Record Nr. UNINA9910830307903321 Bioceramics [[electronic resource]]: materials and applications IV: **Titolo** proceedings of the Bioceramics: Materials and Applications: a symposium to honor Larry Hench, held at the 105th annual meeting of the American Ceramic Society, April 27-30, 2003, in Nashville, Tennessee / / edited by Veeraraghavan Sundar, Richard P. Rusin, Calire A. Rutiser Westerville, Ohio, : American Ceramic Society, c2003 Pubbl/distr/stampa **ISBN** 1-280-67362-1 9786613650559 1-118-40606-0 1-118-40607-9 Descrizione fisica 1 online resource (182 p.) Ceramic transactions, , 1042-1122;; v. 147 Collana Bioceramics: materials and applications;; 4 Altri autori (Persone) HenchL. L SundarVeeraraghavan RusinRichard P RutiserClaire A Disciplina 610.28 610/.28 Soggetti Ceramics in medicine Lingua di pubblicazione Inglese Formato Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographic references and index. Nota di contenuto Bioceramics: Materials and Applications IV; Contents; Preface; Sosman Lecture; The Role of Ceramics in an Age of Biology; Processing and Characterization of Phosphate Bioceramics; A Review of Bone Substitutes in Bone Remodeling: Influence of Materials Chemistry and Porosity; Manufacturing of Thermally Sprayed Tricalcium Phosphate

Coatings for Biomedical Applications: Hydrothermal Deposition of

Containing Silicon Derived from Natural Coral; Electrochemical Deposition and Patterning of Calcium Phosphate Bioceramic Coating

Oxide Based Sintering Additives for HAp CeramicsSynthesis, Characterization and Sintering Behavior of Calcium Hydroxyapatite

Hydroxyapatite Coatings on Glass and Ceramics; Porous Hydroxyapatite

Powders with Average Particle Diameters of I50nm; Microstructure of Hydroxyapatite Thick Film; Molecularly Dispersed Hydroxyapatite Polymer Nanocomposites; Interactions between Ceramics and Biological Environments; Effects of Organic Molecules In Kokubo's Simulated Body Fluid on Apatite Formation on Bioactive Glass and Titanium Substrates; Hydroxy-Carbonate Apatite Synthesis, Blood Compatibility and Adsorption of Specific Pathogenic Proteins In Vitro Stability Predictions of Osteoblast Interaction with Hydroxyapatite and - Tricalcium PhosphateTwo and 10 Year Retrievals of Zirconia Femoral Heads: XRD, SEM and Raman Sprctroscopy Studies; Phase Transformation and Residual Stresses In Retrieved Zirconia Hip Implants - A Raman Microprobe Spectroscopy Study; BioLubrication Phenomena (Protiens) May Control the Wear Perfromance of Zirconia Hip Joints; Index

Sommario/riassunto

The content from these proceedings comes from a symposium honoring Larry Hench, a pioneer in the field of bioceramics. Prof. Hench has condensed his Sosman Lecture into the keynote paper of this volume. In addition, this proceedings draws together research in the different aspects of bioceramics and illustrates its unifying themes. Apatites and active bone substitute materials are well represented, with extended analyses of processing effects and variations in making these materials more functional. Included in this volume are a series of papers on interactions between ceramics and biological