Record Nr. UNINA9910826596003321 Brain mapping: the methods // edited by Arthur W. Toga, John C. **Titolo** Mazziotta Pubbl/distr/stampa Amsterdam;; Boston,: Academic Press, c2002 **ISBN** 1-281-03738-9 9786611037383 1-4294-9839-0 0-08-052828-7 Edizione [2nd ed.] Descrizione fisica 1 online resource (900 p.) Altri autori (Persone) TogaArthur W MazziottaJohn C Disciplina 612.8/2 21 612.82 Soggetti Brain mapping - Methodology Brain - Localization of functions 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 Front Cover; Brain Mapping: The Methods; Copyright Page; Contents; Contributors; Preface; Acknowledgments; Part I: Introduction; Chapter 1. Introduction to Cartography of the Brain; I. Introduction to Cartography; II. The Dimensions of a Brain Map; III. The Full Scope of Brain Mapping; IV. Relationships to Other Biological Maps; V. Stereotaxy; VI. Nomenclature; VII. Detection Devices; VIII. Brain Maps: Content and Format; IX. Summary; References; Chapter 2. Time and Space; I. Introduction; II. Critical Variables in Brain Mapping Techniques; III. The Concept of Resolution; IV. Sampling V. Sites Accessed VI. Invasiveness; VII. Conclusions; References; Part II: Surface-Based Data Acquisition; Chapter 3. Optical Imaging of Neural Structure and Physiology: Confocal Fluorescence Microscopy in Live Brain Slices; I. Introduction; II. Live Brain Slice Preparation and Culture;

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## Sommario/riassunto

Investigation of the functional architecture of the human brain using modern noninvasive imaging techniques is a rapidly expanding area of research. A proper knowledge of methodology is needed to appreciate the burgeoning literature in the field. This timely publication provides an excellent catalogue of the main techniques. The authors offer an invaluable analysis of mapping strategies and techniques, providing everything from the foundations to the major pitfalls and practical applications of the modern techniques used in neuroimaging. Contains over 1000 full color pages with more tha