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Nota di contenuto	Introduction -- State-of-the-Art of Sensing Technologies for monitoring of Bone-Health -- Planar Interdigital Sensors and Electrochemical Impedance Spectroscopy -- Antigen-antibody-based Sensor for CTx-I Detection -- MIP-based Sensor for CTx-I Detection -- IoT-enabled Microcontroller-based System -- Summary and Conclusions.
Sommario/riassunto	This book presents the design of a robust, portable and low-cost PoC sensing system for the early detection of bone loss. The device can measure the level of CTx-I – one of the most sensitive biochemical markers of bone resorption – in serum and transmit the measured value to an IoT-based cloud server. The selectivity of the sensing system to CTx-I has been achieved by coating the sensor with artificial antibodies, prepared by means of molecular imprinting technology. Explaining all aspects of the system's development in detail, the book will be of great interest to all engineers, researchers and scientists whose work involves the development of electrochemical sensors and