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Nota di contenuto	Cover; Title Page; Copyright; Contents; Foreword; Introduction; I.1. History; I.2. Introduction to BCIs; I.2.1. Classification of BCIs; I.2.2. BCI applications; I.2.3. Other BCI systems; I.2.4. Terminology; I.3. Book presentation; I.3.1. Foundations and methods; I.3.2. Reading guide; I.4. Acknowledgments; I.5. Bibliography; PART 1: Anatomy and Physiology; 1: Anatomy of the Nervous System; 1.1. General description of the nervous system; 1.2. The central nervous system; 1.2.1. The telencephalon; 1.2.2. The diencephalon; 1.2.3. The brain stem; 1.3. The cerebellum 1.4. The spinal cord and its roots 1.5. The peripheral nervous system; 1.5.1. Nerves; 1.5.2. General organization of the PNS; 1.5.3. The autonomic nervous system; 1.6. Some syndromes and pathologies targeted by Brain-Computer Interfaces; 1.6.1. Motor syndromes; 1.6.2. Some pathologies that may be treated with BCIs; 1.7. Conclusions; 1.8. Bibliography; 2: Functional Neuroimaging; 2.1. Functional MRI; 2.1.1. Basic principles of MRI; 2.1.2. Principles of fMRI; 2.1.3. Statistical data analysis: the linear model; 2.1.4. Independent component analysis; 2.1.5. Connectivity measures 2.2. Electrophysiology: EEG and MEG 2.2.1. Basic principles of signal generation; 2.2.2. Event-related potentials and fields; 2.2.3. Source localization; 2.2.4. Independent component analysis; 2.2.5. Time-frequency analysis; 2.2.6. Connectivity; 2.2.7. Statistical analysis; 2.3.

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