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Titolo	Deep Brain Stimulation for Neurological Disorders : Theoretical Background and Clinical Application / / edited by Toru Itakura
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Descrizione fisica	1 online resource (212 p.)
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Basic Background of Brain Stimulation: Anatomy and Physiology -- Basal Ganglia and Neuron Network -- Mechanism of Brain Stimulation -- Symptoms and Signs -- Parkinson disease -- Other movement disorders -- Epilepsy. Clinical Studies on Deep Brain Stimulation: Intraoperative Microrecording -- Instrument of Brain Stimulation -- Surgical Technique -- Instrument -- Parkinson disease -- Stimulation of Subthalamic Nucleus -- Stimulation of Globus Pallidus -- Stimulation of Thalamus -- Dystonia -- Essential Tremor -- Intractable pain -- Motor Cortex Stimulation -- Spinal Cord Stimulation -- Psychiatric Disorders -- Epilepsy -- Complications.
Sommario/riassunto	Chronic electrical stimulation of the brain has become a standard surgical therapy for Parkinson's disease, with many studies demonstrating excellent outcomes without any serious complications. Recently this surgical intervention has also been applied to various other neurological diseases, such as involuntary movement disorders, intractable pain, and psychological conditions including depression and obsessive-compulsive disorder. This comprehensive, up-to-date textbook will meet the needs of all who wish to learn more about the application of deep brain stimulation and will provide a sound basis for safe and accurate surgery. The book comprises two main parts, the first

of which presents relevant anatomical and functional background information on the basal ganglia, thalamus, and other brain structures as well as on the mechanism of brain stimulation. The second part describes clinical studies on deep brain stimulation, covering results in a range of movement disorders and psychiatric diseases and also important aspects of instrumentation and technique. The authors are outstanding scientists and experts in the field from across the world. This book will be welcomed by all young neurosurgeons, neurologists, psychiatrists, and other medical staff who are interested in electrical stimulation of the brain for the treatment of neurological disorders.
