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	Nota di contenuto	Chapter 1: Application of reinforcement and deep learning techniques in brain machine interfaces -- Chapter 2: Specific muscle activation patterns in athletic and orthopedic populations: considerations for using surface electromyography in assistive and biofeedback device applications -- Chapter 3: Kineto-dynamic modeling of human upper limb for robotic manipulators and assistive applications -- Chapter 4: Learning from the human hand: force control and perception using a soft-synergy prosthetic hand and non-invasive haptic feedback -- Chapter 5: Design of a soft glove-based robotic hand exoskeleton with embedded synergies -- Chapter 6: Model predictive control based knee actuator allocation during a standing-up motion with a powered exoskeleton and functional electrical stimulation -- Chapter 7: Deep brain stimulation for gait and postural disturbances in Parkinson's

disease -- Chapter 8: Cognitive and physiological intent for the adaptation of motor prostheses -- Index.

Sommario/riassunto	This book provides a comprehensive review of recent developments in the field of motor neuroprosthetics and brain-machine interfaces. Chapters in this book are provided by leading experts in the field and include topics such as the design and control of multidimensional prosthetics and exoskeletons, deep brain stimulation, functional electrical stimulation, deep learning for brain machine interfaces, biofeedback, and cognitive intent for adaptation of motor prostheses. This book is a great resource for undergraduate and graduate students, researchers, engineers from related disciplines, entrepreneurs, and anyone interested in the latest progress in the field of motor neuroprostheses.