1. Record Nr. UNINA9910299051803321

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Titolo	Security-aware Cooperation in Cognitive Radio Networks / / by Ning Zhang, Jon W. Mark
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2014
ISBN	1-4939-0413-2
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (84 p.)
Collana	SpringerBriefs in Computer Science, , 2191-5768
Disciplina	621.384
Soggetti	Computer networks Electrical engineering Computer Communication Networks 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.
Nota di contenuto	Introduction -- Cooperative Cognitive Radio Networking -- Trust-aware Cooperative Networking -- Cooperative Networking for Secure Communications -- Concluding Remarks.
Sommario/riassunto	This brief investigates spectrum efficient and energy efficient strategies, known as cognitive radio networks (CRNs), to ensure secure cooperation between licensed and unlicensed users. The authors address issues of spectrum scarcity, spectrum sensing, transmission performance, trust-aware cooperation, and secure communications. Two security-aware cooperation based spectrum access schemes are presented. The first is a trust-aware cooperative framework for CRNs to improve the throughput or energy efficiency of licensed users and offer transmission opportunities to unlicensed users, taking into consideration the trustworthiness of unlicensed users. The second scheme is a cooperative framework to enhance secure communications of licensed users. An introduction to CRNs and literature survey enhance the discussion while numerical results are provided to demonstrate the viability of the proposed schemes. The brief is designed for researchers and professionals working with cognitive radio networks or interested in cooperation based access. Advanced-level students studying computer communication networks and

communications engineering will also find this brief useful.