1. Record Nr. UNINA9910841492903321

Titolo	Characterization and control of interfaces for high quality advanced materials III [[electronic resource]] : proceedings of the Third International Conference on Characterization and Control of Interfaces for High Quality Advanced Materials, Kurashiki, Japan (2009) / / edited by Kevin Ewsuk ... [et al.]
Pubbl/distr/stampa	Hoboken, N.J., : John Wiley & Sons, Inc., 2010
ISBN	1-282-84914-X 9786612849145 0-470-91714-8 0-470-91713-X
Descrizione fisica	1 online resource (419 p.)
Collana	Ceramic transactions ; ; v. 219
Altri autori (Persone)	EwsukKevin
Disciplina	666
Soggetti	Interfaces (Physical sciences) Nanoparticles Surfaces (Technology) Ceramic materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Characterization and Control of Interfaces for High Quality Advanced Materials III; Contents; Preface; JOINING TECHNOLOGY FOR NEW METALLIC GLASSES AND INORGANIC MATERIALS; Devitrification Behavior and Crystal-Glassy Mixed-Phase Structures Observed in Partially Crystallized Cu-Based Glassy Alloys; Direct Bonding of Copper to Alumina and Its Characterization; Synthesis and Characterization of Materials Harmonized with the Environment-Proton Conductive Silica-Based Hybrid Membranes for Fuel Cells at Intermediate Temperatures Formation of Bone-Like Hydroxyapatite on Surface-Modified Bulk Metallic Glass Using a Hydrothermal-Electrochemical MethodLow Temperature Bonding of Bulk Metallic Glass Using an Ultrasonic Process; Microstructure and Properties of a Ni-Based Metallic Glass Coating Produced by Gas Tunnel Type Plasma Spraying; Tensile Behavior of Zr-Based Bulk Metallic Glass in High-Speed Tensile Tests;

Microstructure Formation on a Titanium-Based Bulk Metallic Glass Plate by Femtosecond Laser Irradiation; Laser Butt Welding of Mg-Based Metallic Glass
Terahertz Wave Properties of Micro Patterned Titania and Metallic Glass Particles in Hexagonal Tablets Fabricated Using MicrostereolithographyThermal Stability of Zr55Cu30Ni5Al10 Metallic Glass in Contact with Aluminum; Laser Welding of Zr55Cu30Al10Ni5 Bulk Metallic Glass; NANO-PARTICLES AND POWDERS; Nanostructured (Y1-xGdx)2O3:Eu3+ Powders Obtained through Aerosol Synthesis; A Simple Approach to Form Hydrothermally Stable Templated Hollow Silica Nanoparticles; Photocatalytic Properties of Titania/Silica Composite Nanoparticles and Gels
Pressure Filtration of Phenylalanine-Adsorbed Submicrometer Silicon Carbide ParticlesCharacterization of the Tribological Interface in Low Wear Magneli Type Ceramics; Dispersion Behavior and Surface Interaction Control of SiC Nanoparticles in Aqueous Media by Using Polymeric Dispersants; Fibrous Composite Powder Compacts for Thermal Insulation at High Temperature; Fabrication of Non-Firing Ceramics by Surface Particle Activation Using a Planetary Ball Mill; Dispersion Behavior of Carbon Black Nanoparticles with a Silane Coupling Agent in an Organic Solvent
Morphological Change during Drying in the Synthesis of ZnO Microtubes from an Aqueous SolutionPreparation of ZnO/Al2O3 Nanocomposite Particles by Mechanical Treatment; INTERFACE CHARACTERIZATION AND CONTROL; Thermal Properties of Materials at Interfaces for Electronic Application; General Analytical Concept and Design Methodology to Producing a Clay-Based Polymer Nanocomposite; Time Dependence of Contact Angle between Silver-Copper- Titanium Alloys and Boron Nitride; Hard X-Ray Photoelectron Spectroscopy Analysis for Organic- Inorganic Hybrid Materials Formation
Numerical Analysis of Plasma Keyhole Welding of an Aluminum Thin Plate

Sommario/riassunto

This proceedings volume features 59 peer-reviewed papers from ICCCI2009 on interface characterization and control technology, powder and composite processing, joining, the control of airborne particulates, new metallic glasses, and interface phenomena at high temperature. ICCCI2009 was supported by the Global COE Program "Center of Excellence for Advanced Structural and Functional Materials Design" lead by Professor Tomoyuki Kakeshita at Osaka University, the Project on Joining Technology for New Metallic Glasses and Inorganic Materials, the Institute of Materials Research (IMR) of Tohoku Univ