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Titolo	Green IT Engineering: Social, Business and Industrial Applications // edited by Vyacheslav Kharchenko, Yuriy Kondratenko, Janusz Kacprzyk
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Descrizione fisica	1 online resource (602 pages)
Collana	Studies in Systems, Decision and Control, , 2198-4182 ; ; 171
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Soggetti	Applied mathematics Engineering mathematics Renewable energy resources Mathematical and Computational Engineering Renewable and Green Energy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Including Software Aspects in Green IT: How to Create Awareness for Green Software Issues -- Information Technology for Evaluating the Computer Energy Consumption at the Stage of Software Development -- Green Wireless Cooperative Networks -- Checkable FPGA Design: Energy Consumption, Throughput and Trustworthiness -- A Prospective Lightweight Block Cipher for Green IT Engineering -- Lightweight Stream Ciphers for Green IT Engineering -- Semi-Markov Availability Model for Infrastructure as a Service Cloud Considering Energy Performance -- Improving of big data centers energy efficiency: traffic based model and method -- A Markov Model of IoT System Availability Considering DDoS-attacks, Patching and Energy Modes -- Assessing the Benefit of Deploying EEE on Commercial Grade Network Switches -- Mobile Phones and Energy consumption.
Sommario/riassunto	This book describes the implementation of green IT in various human and industrial domains. Consisting of four sections: "Development and Optimization of Green IT", "Modelling and Experiments with Green IT Systems", "Industry and Transport Green IT Systems", "Social,

Educational and Business Aspects of Green IT”, it presents results in two areas – the green components, networks, cloud and IoT systems and infrastructures; and the industry, business, social and education domains. It discusses hot topics such as programmable embedded and mobile systems, sustainable software and data centers, Internet servicing and cyber social computing, assurance cases and lightweight cryptography in context of green IT. Intended for university students, lecturers and researchers who are interested in power saving and sustainable computing, the book also appeals to engineers and managers of companies that develop and implement energy efficient IT applications.
