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Descrizione fisica	1 online resource (X, 432 p. 237 illus., 125 illus. in color.)
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Disciplina	610.28
Soggetti	Biomedical engineering Signal processing Image processing Speech processing systems Pattern perception Computational intelligence Computer science - Mathematics Artificial intelligence Biomedical Engineering and Bioengineering Signal, Image and Speech Processing Pattern Recognition Computational Intelligence Computational Mathematics and Numerical Analysis Artificial Intelligence
Lingua di pubblicazione	Inglese
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Nota di contenuto	Surface Electromyography (EMG) Signal Processing, Classification, and Practical Considerations -- Estimation of ankle joint torque and angle based on S-EMG signal for assistive rehabilitation robots -- Force Myography and its Application to Human Locomotion -- Comparison of Independence of Triceps Brachii and Biceps Brachii between Paretic and Non-Paretic side during different MVCs--A case study -- An EEG brain-computer interface to classify motor imagery signals.
Sommario/riassunto	This book reports on the latest advances in the study of biomedical signal processing, and discusses in detail a number of open problems

concerning clinical, biomedical and neural signals. It methodically collects and presents in a unified form the research findings previously scattered throughout various scientific journals and conference proceedings. In addition, the chapters are self-contained and can be read independently. Accordingly, the book will be of interest to university researchers, R&D engineers and graduate students who wish to learn the core principles of biomedical signal analysis, algorithms, and applications, while also offering a valuable reference work for biomedical engineers and clinicians who wish to learn more about the theory and recent applications of neural engineering and biomedical signal processing. .

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