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Nota di contenuto	Introduction -- Auction Mechanisms -- Truthful Double Auction Mechanism for Heterogeneous Spectrums -- Spectrum Group-buying Framework -- Flexauc Auction: Serving Dynamic Demand in Wireless Markets -- Conclusions.
Sommario/riassunto	This Brief introduces the wireless spectrum market and discusses the current research for spectrum auctions. It covers the unique properties of spectrum auction, such as interference relationship, reusability, divisibility, composite effect and marginal effect, while also proposing how to build economic incentives into the network architecture and protocols in order to optimize the efficiency of wireless systems. Three scenarios for designing new auctions are demonstrated. First, a truthful double auction scheme for spectrum trading considering both the heterogeneous propagation properties of channels and spatial reuse is proposed. In the second scenario, a framework is designed to enable spectrum group secondary users with a limited budget. Finally, a flexible auction is created enabling operators to purchase the right amounts of spectrum at the right prices according to their users’

dynamic demands. Both concise and comprehensive, Auction Design for the Wireless Spectrum Market is suited for professionals and researchers working with wireless communications and networks. It is also a useful tool for advanced-level students interested in spectrum and networking issues.