1. Record Nr. UNINA9910299235603321 Autore Feng Zhiyong Titolo Cognitive Wireless Networks [[electronic resource] /] / by Zhiyong Feng, Qixun Zhang, Ping Zhang Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-15768-X Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (142 p.) Collana SpringerBriefs in Electrical and Computer Engineering, , 2191-8112 621.38215 Disciplina Soggetti Computer communication systems Electrical engineering Information storage and retrieval Computer Communication Networks Communications Engineering, Networks Information Storage and Retrieval 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 at the end of each chapters. Nota di contenuto Introduction -- Theoretical Study in CWNs -- Novel Architecture Models in CWNs -- Cognitive Information Awareness and Delivery --Intelligent Resource Management -- TD-LTE based CWN Test bed --Standardization Practice -- Conclusion and Future Research Directions. Sommario/riassunto This brief examines the current research in cognitive wireless networks (CWNs). Along with a review of challenges in CWNs, this brief presents novel theoretical studies and architecture models for CWNs, advances in the cognitive information awareness and delivery, and intelligent resource management technologies. The brief presents the motivations and concepts of CWNs, including theoretical studies of temporal and geographic distribution entropy as well as cognitive information metrics. A new architecture model of CWNs is proposed with theoretical, functional and deployment architectures supporting cognitive information flow and resource flow. Key technologies are identified to achieve the efficient cognitive information awareness and delivery. The brief concludes by validating the effectiveness of

proposed theories and technologies using the CWNs testbed and

discussing the importance of standardization practices. The context and analysis provided by this text are ideal for researchers and practitioners interested in wireless networks and cognitive information. Cognitive Wireless Networks is also valuable for advanced-level students studying resource management and networking.