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Titolo	Energy Conservation for IoT Devices : Concepts, Paradigms and Solutions // edited by Mamta Mittal, Sudeep Tanwar, Basant Agarwal, Lalit Mohan Goyal
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Descrizione fisica	1 online resource (XII, 356 p. 138 illus., 109 illus. in color.)
Collana	Studies in Systems, Decision and Control, , 2198-4190 ; ; 206
Disciplina	006.3
Soggetti	Computational intelligence Control engineering Robotics Automation Application software Big data Computational Intelligence Control, Robotics, Automation Computer and Information Systems Applications Big Data
Lingua di pubblicazione	Inglese
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Nota di contenuto	IoT Architecture for Preventive Energy Conservation of Smart Buildings -- Designing Energy Efficient IoT based Intelligent Transport System: Need, Architecture, Characteristics, Challenges and Applications -- Energy-Efficient System Design for Internet of Things (IoT) Devices -- Need and Design of Smart and Secure Energy Efficient IoT Based Healthcare Framework -- The Rudiments of Energy Conservation and IoT -- Capacity Estimation of Electric Vehicle Aggregator for Ancillary Services to the Grid -- Existing Enabling Technologies and Solutions for Energy Management in IoT -- Medical Information Processing Using Smartphone Under IoT Framework.
Sommario/riassunto	This book addresses the Internet of Things (IoT), an essential topic in the technology industry, policy, and engineering circles, and one that

has become headline news in both the specialty press and the popular media. The book focuses on energy efficiency concerns in IoT and the requirements related to Industry 4.0. It is the first-ever “how-to” guide on frequently overlooked practical, methodological, and moral questions in any nations’ journey to reducing energy consumption in IoT devices. The book discusses several examples of energy-efficient IoT, ranging from simple devices like indoor temperature sensors, to more complex sensors (e.g. electrical power measuring devices), actuators (e.g. HVAC room controllers, motors) and devices (e.g. industrial circuit-breakers, PLC for home, building or industrial automation). It provides a detailed approach to conserving energy in IoT devices, and comparative case studies on performance evaluation metrics, state-of-the-art approaches, and IoT legislation.
