1. Record Nr. UNINA9910254988603321

Autore	Wang Li
Titolo	Device-to-Device Communications in Cellular Networks / / by Li Wang, Huan Tang
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-30681-2
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (103 p.)
Collana	SpringerBriefs in Electrical and Computer Engineering, , 2191-8112
Disciplina	004
Soggetti	Computer networks Electrical engineering Computers Computer Communication Networks Communications Engineering, Networks Information Systems and Communication Service
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	Introduction -- Critical Technologies for D2D Communications -- Proximity Discovery for Cellular D2D Underlay -- Mode Selection for Cellular D2D Underlay -- Resource Management for Cellular D2D Underlay -- Summary and Future Work.
Sommario/riassunto	This SpringerBrief focuses on crucial issues for device-to-device (D2D) communications within the rapidly expanding 4G LTE toward 5G system. Several critical technical challenges in D2D communications are discussed, and D2D standardization activities in 3GPP are provided. Topics range from proximity discovery and mode selection, to resource management. The authors investigate proximity detection solutions for enabling direct user equipment communication by listening to uplink transmission. The problem of mixed mode selection is demonstrated to meet multiple quality of service (QoS) requirements in D2D enabled cellular networks. Finally, the brief explores the problem of designing interference-constrained resource allocation to pair cellular user resources with potential D2D links in cellular D2D underlay, with the goal of improving spectrum efficiency. Device-to-Device

Communications in Cellular Networks targets researchers and professionals working in wireless communications and networks. Advanced-level students in electrical engineering and computer science studying wireless communications and networks can also use this material as a study guide.