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Materials: Advanced X-Ray Techniques and New Statistical Analysis Methods; Modeling the Properties of Cellular Ceramics: From Foams to Lattices and Back to Foams
Porous Silicas for Enhanced Drug ReleaseLightweight Bi-Layered Ceramic Tiles for Novel Applications; Porous Clay Ceramic for Environmental Technologies; Al2O3 Preforms with Gradient Porosity for Brake Disk Application; Chapter 3: Ceramic Thin Films and Coatings; Relationship between Residual Stresses and Damaging in Thermally Grown Oxide on Metals: Raman Spectroscopy and Synchrotron Micro-Diffraction Contributions; Influence of Application Technology in the Structural Characteristics of Ceramic Coatings with Advanced Anticorrosive and Tribological Properties
Amorphous Alumina Coatings on Glass Bottles Using Direct Liquid Injection MOCVD for Packaging ApplicationsTemperature Dependent 4-, 5- and 6-Fold Coordination of Aluminum in MOCVD-Grown Amorphous Alumina Films: From Local Coordination to Material Properties; Comparison of the Ablation Mechanism of C/C-SiC Composite under Atmospheric and Low Pressure; Oxide Films Formed on FeCrAl Steel Foil Coated with Pt and Al Films; Keywords Index; Authors Index

Sommario/riassunto

Collection of selected, peer reviewed papers from the 13th International Ceramics Congress, part of CIMTEC 2014-13th International Ceramics Congress and 6th Forum on New Materials, June 8-13, 2014, Montecatini Terme, Italy. The 21 papers are grouped as follows: Chapter 1: Nanomaterials for Energy and Sustainability; Chapter 2: Porous Ceramics; Chapter 3: Ceramic Thin Films and Coatings.