Record Nr. UNINA9910298969703321 Autore Bouhafs Fayal Titolo Communication Challenges and Solutions in the Smart Grid / / by Fayal Bouhafs, Michael Mackay, Madjid Merabti New York, NY:,: Springer New York:,: Imprint: Springer,, 2014 Pubbl/distr/stampa **ISBN** 1-4939-2184-3 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (99 p.) Collana SpringerBriefs in Computer Science, , 2191-5768 Disciplina 004 004.6 005.7 621.317 621.382 Soggetti Computer communication systems Electrical engineering Application software Power electronics Computer Communication Networks Communications Engineering, Networks Information Systems Applications (incl. Internet) Power Electronics, Electrical Machines and Networks Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto Overview of the Smart Grid -- Communication for Control in Heterogeneous Power Supply -- The Smart Grid in the Last Mile --Communication Solutions for Backhaul and Wide Area Networks --Home Energy Management Systems -- Communication Technologies for Smart Energy Management Systems -- Towards a Unified Smart Grid ICT Infrastructure. Sommario/riassunto This SpringerBrief discusses the rise of the smart grid from the perspective of computing and communications. It explains how current and next-generation network technology and methodologies help recognize the potential that the smart grid initiative promises. Chapters

provide context on the smart grid before exploring specific challenges

related to communication control and energy management. Topics include control in heterogeneous power supply, solutions for backhaul and wide area networks, home energy management systems, and technologies for smart energy management systems. Designed for researchers and professionals working on the smart grid, Communication Challenges and Solutions in the Smart Grid offers context and applications for the common issues of this developing technology. Advanced-level students interested in networking and communications engineering will also find the brief valuable.