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Nota di contenuto	Advanced Ceramic Coatings and Materials for Extreme Environments II: A Collection of Papers Presented at the 36th International Conference on Advanced Ceramics and Composites; Contents; Preface; Introduction; ADVANCED THERMAL AND ENVIRONMENTAL COATING PROCESSING AND CHARACTERIZATIONS; Multilayered Thermal Barrier Coating Architectures for High Temperature Applications; Foreign Object Damage (FOD) Behavior of EB-PVD Thermal Barrier Coatings (TBCs) in Airfoil Components; Solid Particle Erosion of Thermal Spray and Physical Vapour Deposition Thermal Barrier Coatings Effect of Hard Thin Film Coatings on Tribocorrosion Behavior under Lubricated Sliding ContactRare Earth Oxides Pyrochlore Compounds by

Soft Chemistry; Degradation of (Ni,Pt)Al Coatings by Mixture of Sodium and Potassium Sulfate at 950°C; Original In-Situ Method to Quantify the SiC Active Corrosion Rate and Active/Passive Transition in Ar/O₂ and Ar/H₂O Gas Mixtures at Very High Temperatures; Silicon Carbide Nanotube Oxidation at High Temperatures; ADVANCED WEAR-CORROSION RESISTANT, NANO-COMPOSITE AND MULTI-FUNCTIONAL COATINGS

Evaluations of Multilayer Coatings for Galvanic Corrosion Resistance Applications-Oxide and Nitride Coatings on Carbon Steel; Acoustic Field Assisted Drying of Electrophoretically Deposited Colloidal Coatings; THERMAL PROTECTION SYSTEMS; Testing of Candidate Rigid Heat Shield Materials at LHTEL for the Entry, Descent, and Landing Technology Development Project; Failure Mechanism of R-Type Temperature Sensor in Extreme Environments; MATERIALS FOR EXTREME ENVIRONMENTS; Protection against Oxydation by CVD or SPS Coatings of Hafnium Carbide and Silicon Carbide on Carbon/Carbon Composites

Properties of Hot-Pressed Ti₂AlN Obtained by SHS Process; A Comparative Study of Decomposition Kinetics in Max Phases at Elevated Temperature; The Hardness of ZrB₂ between 1373K and 2273 K; Microstructural Analysis of a Cf/ZrC Composites Produced by Melt Infiltration; TECHNOLOGIES FOR INNOVATIVE SURFACE COATINGS; Interactions between Amorphous Carbon Coatings and Engine Oil Additives; Prediction of the Friction Behavior using Optimized Artificial Neural Networks; Control of Oxygen Content with Oxygen Gas Introduction in Cr(N,O) Thin Films Prepared by Pulsed Laser Deposition; Author Index

Sommario/riassunto

Exploring advanced ceramic coatings and ultra-high temperature ceramic materials, this issue brings readers up-to-date with important new and emerging findings, materials, and applications. The nineteen papers in this issue originate from two symposia and one focused session held in January 2012, during the 36th International Conference on Advanced Ceramics and Composites (ICACC). With contributions from leading ceramics and materials researchers from around the world, this issue explores the latest advances and key challenges in advanced thermal and environmental coating processing and cha
