Record Nr.	UNINA9910148749403321
Autore	Istepanian Robert S. H.
Titolo	M-health : fundamentals and applications / / Robert S.H. Istepanian, Bryan Woodward
Pubbl/distr/stampa	Hoboken, New Jersey : , : John Wiley & Sons, , [2017] [Piscataqay, New Jersey] : , : IEEE Xplore, , [2017]
ISBN	1-119-30290-0 1-119-30288-9
Descrizione fisica	1 online resource (423 pages)
Collana	IEEE press series on biomedical engineering IEEE Press series in biomedical engineering ; ; 27
Disciplina	362.1028
Soggetti	Telecomunicació en medicina Comunicació sense fil, Sistemes de Telecommunication in medicine
	Mobile communication systems Wireless communication systems
Lingua di pubblicazione	Inglese
	-
Formato	Materiale a stampa
Formato Livello bibliografico	
	Materiale a stampa

1.

	Assistive Sensors, 55 2.12 Summary, 55 References, 58 3 m- Health Computing: m-Health 2.0, Social Networks, Health Apps, Cloud, and Big Health Data 67 3.1 Introduction, 67 3.2 The Evolution of m-Health with Web 2.0 and Medicine 2.0: m-Health 2.0, 68 3.3 Mobile Health Applications (m-Health Apps), 76 3.4 Cloud Computing and m-Health, 90 3.5 m-Health and "Big Data", 101 3.6 Summary, 109 References, 110 4 m-Health and Mobile Communication Systems 119 4.1 Introduction, 119 4.2 Wireless Communications for m-Health: From "Unwired Health" to "4G-Health", 123 4.3 Wireless Metropolitan Area Networks for m-Health, 144 4.4 Wireless Local Area Networks (WLAN) for m-Health, 147 4.5 Personal Area Networks (PAN) and Body Area Networks (BAN) for m- Health, 151 4.6 Machine-to-Machine Communications and Internet of Things, 166 4.7 Summary, 177 References, 179 5 m-Health Care Models and Applications 189 5.1 Introduction, 189 5.2 Mobile Phone m-Health Systems and Their Impact on Future Healthcare Services, 191. 5.3 m-Health for Chronic Disease Management and Monitoring Applications, 200 5.4 Mobile Health for Other Healthcare Services, 229 5.5 Summary, 234 References, 237 6 m-Health and Global Healthcare 251 6.1 Introduction, 251 6.2 m-Health Technologies for Global Health, 254 6.3 Global m-Health Initiatives for the Developing World: Healthcare Challenges and Impacts, 260 6.4 Global m-Health for the Developing World: Barriers and Recommendations, 294 6.5 Summary, 309 References, 311 7 m-Health Ecosystems, Interoperability Standards, and Markets 323 7.1 Introduction, 323 7.2 m-Health Stakeholders and Ecosystems, 325 7.3 m-Health Interoperability and Standardization, 337 7.4 m-Health Markets and Business Models, 345 7.5 Summary, 351 References, 352 8 The Future of m-Health: Progress or Retrogression? 355 8.1 Introduction, 355 8.2 Future Trends of m-Health, 357 8.3 Challenges and Expectations: m-Health "Mar
Sommario/riassunto	Addresses recent advances from both the clinical and technological perspectives to provide a comprehensive presentation of m-Health This book introduces the concept of m-Health, first coined by Robert S. H. Istepanian in 2003. The evolution of m-Health since thenhow it was transformed from an academic concept to a global healthcare technology phenomenonis discussed. Afterwards the authors describe in detail the basics of the three enabling scientific technological elements of m-Health (sensors, computing, and communications), and how each of these key ingredients has evolved and matured over the last decade. The book concludes with detailed discussion of the future of m-Health and presents future directions to potentially shape and transform healthcare services in the coming decades. In addition, this book: . Discusses the rapid evolution of m-Health in parallel with the maturing process of its enabling technologies, from bio-wearable sensors to the wireless and mobile communication technologies from IOT to 5G systems and beyond. Includes clinical examples and current studies, particularly in acute and chronic disease management, to illustrate some of the relevant medical aspects and clinical applications of m-Health. Describes current m-Health ecosystems and business models. Covers successful applications and deployment examples of m-Health in various global health eating, particularly in developing countries.