1. Record Nr. UNINA9910337462303321

Autore	Gui Guan
Titolo	Optimization for Wireless Powered Communication Networks / / by Guan Gui, Bin Lyu
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-01021-X
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (95 pages)
Collana	SpringerBriefs in Electrical and Computer Engineering, , 2191-8120
Disciplina	621.38232 004.6
Soggetti	Wireless communication systems Mobile communication systems Telecommunication Wireless and Mobile Communication Communications Engineering, Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1 Introduction -- 2 Non-Orthogonal Multiple Access in Wireless Powered Communication Networks -- 3 Wireless Powered Communication Networks with Backscatter Communication -- 4 Cognitive Wireless Powered Communication Networks with Hybrid Backscatter Communication -- 5 Relay Cooperation for Backscatter Communication Systems -- 6 Summary.
Sommario/riassunto	This SpringerBrief introduces the basics of wireless powered communication networks (WPCNs). In particular, the background and concept of WPCNs are briefly discussed. Moreover, this brief provides an extensive study of the recent developments in this area from an optimization perspective. Wireless powered communication network (WPCN) is a new network paradigm for IoT, where wireless devices (WDs) are powered by radio frequency (RF) based wireless power transfer (WPT) to eliminate the need for recharging or replacing the batteries manually and to prolong their lifetime.In this context, the brief also discusses some optimization problems for state-of-the-art scenarios of wireless powered communication networks. The target

audiences for this SpringerBrief are researchers, engineers, and undergraduate and graduate-level students, who are studying or working in wireless powered communication networks and its performance optimization.