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Brain-Computer Interface Technologies

Accelerating Neuro-Technology for Human Benefit

- Reviews the Active Implantable Medical Devices (AIMDs) industry and how it is moving from cardiac to neuro applications
- Clear, easy to read, presentation of the field of neuro-technologies for human benefit
- Provides easy to understand explanations about the technical limitations, the physics of implants in the human body, and realistic long terms perspectives

This book is about the field of brain-computer interfaces (BCI) and the unique and special environment of active implants that electrically interface with the brain, spinal cord, peripheral nerves, and organs. At the heart of the book is the matter of repairing and rehabilitating patients suffering from severe neurologic impairments, from paralysis to movement disorders and epilepsy, that often requires an invasive solution based on an implanted device. Past achievements, current work, and future perspectives of BCI and other interactions between medical devices and the human nervous system are described in detail from a pragmatic point of view. Reviews the Active Implantable Medical Devices (AIMDs) industry and how it is moving from cardiac to neuro applications Clear, easy to read, presentation of the field of neuro-technologies for human benefit Provides easy to understand explanations about the technical limitations, the physics of implants in the human body, and realistic long terms perspectives

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