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Collana	Advances in Intelligent Systems and Computing, , 2194-5365 ; ; 1429
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Soggetti	Computational intelligence Biomedical engineering Medical informatics Computational Intelligence Biomedical Engineering and Bioengineering Health Informatics
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Classifying Changes in Motion Behaviour Due to a Hospital Stay Using Floor Sensor Data – a Single Case Study -- Cloud-Based System for Vital Data Recording at Patients' Home -- Tele-BRAIN Diagnostics Support System for Cognitive Disorders in Parkinson's Patients -- EEG Signal and Deep Learning Approach in Evaluation of Cognitive Declines in Parkinson's Disease -- Construction of a Cephalometric Image Based on Magnetic Resonance Imaging Data -- A Revealed Imperfection in Concept Drift Correction in Metabolomics Modeling -- The Influence of Low-Intensity Pulsed Ultrasound (LIPUS) on the Properties of PLGA Biodegradable Polymer Coatings on Ti6Al7Nb Substrate.
Sommario/riassunto	This book presents a comprehensive study in the field of advances in medical data science and contains carefully selected articles contributed by experts of information technology. Continuous growth of the amount of medical information and the variety of multimodal content necessitates the demand for a fast and reliable technology able

to process data and deliver results in a user-friendly manner at the time and place the information is needed. Computational approaches for understanding human complexity, AI-powered applications in image and signal processing, bioinformatics, sound and motion as activity stimulus, joint activities in biomedical engineering and physiotherapy, disorder in children, selected comparative studies give new meaning to optimization of the functional requirements of the healthcare system for the benefit of the patients. It is an interdisciplinary collection of papers that have both theoretical and applied dimensions. It includes the following research areas: Computational methods for understanding human complexity Image and signal analysis Multidimensional medical data analysis Sound and motion Joint activities in biomedical engineering and physiotherapy This book is a great reference tool for scientists who deal with problems of designing and implementing information processing tools employed in systems that assist the clinicians, radiologists, and physiotherapists in patient diagnosis and treatment. It also serves students in exploring innovations in quantitative medical data analysis, data mining, and artificial intelligence.