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Nota di contenuto	A Survey of Human Action Recognition using Accelerometer Data -- Ultra Thin Nanocomposite In-Sole Pressure Sensor Matrix for Gait Analysis -- Piezo-resistive Pressure and Strain Sensors for Biomedical and Tele-manipulation Applications -- Wireless Body Sensor Networks with Enhanced Reliability by Data Aggregation based on Machine Learning Algorithms -- Accelerated Human Movement Detection Algorithm using combined Global Descriptors on GPU Based on CUDA -- Human Breathing Monitoring by Graphene Oxide Based Sensors -- Impedimetric Detection of Human Interleukin 10 on Diazonium Salt Addressed Gold Microelectrode Surfaces -- Review on Recent Advances in Urinary Biomarkers based Electrochemical Sensors for Prostate Cancer Detection -- Recent Advances in Ultrasensitive miRNA Biomarkers Detection -- Early Detection of Helicobacter Pylori Bacteria

in Complex Samples.

Sommario/riassunto

The book highlights recent developments in the field of biomedical sensors with a focus on technology and design aspects of novel sensors and sensor systems. Diagnosis plays a central role in healthcare and requires a variety of novel biomedical sensors and sensor systems. This creates an enormous ongoing demand for sensors for both the everyday life as well as for medical care. Technologies concerning the analysis of human activities as well as for the early detection of diseases are moving into the focus of interest and form the basis for supporting human health and quality of life. As such, the book offers a key reference guide about novel medical sensors and systems for students, engineers, sensors designers and technicians.
