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Collana	Studies in Big Data, , 2197-6503 ; ; 73
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Soggetti	Computational intelligence Artificial intelligence Big data Health informatics Computational Intelligence Artificial Intelligence Big Data Health Informatics
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Nota di contenuto	Introduction to Technological advances in Healthcare -- Role of Big data analysis and Bio-electronics for upgrading healthcare technologies -- Automated Epileptic Seizure Detection in Clinical EEG using Frequency-Time Domain Features and Hidden Markov Model -- ECG Data Compression for IoT in Healthcare -- Prospects of Bioelectronics (IC enabled, flexible electronics, sensors, systems etc) for Biomedical Engineering and Healthcare in the information age -- Security and Privacy concerns in Healthcare -- Internet of Medical Things -- THz Sources and Detectors for Biomedical Application -- Big data analytics for Internet of Medical Things -- Biomedical Image Analysis: A Predictive Approach -- Missing data handling in medical questionnaires using hybrid methods.
Sommario/riassunto	This book focuses on recent advances in the Internet of Things (IoT) in biomedical and healthcare technologies, presenting theoretical, methodological, well-established, and validated empirical work in these

fields. Artificial intelligence and IoT are set to revolutionize all industries, but perhaps none so much as health care. Both biomedicine and machine learning applications are capable of analyzing data stored in national health databases in order to identify potential health problems, complications and effective protocols, and a range of wearable devices for biomedical and healthcare applications far beyond tracking individuals' steps each day has emerged. These prosthetic technologies have made significant strides in recent decades with the advances in materials and development. As a result, more flexible, more mobile chip-enabled prosthetics or other robotic devices are on the horizon. For example, IoT-enabled wireless ECG sensors that reduce healthcare cost, and lead to better quality of life for cardiac patients. This book focuses on three current trends that are likely to have a significant impact on future healthcare: Advanced Medical Imaging and Signal Processing; Biomedical Sensors; and Biotechnological and Healthcare Advances. It also presents new methods of evaluating medical data, and diagnosing diseases in order to improve general quality of life.