Record Nr. UNINA9910132286303321 Advances in bioceramics and porous ceramics VII: a collection of **Titolo** papers presented at the 38th International Conference on Advanced Ceramics and Composites, January 27-31, 2014, Daytona Beach, Florida / / edited by Roger Narayan [and three others] Pubbl/distr/stampa Hoboken, New Jersey:,: The American Ceramic Society:,: Wiley,, 2015 ©2015 **ISBN** 1-119-04040-X 1-119-04039-6 1-119-04042-6 Descrizione fisica 1 online resource (200 p.) Ceramic Engineering and Science Proceedings, , 0196-6219; ; Volume Collana 35, Issue 5 Disciplina 610.28/4 Soggetti Ceramic materials Porous materials Ceramics in medicine Biomedical materials Electronic books. 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 Advances in Bioceramics and Porous Ceramics VII; Contents; Preface; Introduction; Bioceramics; INFLUENCE OF THE HYDROXYAPATITE POWDER PROPERTIES ON ITS PROPERTIES RHEOLOGY BEHAVIOR: ABSTRACT: INTRODUCTION: 3.1. EXPERIMENTAL: 2.1. Materials: 2.2. Processing; 2.2. Characterizations; 3.2. RESULTS AND DISCUSSION; 3.2.1. Rheological behavior of as received and calcined HA powder suspensions; 3.2.2. Effect of solid loading on the rheology of suspension produced from calcined HA powder; CONCLUSION; ACKNOWLEDMENT: REFERENCES: NANOSTRUCTURAL Ca-ALUMINATE BASED BIOMATERIALS - AN OVERVIEW; ABSTRACT

INTRODUCTIONBODY TEMEPRATURE FORMED BIOMATERIALS; PROCESSING AND PROPERTY PROFILE; CHEMICAL ASPECTS; Stable

chemically bonded bioceramics; NANOSTRUCTURE DEVELOPED CHEMICALLY BONDED BIOCERAMICS; NANOSTRUCTURES AND MECHANICAL STRENGTH; ADDITIONAL PROPERTY FEATURES OF NANOSTRUCTURAL CHEMICALLY BONDED BIOCERAMICS; NANOSTRUCTURE INCLUDING PHASES AND POROSITY FOR SPECIFIC PROPERTIES; Bioactivity and antibacterial properties simultaneously; APPLICATIONS FOR NANOSTRUCTURAL CHEMICALLY BONDED Ca-ALUMINATE BASED BIOMATERIALS; OUTLOOK; ACKNOWLEDGEMENT; REFERENCES

ANTIMICROBIAL EFFECTS OF FORMABLE GELATINOUS HYDROXYAPATITE-CALCIUM SILICATE NANOCOMPOSITES FOR BIOMEDICAL APPLICATIONSABSTRACT; INTRODUCTION; MATERIALS AND METHODS; Incorporation Of Chlorhexidine In Ca(OH)2 For GEMOSIL; Disc Sample Preparation; Microorganism; Antimicrobial Assay: Agar Diffusion Assay: In-Vitro Cell Cytotoxicity Testing Through MTS: RESULTS AND DISCUSSION: CONCLUSION: ACKNOWLEDGEMENT: REFERENCES; USE OF INTER-FIBRIL SPACES AMONG ELECTROSPUN FIBRILS AS ION-FIXATION AND NANO-CRYSTALLIZATION: ABSTRACT: INTRODUCTION: MATERIALS AND METHODS: RESULTS Apatite crystallization on the exposure to ammonia vaporEffects of glutaraldehyde cross-link formation on apatite deposition in SBF; Effects of silane (TEOS) coating on the Ca-P deposition in SBF; DISCUSSION; Effects of the vapor treatments; Fixation of other ions and molecules in the spaces; CONCLUSIVE REMARKS; Acknowledgment; REFERENCES: FRACTOGRAPHIC ANALYSIS OF BROKEN CERAMIC DENTAL RESTORATIONS: ABSTRACT: INTRODUCTION: EXPERIMENTAL PROCEDURE: RESULTS: CASE B1: A zirconia bridge: CASE B2: A training course zirconia bridge; CASE B3: A training course four-unit posterior zirconia bridge

CASE B4: A three-unit alumina bridgeCASE B5: Three (or more) unit zirconia bridge; CASE B6: Three-unit e.max Press lithium disilicate bridge; CASE B7: A five-unit zirconia telescoping denture; CASE: C1 Incisor zirconia crown; DISCUSSION; CONCLUSIONS; ACKNOWLEDGEMENTS; REFERENCES; IN VIVO EVALUATION OF SCAFFOLDS WITH A GRID-LIKE MICROSTRUCTURE COMPOSED OF A MIXTURE OF SILICATE (13-93) AND BORATE (13-93B3) BIOACTIVE GLASSES; ABSTRACT; INTRODUCTION; MATERIALS AND METHODS; Fabrication of bioactive glass scaffolds; Characterization of asfabricated scaffolds; Animals and surgical procedure Histological processing

Sommario/riassunto

A collection of 15 papers from The American Ceramic Society's 38th International Conference on Advanced Ceramics and Composites, held in Daytona Beach, Florida, January 26-31, 2014. This issue includes papers presented in Symposium 5 - Next Generation Bioceramics and Biocomposites and Symposium 9 - Porous Ceramics: Novel Developments and Applications.