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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Overview of Dynamic Sharing of Wireless Spectrum -- Dynamic Wireless Spectrum Sharing in Cognitive Cellular Networks -- Dynamic White Spaces Spectrum Sharing in Vehicular Networks -- Auction-based White Spaces Spectrum Sharing in Multimedia Networks -- Conclusion and Future Research Directions.
Sommario/riassunto	This book focuses on the current research on the dynamic spectrum sharing for efficient spectrum resource utilization, which covers the overlay spectrum sharing, underlay spectrum sharing and database-assisted spectrum sharing related research issues. Followed by a comprehensive review and in-depth discussion of the current state-of-the-art research literature and industry standardization, this book first presents a novel overlay spectrum sharing framework for dynamic utilization of available cellular frequency bands, formulates the dynamic spectrum sharing problem as a dynamic resource demand-supply matching problem, and accordingly develops a distributed fast spectrum sharing algorithm to solve the resource matching problem. A self-awareness power control approach for multi-hop routing selection

is proposed, which can establish an effective and practical routing selection optimization in secondary access networks and minimize the interference to primary users. Finally, this book offers dynamic secondary access scheme for database-assisted spectrum sharing networks, which is targeted to support the prosperous wireless multimedia networking applications by leveraging the TV white spaces of geolocation databases while satisfying QoS guarantees of secondary users. The overlay spectrum sharing, underlay spectrum sharing, and database-assisted white spaces spectrum sharing research results that are presented in this book provide useful insights for the design of next generation wireless access networks. This book motivates a new line of thinking for efficient spectrum resource utilization and performance enhancements of future wireless access applications.

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