

1. Record Nr.	UNINA9910337473403321
Titolo	Body Area Network Challenges and Solutions // edited by R. Maheswar, G. R. Kanagachidambaresan, R. Jayaparvathy, Sabu M. Thampi
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-00865-7
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (157 pages)
Collana	EAI/Springer Innovations in Communication and Computing, , 2522-8595
Disciplina	610.285468
Soggetti	Electrical engineering Application software Medical informatics Electronics Microelectronics Signal processing Image processing Speech processing systems Database management Communications Engineering, Networks Information Systems Applications (incl. Internet) Health Informatics Electronics and Microelectronics, Instrumentation Signal, Image and Speech Processing Database Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Features of wireless body sensor networks -- Emerging trends of WBSN and the present health care system -- Technology, protocols and use cases of wireless WBSN -- Literature survey on various health monitoring system -- Wireless communication protocols in health monitoring -- WBSN challenges and their solutions -- Communication protocols of implanted, wearable and nano body

sensor networks -- Interference and channel allocation -- Energy harvesting methodologies and experimentation -- Reliability analysis and fault tolerant architecture for WBSN -- Buffer management in delay tolerant and delay in tolerant monitoring -- Handling network failure during critical duration -- Trust models and digital signature concepts in wearable nodes -- Animal health monitoring system -- Physiological sensor design -- Factors affecting Sensor reusability, Sensing time and sensed state to initial state -- Conclusion.

Sommario/riassunto

This book provides a novel solution for existing challenges in wireless body sensor networks (WBAN) such as network lifetime, fault tolerant approaches, reliability, security, and privacy. The contributors first discuss emerging trends of WBAN in the present health care system. They then provide possible solutions to challenges inherent in WBANs. Finally, they discuss results in working environments. Topics include communication protocols of implanted, wearable and nano body sensor networks; energy harvesting methodologies and experimentation for WBAN; reliability analysis and fault tolerant architecture for WBAN; and handling network failure during critical duration. The contributors consist of researchers and practitioners in WBAN around the world.
