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Nota di contenuto	1. Introduction -- 2. Overview of OFDMA and MIMO Systems -- 3. Remarks on Resource Allocation -- 4. Resource Allocation for OFDMA Systems -- 5. Dealing with Imperfect CSI -- 6. Summary and Outlook.
Sommario/riassunto	This book introduces the sources and historic collection campaigns of resource allocation in wireless communication systems. The unique characteristics of MIMO-OFDMA systems are thoroughly studied and summarized. Remarks on resource allocation and spectrum sharing are also presented, which demonstrate the great value of resource allocation techniques, but also introduce distinct challenges of resource allocation in MIMO-OFDMA systems. Novel resource allocation techniques for OFDMA Systems are surveyed from various applications (e.g., for unicast, or multicast with Guaranteed BER and Rate, subcarrier and power allocation with various detectors, low-complexity energyefficient resource allocation, etc.) in this book. Due to the high mobility and low latency requirements of 5G wireless communications, this book discusses how to deal with the imperfect CSI. It also discusses how to deal with e.g., throughput maximization, outage probabilities maximization and guarantee, energy efficiency, physical-

layer security issues with feedback channel capacity constraints, in order to characterize and understand the applications of practical scenes. This book will target professionals & researchers working in the fields of Wireless Communications and Networking, Resource Allocation and Transmissions. Advanced-level students in electrical engineering and computer science will also find this book useful as a secondary textbook.