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Microwave-Assisted Synthesis and Characterization of Biphasic Calcium Phosphate Nanopowders; Silicon-Substituted Hydroxyapatite Synthesized by a Hydrothermal Method; BIOGLASSES AND GLASS-CERAMICS; Antibacterial Ag-Doped Glass-Ceramic Scaffolds; Bioactive Glass for Bone and Joint Repair; Comparison of Reactions of Bioactive Glasses in Different Aqueous Solutions; Comparison of Self-Bonded Three Dimensional Bioactive Glass Fiber Scaffolds after In-Vivo Implantation in Rats; Enzyme Grafting to Bioactive Glasses Ferrimagnetic Glass-Ceramics for Magnetic Induction HyperthermiaRecent Research on Composition Dependence of the Properties of Bioactive Glasses; CALCIUM PHOSPHATES; Adsorption on Apatitic Calcium Phosphates: Applications to Drug Delivery; Bioactive Calcium Phosphates and Nanocomposite Scaffolds for Bone Tissue Engineering; Preparation of Hydroxyapatite Nanoparticles Applying the Micro Chemical Process; Synthesis, Mechanical and Bone Cell Materials Interaction Studies on SrO and MgO Doped Resorbable Tricalcium Phosphate for Bone Tissue Engineering; Al₂O₃ AND TiO₂ Cell Proliferation on Nano-Structured Titanium Oxide Layer Prepared on Titanium SubstratesFreeform Fabrication and Structural Controls of Alumina Dental-Crown Models by Using Stereolithography; Moisture Effect on Tubular Alumina Toughened Zirconia Ceramic for Implant Casing; Author Index

Sommario/riassunto

This volume is a collection of twenty-two cutting edge research papers from the symposia on Nano-Biotechnology and Ceramics in Biomedical Applications and Advances in Biomineralized Ceramics, Bioceramics, and Bioinspired Designs, which were presented at the 8th Pacific Rim Conference on Ceramics and Glass Technology (PACRIM-8). The symposia was focused on several key areas, including novel synthesis techniques, bioglasses and glass-ceramics, calcium phosphates for bone tissue applications, and oxide ceramic implant applications. These papers cut across disciplines - ceramic science and technol
