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Autore	Wen Miaowen
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Sommario/riassunto	Thanks to their considerable advantages, index modulation and orthogonal frequency division multiplexing (OFDM) are considered to be promising candidates for future wireless communications. This book focuses on the index modulation techniques for OFDM communications systems, which allow information to be conveyed not only via constellation symbols, but also by the indices of various transmission entities in OFDM systems, such as signal constellations, spreading codes, and pilots. The book discusses representative transmitter and receiver designs, optimization and performance analysis of index modulation based on various transmission entities. It also introduces readers to information-guided precoding for OFDM systems, followed by two embodiments: layered index modulation and grouped index modulation. It then describes how the spreading code is used to design an index modulated spread spectrum for OFDM systems, and the extensions to multi-code and multi-user scenarios. In addition it explores information guided pilot insertion for OFDM systems, followed by applications in carrier phase tracking and channel estimation. Lastly,

the book highlights a number of open problems and discusses future research directions in the general field of index modulation. Intended for professionals and researchers in the field of wireless communications, this book is also a valuable resource for advanced-level electrical engineering and computer science students.