Record Nr. UNINA9910464941503321 Autore Mercanzini Andr, ? Titolo Microfabricated cortical neuroprostheses / / Mercanzini, Andr,? [Place of publication not identified], : EPFL Press, 2011 Pubbl/distr/stampa **ISBN** 0-429-15634-0 1-4822-4715-1 Descrizione fisica 1 online resource (250 p.) Engineering Sciences. Micro- and Nanotechnology Collana Altri autori (Persone) RenaudPhilippe Disciplina 617.480592 Soggetti **Prosthesis** Foreign-body reaction Implants, Artificial Tissue engineering Neural stimulation Electronic books. Lingua di pubblicazione Non definito **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from content provider. Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto Front Cover; Table of contents; CHAPTER 1: Introduction; CHAPTER 2: Microfabrication Techniques for Neuroprostheses; CHAPTER 3: Neural Recording and Stimulation: CHAPTER 4: in vivo Electrical Impedance Spectroscopy; CHAPTER 5: Controlled Release Drug Coatings; CHAPTER 6: Conclusion; Back Cover The use of neural implants for stimulation and recording show Sommario/riassunto excellent promise in restoring certain functions to the central nervous system; and neuroprostheses remains one of the most important tools of neuroscientists for the elucidation of the brain's function. Ailments such as Parkinson's disease, obesity, blindness, and epilepsy are being studied from this angle. Development of better electrodes for recording and stimulation is therefore critical to ensure continuing progress in

this field. This book addresses one of the main clinical complications

with the use of electrodes, n