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Nota di contenuto	Wearable healthcare-monitoring systems using e-textiles and wireless sensor networks / Gregorio López, Victor Custodio and José Ignacio Moreno -- Outdoor wireless networks for healthcare applications: reliability optimization through prognostics and health management / Bernard Fong and A.C.M. Fong -- Remote assessment of health in oledr and frail adults living independently through mobility assessment / Peter G. Jacobs -- Virtual reality-based tele-rehabilitation computing / Fei Hu [and others] -- Tele-rehabilitation system based on augmented feedback for people with parkinson's disease: design principle / Laura Rocchi [and others]. Reconfigurable solutions in telemedical cardiac monotoring / Piotr Augustyniak -- Health technology assessment of telemedicine for patient suffering from heart failure / L. Pecchia, P. Melillo and N. De Luca -- Cardiac fetal monitoring / Martín Rubén-Clemente -- Healthcare sensor and system / Hongda Chen, Weihua Pei and Xu Zhang -- Medical sensing using doppler radar / Aditya Singh, Olga Boric-Lubecke and Victor Lubecke -- Continuous glucose monitoring in diabetes: sensor engineering and remote monitoring / W. Kenneth Ward. Multiscale quality control of telemedicine ECG signal acquisition / Chen Kan, Yun Chen and Hui Yang -- Development of a low-frequency microphone for measurement of bio-signals by mobile phones for

ubiquous medical and healthcare monitoring / Yosuke Kurihara and Kajiro Watanbe -- Small is beautiful and smart / James B. Wendt, Saro Meguerdichian and Miodrag Potkonjak -- Implantable medical devices: architecture and design / Fei Hu [and others] -- RFID for telehealthcare applications / Fei Hu [and others] -- Printed circuit board design for implantable and wearable medical electronics / Michael Rothfuss, Ajay Ogirala and Marlin H. Mickle.
A systematic approach for automated pattern recognition in histological smaples of multiple cancers / Nikita V. Orlov and Ilya G. Goldberg -- Multiscale quality control of telemedicine ECG signal acquisition / Chen Kan, Yun Chen and Hui Yang -- Enhanced remote health monitoring: home monitoring of patients suffering from congestive health failure via heart rate variability analysis / P. Melillo and L. Pecchia -- Symbolic approach to motion analusis: framework and giat analysis case studies / Anita Sant'Anna and Nicholas Wickström -- Speech analysis for ambient assisted living: technical and user design of a vacal order system / Michel Vacher [and others].
Medical image search and retrieval for improved tele-healthcare / Devrim Unay and Ahmet Ekin -- Sleep stage estimation algorithm as a one application for the ubiquous medical and health care monitoring / Yosuke Kurihara and Kajiro Watanabe -- Simultaneous trust and privacy in medical systems using public physical unclonable functions / Saro Meguerdichian, James B. Wendt and Miodrag Potkonjak -- Implantable medical device security from a machine learning perspective / Fei Hu [and others] -- Establishing ethical guideines for home-based telemedicine / Y. Tony Yang.

Sommario/riassunto

While conventional similar books focus on medical science and social aspects, this book emphasizes computing science and engineering design. This feature can help with both industry development and academic research. It book explains in detail both entire telehealthcare engineering system and individual hardware components. For example, it has circuit design details on ECG /EEG sensors. Highlighting basic principles and deep research development (R&D) details, the book focuses on two important design aspects: medical sensor design and medical signal processing. Their principles can be directly used for practical product design.