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	Titolo	Cognitive Radio Networks : Medium Access Control for Coexistence of Wireless Systems / / by Kaigui Bian, Jung-Min Park, Bo Gao
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	ISBN	3-319-07329-X
	Edizione	[1st ed. 2014.]
	Descrizione fisica	1 online resource (149 p.)
	Disciplina	621.384
	Soggetti	Electronic circuits
		Signal processing
		Image processing
		Speech processing systems
		Electrical engineering
		Circuits and Systems
		Signal, Image and Speech Processing
		Communications Engineering, Networks
	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 and index.
	Nota di contenuto	Introduction -- Taxonomy of Coexistence Mechanisms -- Coexistence-aware Spectrum Sharing for Homogeneous Cognitive Radio Net-works -- Frequency Reuse over A Single TV White Space Channel -- Channel Assignment for Multi-hop Cognitive Radio Networks -- Ecology-inspired Coexistence of Heterogeneous Cognitive Radio Networks.
	Sommario/riassunto	This book gives a comprehensive overview of the medium access control (MAC) principles in cognitive radio networks, with a specific focus on how such MAC principles enable different wireless systems to coexist in the same spectrum band and carry out spectrum sharing. From algorithm design to the latest developments in the standards and spectrum policy, readers will benefit from leading-edge knowledge of how cognitive radio systems coexist and share spectrum resources. Coverage includes cognitive radio rendezvous, spectrum sharing, channel allocation, coexistence in TV white space, and coexistence of heterogeneous wireless systems. • Provides a

comprehensive reference on medium access control (MAC)-related problems in the design of cognitive radio systems and networks;
• Includes detailed analysis of various coexistence problems related to medium access control in cognitive radio networks; • Reveals novel techniques for addressing the challenges of coexistence protocol design at a higher level of abstraction; • Discusses technical challenges of MAC layer protocol design for heterogeneous wireless systems as well as potential solutions. .