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Titolo	Wellness Protocol for Smart Homes [[electronic resource]] : An Integrated Framework for Ambient Assisted Living // by Hemant Ghayvat, Subhas Chandra Mukhopadhyay
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Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XI, 160 p. 115 illus. in color.)
Collana	Smart Sensors, Measurement and Instrumentation, , 2194-8402 ; ; 24
Disciplina	696
Soggetti	Electronics Microelectronics Physical measurements Measurement Data mining Biomedical engineering Environmental monitoring Electronics and Microelectronics, Instrumentation Measurement Science and Instrumentation Data Mining and Knowledge Discovery Biomedical Engineering and Bioengineering Monitoring/Environmental Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Literature Survey -- Wellness Protocol Development and Implementation -- Issues and Mitigation of WSNs-based Smart Building Systems -- Activity Detection and Wellness Pattern Generation -- Wellness Pattern Generation and Forecasting -- Conclusion and Future Works.
Sommario/riassunto	This book focuses on the development of wellness protocols for smart home monitoring, aiming to forecast the wellness of individuals living in ambient assisted living (AAL) environments. It describes in detail the design and implementation of heterogeneous wireless sensors and

networks as applied to data mining and machine learning, which the protocols are based on. Further, it shows how these sensor and actuator nodes are deployed in the home environment, generating real-time data on object usage and other movements inside the home, and therefore demonstrates that the protocols have proven to offer a reliable, efficient, flexible, and economical solution for smart home systems. Documenting the approach from sensor to decision making and information generation, the book addresses various issues concerning interference mitigation, errors, security and large data handling. As such, it offers a valuable resource for researchers, students and practitioners interested in interdisciplinary studies at the intersection of wireless sensing processing, radio communication, the Internet of Things and machine learning, and in how they can be applied to smart home monitoring and assisted living environments.
