Record Nr. UNINA9910780485803321 Autore Hara Shinsuke Titolo Multicarrier techniques for 4G mobile communications // Shinsuke Hara, Ramjee Prasad Pubbl/distr/stampa Boston:,: Artech House,, ©2003 [Piscatagay, New Jersey]:,: IEEE Xplore,, [2003] **ISBN** 1-58053-660-3 Descrizione fisica 1 online resource (258 p.) Collana Artech House universal personal communications series Altri autori (Persone) PrasadRamjee Disciplina 621.382 Soggetti Universal Mobile Telecommunications System Carrier waves Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 1. Introduction -- 2. Characteristics of Multipath Fading Channels -- 3. Principle and History of MCM/OFDM -- 4. OFDM Characteristics -- 5. Pilot-Assisted DFT Window Timing/Frequency Offset Synchronization and Subcarrier Recovery -- 6. Blind Maximum Likelihood-Based Joint DFT Window Timing/Frequency Offset/DFT Window Width Estimation --7. Coded OFDM Scheme to Gain Frequency Diversity Effect -- 8. Applications of OFDM -- 9. Combination of OFDM and CDMA -- 10. Future Research Directions. Sommario/riassunto Annotation "As research for future fourth generation (4G) mobile communication systems is underway worldwide in major companies and academic institutions, forward-thinking professionals are striving to gain a thorough understanding of the cutting-edge technologies and design techniques that will make these systems work. This book helps readers do just that by: providing a comprehensive introduction to multicarrier techniques for 4G mobile communications with a special focus on the analytical aspects; explaining radio channel characteristics and phenomena and discussing the advantages and disadvantages of the OFDM scheme; featuring new multicarrier-related techniques, MC-

CDMA, research on several 4G systems, and a look at several problems to be overcome with these systems; examining the concept and detail of the ODFM scheme and how to carry out theoretical analysis on the

performance of transmission systems in radio channels; showing how ODFM has been successfully adopted as a modulation scheme in communications systems and broadcasting systems such as ADSL, wireless LANs, and DVB-T."--BOOK JACKET. Title Summary field provided by Blackwell North America, Inc. All Rights Reserved.