Record Nr. UNINA9910821274603321 Autore Batchelor A. W (Andrew W.) **Titolo** Service characteristics of biomedical materials and implants / / Andrew W. Batchelor, Margam Chandrasekaran London, : Imperial College Press, c2004 Pubbl/distr/stampa **ISBN** 1-281-86642-3 9786611866426 1-86094-536-8 Edizione [1st ed.] Descrizione fisica 1 online resource (260 p.) Series on biomaterials and bioengineering;; v. 3 Collana Altri autori (Persone) ChandrasekaranMargam Disciplina 610.28 Soggetti Biomedical materials Biomedical engineering Implants, Artificial **Prosthesis** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Preface; Acknowledgements; Contents; Introduction; Physiological Environment of the Human Body: Implantation and Physiological Responses to Biomaterials; Orthopaedic Prostheses; Cardiac, Vascular and Neural Implants; Dental Implants; Bioartificial Pancreas and Bioartificial Liver; Implants and Biomaterials for External Bodily Functions and Cosmetic Advantage; Tissue Scaffolds; Physiological Reactions to External Support Systems; Drug Delivery Systems; Physiological Reaction to Medical Instrumentation and Disposal of Used **Biomaterials** APPENDIX 1 Government and Technical Society Standards for Biomedical Materials APPENDIX 2 Experimental Apparatus to Measure the Service Characteristics of Implants; Index A wide variety of materials is being used in biomedical engineering for Sommario/riassunto various functions. This includes a range of ceramics, polymers and metallic materials for implants and medical devices. A major question is how these materials will perform inside the body, which is very sensitive to alien materials.