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Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Cybernetics: Fusion of Human, Machine and Information Systems -- Wearable Robot Technology -- Robot Motion Control for Physical Assistance -- Motor Control and Learning -- Movement Disorder and Rehabilitation -- Regenerative Medicine for Spinal Cord Injury Using Olfactory Mucosa Autografts -- Augmented Human Technology -- Haptic Interface and Cybernetics -- Introduction to Mediated Communication -- Robotics for Supporting Childhood Education -- Subjectivity-Kansei Computing -- Human-Machine Coagency for Collaborative Control -- Electroneurophysiology and Brain Functional Imaging for Brain-Machine-Interface -- Roboethical Arguments and Applied Ethics: Being a Good Citizen -- Safety and Ethical Issues in the Development of Human Assistive Robots -- Standards and Statutes:

## 'Soft' Law and 'Hard' Law.

### Sommario/riassunto

Cybernetics plays a significant role in coping with an aging society using state-of-the-art technologies from engineering, clinical medicine and humanities. This new interdisciplinary field studies technologies that enhance, strengthen, and support physical and cognitive functions of human beings, based on the fusion of human, machine, and information systems. The design of a seamless interface for interaction between the interior and exterior of the human body is described in this book from diverse aspects such as the physical, neurophysiological, and cognitive levels. It is the first book to cover the many aspects of cybernetics, allowing readers to understand the life support robotics technology for the elderly, including remote, in-home, hospital, institutional, community medical welfare, and vital-sensing systems. Serving as a valuable resource, this volume will interest not only graduate students, scientists, and engineers but also newcomers to the field of cybernetics.