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Introduction; 2. Creation of implants composed of hollow HA microspheres
3. Hollow HA microspheres as a device for controlled delivery of BMP24. In vivo performance of hollow HA microspheres; 4.1 Effect of hollow HA microsphere diameter; 4.2 Effect of loading the microspheres with BMP2; 4.3 Effect of coating the BMP2-loaded microspheres with PLGA; 4.4 Comparison of bone regeneration; 5. Conclusions; References; POROUS TITANIUM IMPLANTS FABRICATED BY A SALT BATH SINTERING PROCESS FOR BONE REPAIR APPLICATIONS; ABSTRACT; INTRODUCTION; EXPERIMENT PROCEDURE; Materials and processing; Microstructural evaluation, chemical analysis, and mechanical testing; Cell culture
Fabrication of prototype titanium inserts for total joint arthroplastyRESULTS; Microstructure of fabricated Ti constructs; Mechanical properties; Response of porous Ti constructs to cells; Prototype titanium implant; DISCUSSION; CONCLUSION; REFERENCES; NAVIGATING THE UNCHARTED WATERS OF THE NEW AIA U.S. PATENT LAW; ABSTRACT; PRIOR ART UNDER THE NEW AIA PATENT LAW; What is Prior art; First Exception to Prior Art; Second Exception to Prior Art; Old Law Still Exists Along with the New Law; APPLICANT EMPLOYER COMPANIES NOW HAVE MORE OPTIONS IN PATENTING PROCESS POST GRANT REVIEW AND INTER PARTES REVIEWDERIVATION PROCEEDING; PRIOR COMMERCIAL USE DEFENSE; PREISSUANCE SUBMISSION; SUPPLEMENTAL EXAMINATION; HOW THE NEW LAW IS APPLIED, USING A HYPOTHETICAL CONCERNING BIOMEDICAL DEVICE PATENTS; PRACTICE TIPS; CONCLUSION; DISCLAIMER; COMPARATIVE ANALYSIS OF HYDROXYAPATITE AND TITANIUM-BASED BIOSCAFFOLDS FABRICATED VIA ADAPTIVE FOAM RETICULATION; ABSTRACT; INTRODUCTION; MATERIALS AND METHODOLOGY; RESULTS AND DISCUSSION; CONCLUSIONS; ACKNOWLEDGEMENTS; REFERENCES; LASER PROCESSING OF TRICALICUM PHOSPHATE REINFORCED COBALT - CHROME ALLOY COATINGS; ABSTRACT
INTRODUCTION

Sommario/riassunto

Ceramic Transactions, Volume 242; Biomaterials Science - Processing, Properties and Applications IIISusmita Bose, Roger Narayan, and Amit Bandyopadhyay, EditorsThis CT Volume contains14 contributed papers from the following 2012 Materials Science and Technology (MS&T"12) symposia: Next Generation BiomaterialsSurface Properties of Biomaterials
