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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 SteelAcoustic Field Assisted Drying of Electrophoretically Deposited Colloidal Coatings; THERMAL PROTECTION SYSTEMS; Testing of Candidate Rigid Heat Shield Materials at LHMEL 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 Ti2AIN Obtained by SHS ProcessA 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