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Descrizione fisica	1 online resource (XIII, 232 p. 80 illus., 74 illus. in color.)
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Soggetti	Biomedical engineering Health informatics Electronic circuits Biomedical Engineering and Bioengineering Health Informatics Electronic Circuits and Devices
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Nota di contenuto	An overview of point-of-care technologies enabling next-generation healthcare monitoring and management -- Smartphone-based point-of-care technologies for mobile healthcare -- Commercially-available smartphone-based personalized mobile healthcare technologies -- Point-of-care diabetes management softwares and smart applications -- Paper-based point-of-care immunoassays -- Lab-on-a-chip based point-of-care immunoassays -- Multiplex immunoassays -- Bioanalytical parameters in immunoassays and their determination -- Future trends for the next-generation of personalized and integrated healthcare for chronic diseases -- Index.
Sommario/riassunto	This book describes the emerging point-of-care (POC) technologies that are paving the way to the next generation healthcare monitoring and management. It provides the readers with comprehensive, up-to-date information about the emerging technologies, such as smartphone-based mobile healthcare technologies, smart devices, commercial personalized POC technologies, paper-based

immunoassays (IAs), lab-on-a-chip (LOC)-based IAs, and multiplex IAs. The book also provides guided insights into the POC diabetes management software and smart applications, and the statistical determination of various bioanalytical parameters. Additionally, the authors discuss the future trends in POC technologies and personalized and integrated healthcare solutions for chronic diseases, such as diabetes, stress, obesity, and cardiovascular disorders. Each POC technology is described comprehensively and analyzed critically with its characteristic features, bioanalytical principles, applications, advantages, limitations, and future trends. This book would be a very useful resource and teaching aid for professionals working in the field of POC technologies, in vitro diagnostics (IVD), mobile healthcare, Big Data, smart technology, software, smart applications, biomedical engineering, biosensors, personalized healthcare, and other disciplines. Acts as an up-to-date resource to emerging POC technologies; Provides readers with extensive knowledge, competence, and analytical skills in POC technologies, mobile healthcare, and clinical diagnostics; Explains future trends in POC technologies and personalized and integrated healthcare solutions for chronic diseases.