Record Nr. UNINA9910298562503321 Autore Xu Chen Titolo Resource management for device-to-device underlay communication / / Chen Xu, Lingyang Song, Zhu Han New York, : Springer Science, 2014 Pubbl/distr/stampa 1-4614-8193-7 **ISBN** Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (vii, 79 pages): illustrations (some color) Collana SpringeBriefs in computer science Altri autori (Persone) SongLingyang HanZhu Disciplina 621.384 Soggetti Radio resource management (Wireless communication) Wireless communication systems - Management Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "ISSN: 2191-5768." Note generali Nota di bibliografia Includes bibliographical references. Nota di contenuto Introduction -- Physical-layer Techniques -- Radio Resource Management -- Cross-layer Optimization -- Summary. Device-to-Device (D2D) communication will become a key feature Sommario/riassunto supported by next generation cellular networks, a topic of enormous importance to modern communication. Currently, D2D serves as an underlay to the cellular network as a means to increase spectral efficiency. Although D2D communication brings large benefits in terms of system capacity, it also causes interference as well as increased computation complexity to cellular networks as a result of spectrum sharing. Thus, efficient resource management must be performed to guarantee a target performance level of cellular communication. This brief presents the state-of-the-art research on resource management for D2D communication underlaying cellular networks. Those who work with D2D communication will use this book's information to help ensure their work is as efficient as possible. Along with the survey of

existing work, this book also includes the fundamental theories, key

techniques, and applications.