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Nota di contenuto	About the Editors -- List of Contributors -- Acknowledgements -- Introduction -- 1. Channel Models and Reliable Communications (Evgenii Krouk, Andrei Ovchinnikov, and Jussi Poikonen) -- 1.1 Principles of Reliable Communication -- 1.2 AWGN -- 1.3 Fading Processes in Wireless Communication Channels -- 1.4 Modelling Frequency-Nonselective Fading -- 1.5 WSSUS Models for Frequency-Selective Fading -- References -- 2. Modulation (Sergei Semenov) -- 2.1 Basic Principles of Bandpass Modulation -- 2.2 PSK -- 2.3 MSK -- 2.4 QAM -- 2.5 OFDM -- References -- 3. Block Codes (Grigorii Kabatiansky, Evgenii Krouk, Andrei Ovchinnikov, and Sergei Semenov) -- 3.1 Main Definitions -- 3.2 Algebraic Structures -- 3.3 Linear Block Codes -- 3.4 Cyclic Codes -- 3.5 Bounds on Minimum Distance -- 3.6 Minimum Distance Decoding -- 3.7 Information Set Decoding -- 3.8 Hamming Codes -- 3.9 Reed-Solomon Codes -- 3.10 BCH Codes -- 3.11 Decoding of BCH Codes -- 3.12 Sudan Algorithm and Its Extensions -- 3.13 LDPC Codes -- References -- 4. Convolutional

Codes and Turbo-Codes (Sergei Semenov and Andrey Trofimov) -- 4.1 Convolutional Codes Representation and Encoding -- 4.2 Viterbi Decoding Algorithm -- 4.3 List Decoding -- 4.4 Upper Bound on Bit Error Probability for Viterbi Decoding -- 4.5 Sequential Decoding -- 4.6 Parallel-Concatenated Convolutional Codes and Soft Input Soft Output Decoding -- 4.7 SISO Decoding Algorithms -- References -- 4.A Modified Chernoff Bound and Some Applications (Andrey Trofimov) -- References -- 5. Equalization (Sergei Semenov) -- 5.1 Equalization with Filtering -- 5.2 Equalization Based on Sequence Estimation -- 5.3 RAKE Receiver -- 5.4 Turbo Equalization -- 5.5 Performance Comparison -- References -- 6. ARQ (Evgenii Krouk) -- 6.1 Basic ARQ Schemes -- 6.2 Hybrid ARQ -- References -- 7. Coded Modulation (Andrey Trofimov) -- 7.1 Principle of Coded Modulation -- 7.2 Modulation Mapping by Signal Set Partitioning -- 7.3 Ungerboeck Codes -- 7.4 Performance Estimation of TCM System. References -- 8. MIMO (Andrei Ovchinnikov and Sergei Semenov) -- 8.1 MIMO Channel Model -- 8.2 Space-Time Coding -- 8.3 Orthogonal Designs -- 8.4 Space-Time Trellis Codes -- 8.5 Differential Space-Time Codes -- 8.6 Spatial Multiplexing -- 8.7 Beamforming -- References -- 9. Multiple Access Methods (Dimitry Osipov, Jarkko Paavola, and Jussi Poikonen) -- 9.1 Frequency Division Multiple Access -- 9.2 Time Division Multiple Access -- 9.3 Code Division Multiple Access -- 9.4 Advanced MA Methods -- 9.5 Random Access Multiple Access Methods -- 9.6 Conclusions -- References -- 10. Standardization in IEEE 802,11, 802.16 (Tuomas Laine, Zexian Li, Andrei Malkov, and Prabodh Varshney) -- 10.1 IEEE Overview -- 10.2 Standard Development Process -- 10.3 IEEE 802.11 Working Group -- 10.4 IEEE 802.16 Working Group -- 10.5 IEEE 802.11 -- 10.6 IEEE 802.16x -- References -- 11. Standardization in 3GPP (Asbjorn Grovlen, Kari Hooli, Matti Jokimies, Kari Pajukoski, Sergei Semenov, and Esa Tiirola) -- 11.1 Standardization Process and Organization -- 11.2 3G WCDMA -- 11.3 3.5G HSDPA/HSUPA -- 11.4 4G LTE -- References -- 12. CDMA 2000 and Its Evolution (Andrei Ovchinnikov) -- 12.1 Development of 3G CDM 2000 Standard -- 12.2 Reverse Channel of Physical Layer in CDMA 2000 Standard -- 12.3 Forward Channel of Physical Layer in CDMA 2000 Standard -- 12.4 Architecture Model of CDMA 2000 1xEV-DO Standard -- 12.5 Access Terminal of the CDMA 2000 1xEV-DO Standard -- 12.6 Access Network of the CDMA 2000 1xEV-DO Standard -- References -- Index.

Sommario/riassunto

The high level of technical detail included in standards specifications can make it difficult to find the correlation between the standard specifications and the theoretical results. This book aims to cover both of these elements to give accessible information and support to readers. It explains the current and future trends on communication theory and shows how these developments are implemented in contemporary wireless communication standards. Examining modulation, coding and multiple access techniques, the book is divided into two major sections to cover these functions. The two-stage approach first treats the basics of modulation and coding theory before highlighting how these concepts are defined and implemented in modern wireless communication systems. Part 1 is devoted to the presentation of main L1 procedures and methods including modulation, coding, channel equalization and multiple access techniques. In Part 2, the uses of these procedures and methods in the wide range of wireless communication standards including WLAN, WiMax, WCDMA, HSPA, LTE and cdma2000 are considered. . An essential study of the implementation of modulation and coding techniques in modern standards of wireless communication. Bridges

the gap between the modulation coding theory and the wireless communications standards material. Divided into two parts to systematically tackle the topic - the first part develops techniques which are then applied and tailored to real world systems in the second part. Covers special aspects of coding theory and how these can be effectively applied to improve the performance of wireless communications systems.
