1. Record Nr. UNINA9910557659903321 Autore Abd-Alhameed Raed A Titolo Recent Technical Developments in Energy-Efficient 5G Mobile Cells Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020 1 electronic resource (292 p.) Descrizione fisica Soggetti History of engineering & technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia This book addresses the true innovation in engineering design that may Sommario/riassunto be promoted by blending together models and methodologies from different disciplines, and, in this book, the target was exactly to follow this approach to deliver a new disruptive architecture to deliver these next-generation mobile small cell technologies. According to this design philosophy, the work within this book resides in the intersection of engineering paradigms that includes "cooperation", "network coding", and "smart energy-aware frontends". These technologies will not only be considered as individual building blocks, but re-engineered according to an inter-design approach resulting in the enabler for energy efficient femtocell-like services on the move. The book aims to narrow the gap between the current networking technologies and the foreseen requirements that are targeted at the future development of the 5G mobile and wireless communications networks in terms of the higher networking capacity, the ability to support more users, the lower cost per bit, the enhanced energy efficiency, and adaptability to new

things (IoT)).

services and devices (for example, smart cities, and the Internet of