1. Record Nr. UNINA9910350301103321 Autore Ge Xiaohu **Titolo** 5G Green Mobile Communication Networks / / by Xiaohu Ge, Wuxiong Zhang Singapore:,: Springer Singapore:,: Imprint: Springer,, 2019 Pubbl/distr/stampa **ISBN** 981-13-6252-1 [1st ed. 2019.] Edizione 1 online resource (VIII, 325 p. 127 illus., 121 illus. in color.) Descrizione fisica Disciplina 621.382 Soggetti Electrical engineering Microwaves Optical engineering **Energy efficiency** Communications Engineering, Networks Microwaves, RF and Optical Engineering **Energy Efficiency** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Challenges of 5G Green Communication Networks -- Energy Efficiency of 5G Wireless Communications -- Energy Efficiency of Cellular Networks -- Energy Efficiency of 5G Multimedia Communications --Wireless Resource Management for Green Communication -- Energy Efficiency & Collaborative Optimization Theory of 5G Heterogeneous Wireless Multi networks. Sommario/riassunto This book focuses on the modeling, optimization, and applications of 5G green mobile communication networks, aimed at improving energy efficiency and spectrum utilization in 5G systems. It offers a balance between theoretical analysis and engineering practice, providing indepth studies of a number of major topics, such as energy consumption models, optimization, system design, implementation, and performance evaluation. It also discusses four aspects of green communication in detail: cellular networks, resource management, wireless transmissions and multi-media communications. Further, this

unique book comprehensively and systematically discusses green optimization in wireless mobile communications. As such it is a

valuable resource for researchers, engineers, and graduate students in various fields, including telecommunications engineering, electrical and electronic engineering, and computer engineering, particularly those interested in green communications.