; and Ultrahigh Temperature Ceramics and Nanolaminat
