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Edizione	[Sixth edition.]
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Altri autori (Persone)	NiedermeyerErnst <1920-> SchomerDonald L Lopes da SilvaF. H. <1935->
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Nota di contenuto	Machine generated contents note: 1: Historical Aspects of EEG 2: Introduction to Neurophysiology 3: Cellular Substrates of Brain Rhythms 4: Dynamics of EEGs as Signals of Neuronal Populations: Models and Theoretical Considerations 5: Biophysical Aspects of EEG and Magnetoencephalogram Generation 6: Analog Signal Recording Principles 7: Digital Recording Principles 8: Principles of EEG Localization 9: Normal EEG in the Preterm and Term Neonate: Awake and Asleep 10: Normal EEG and Sleep: Infant to Adolescents 11: Normal EEG and Sleep: Adults and Elderly 12: Activation Techniques 13: Artifacts of Recording 14: Non-specific or Questionably Significant Findings 15: Neuronal Degenerative and Storage Diseases 16: The EEG in Congenital Malformations of Cortical Development, Neurocutaneous Disorders, Cerebral Palsy, Autism/Mental Retardation, and ADHD/Learning Disabilities of Childhood 17: Brain Tumors and Other Space-Occupying Lesions 18: Inflammatory Disorders of the Brain 19: Cerebrovascular Diseases and EEG 20: Dementia and EEG 21: Metabolic

Disorders and EEG 22: Craniocerebral Trauma 23: Anoxia, Coma, and Brain Death 24: EEG in Headache and Migraine 25: Seizures in the Preterm and Term Neonate 26: Seizures and Epilepsy in Infants to Adolescents 27: Epilepsy in Adults and the Elderly 28: Convulsive Status Epilepticus 29: Non-convulsive Status Epilepticus 30: Anticipation of Seizure Based on EEG 31: Non-epileptic Attacks 32: Nasopharyngeal, Sphenoidal, and Other Complementary Electrodes 33: Depth, Subdural, and Foramen Ovale Electrodes 34: Electrooculography 35: Principles and Techniques for Long-Term EEG Recording (EMU, ICU, Amb) 36: Infraslow EEG Activity 37: Fast and Ultrafast Activity 38: Spinal Cord Function Monitoring in the OR 39: Monitoring EEG During Carotid Surgery 40: Polygraphy 41: Polysomnography: Technical and Clinical 42: Magnetoencephalography: Methods and Applications 43: EEG, Drug Effects, and Central Nervous System Poisoning 44: EEG and Neuroanesthesia 45: Event Related Potentials: General Theory 46: EEG Event-Related Desynchronization (ERD) and Event-Related Synchronization (ERS) 47: Visual Evoked Potentials 48: Brain Stem Auditory Evoked Potentials (BAEPs) and Other Auditory Evoked Potentials 49: Somatosensory Evoked Potentials 50: Evoked Potentials in Children and Infants 51: Neurocognitive Function and EEG 52: EEG in Psychiatric Disorders 53: Transcranial Electrical and Magnetic Stimulation: Technical 54: Transcranial Electrical Stimulation: Clinical 55: Transcranial Magnetic Stimulation: Clinical 56: EEG Analysis: Theory and Practice 57: EEG Mapping and Source Imaging 58: Computer-Assisted EEG Diagnosis 59: Computer and Brain Interface 60: EEG as a Part of Multimodal Imaging 61: Integrating EEG With Other Measures of Physiological Function Index.

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## Sommario/riassunto

"This edition has several new features, reflective of the changes that have occurred in our field over the last 5 years since the fifth edition. More and more, the field of digital recording has expanded; however, in order to understand some of the shortcomings and pitfalls of digital EEG, people need to still address the issues of basic analog recording principles. With an increased use of digital recording, laboratories have collected new and different "technical artifacts." We present here an attempt to start a database for such artifacts in a hopes that future editions will continue to expand upon this and offer a fairly complete library for beginning individuals interested in our field. As noted in the fifth edition, epilepsy monitoring units (EMU's) have continued to mushroom. Similar growth has occurred in the use of EEG monitoring in newborn, cardiac, trauma, and post-operative intensive care units. With the significant advances in wireless communication and easy access to the Internet, such recordings can also be viewed and transmitted locally virtually instantaneously and can allow for well-trained clinical neurophysiologists to see and opine about patients' conditions on a very time-relevant basis. Hopefully, as future generations may show, this ability will significantly influence our patients' outcomes. Similarly, the field of intraoperative clinical neurophysiology for spinal cord function, cranial nerve function, and cranial vascular therapies has continued to evolve along with the wireless and iInternet communications. This has allowed for close monitoring of neurologic function during critical periods of operations, again with a time course that allows for corrective actions to be taken on a meaningful time frame"--Provided by publisher.

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