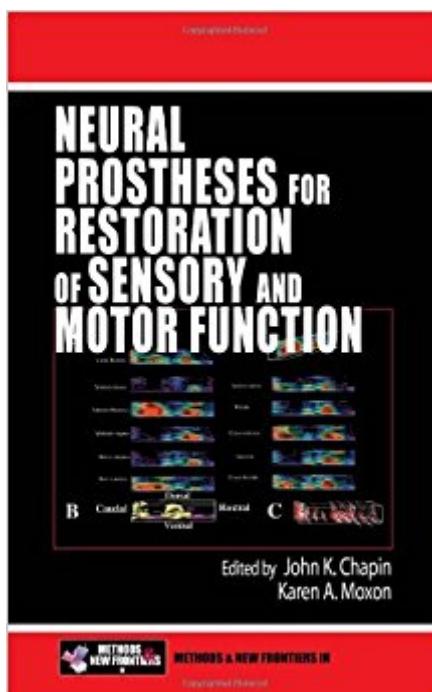


The book was found

Neural Prostheses For Restoration Of Sensory And Motor Function (Frontiers In Neuroscience)



Synopsis

The prospect of interfacing the nervous system with electronic devices to stimulate or record from neural tissue suggests numerous possibilities in the field of neuroprosthetics. While the creation of a "six million dollar man" may still be far into the future, neural prostheses are rapidly becoming viable theories for a broad range of patients with injury or disease of the nervous system. Neural Prostheses for Restoration of Sensory and Motor Function presents a general review of exciting scientific discoveries that show the feasibility of using electronic devices to restore motor function in paralyzed patients. The book is divided into two sections. The first section details some of the most successful sensory and motor prosthetic devices available. It pays particular attention to the present usefulness and future promise of these devices. It explores different approaches to the use of functional electrical stimulation for the restoration of motor control. The second section highlights the growing field of brain-implantable devices for the control of artificial prosthetic devices or neural prosthetics. It considers the possible scientific and clinical advantages of using implanted devices to record signals from the nervous system and the use of those signals for the restoration of neurological function. The book presents research data that relates to the feasibility of using brain-controlled neurorobotic devices. It offers a new perspective on the practice of combining neurochemical and neurophysiological information to create prosthetic control devices that restore chemical balance to the brain. Neural Prostheses for Restoration of Sensory and Motor Function examines several different types of neural prosthetic devices as well as recent advances in research for novel devices to restore sensory and motor function in patients with neural damage. It provides authoritative information on neural prosthetic techniques and applications - specifically in relation to the sensory and motor systems of the brain.

Book Information

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Customer Reviews

It was good to find this book since there aren't many books out there that cover this subject. I was disappointed, however, to find that sensory prostheses were covered so lightly. I am personally aware of much more knowledge that could have been covered with regard to visual prosthetics.

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