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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- OFDM Based Wireless Communication Systems -- CFO Estimation and Channel Equalization for OFDM Based Wireless Systems -- Semi-Blind CFO Estimation and Equalization for Single-User MIMO OFDM Systems -- Semi-Blind Multi-CFO Estimation and Equalization for Multiuser CoMP OFDM Systems -- Semi-Blind Joint ICI Mitigation and Equalization for CA Based CoMP OFDMA systems -- Conclusions.
Sommario/riassunto	This SpringerBrief investigates the performance of semi-blind independent component analysis (ICA) based equalization and carrier frequency offset estimation approaches (CFO) for a number of orthogonal frequency division multiplexing (OFDM) based wireless communication systems. It provides a comprehensive overview of the challenges of channel equalization and frequency synchronization for different wireless systems. The authors present the wireless communication channel and system models. Key existing CFO estimation methods are reviewed, along with a number of the training based and non-training based (blind) channel estimation methods. This is followed by a study of ICA and its applications to OFDM-based

wireless communication systems. Later chapters provide a detailed description of recent research on semi-blind CFO estimation and ICA based equalization approaches for various wireless communication systems including multiple-input multiple-output (MIMO) OFDM and coordinated multipoint (CoMP) systems. Semi-blind CFO estimation and equalization structures provide a spectrum-efficient and high-performance solution for high speed wireless communications. This book is suitable for postgraduate students, researchers or professionals in the area of wireless communications.

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