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Altri autori (Persone)	HaykinSimon S. <1931->
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Nota di contenuto	List of Tables. -- List of Figures. -- 1 Introduction. -- 1.1 Brief Historical Notes. -- 1.2 Turbo-Information Processing. -- 1.3 MIMO Wireless Communications. -- 1.4 Organization of the Book. -- 2 MIMO Channel Capacity. -- 2.1 Introduction. -- 2.2 Multiple-Input, Multiple-Output Antenna Systems. -- 2.3 Channel Capacity. -- -- 2.4 MIMO Capacity for a Channel Known at the Receiver. -- -- 2.5 Channel Known at the Transmitter. -- -- 2.6 Summary and Discussion. -- 3 BLAST Architectures. -- 3.1 BLAST Architecture. -- 3.2 Diagonal BLAST. -- 3.3 Vertical BLAST (V-BLAST). -- -- 3.4 Stratified Diagonal BLAST (SD-BLAST). -- -- 3.5 Simulations on BLAST for the Matrix Rayleigh Channel. -- 3.6 Multirate Layered Space-Time Architecture. -- 3.7 Outage Capacity. -- -- 3.8 Simulation Results. -- 3.9 Summary and Discussion. -- 4 Space-Time Turbo Codes and Turbo Decoding Principles. -- 4.1 Introduction. -- 4.2 Turbo Codes. -- 4.3 Interleaver

Designs for Turbo Codes. -- 4.4 Space-Time Turbo Codes. -- 4.4.1 Example Space-Time Turbo Codes. -- 4.5 Multirate Layered Space-Time (MLST) Turbo Codes. -- 4.6 Summary and Discussion. -- 5 Turbo-BLAST. -- 5.1 Introduction. -- 5.2 T-BLAST: Basic Transmitter Considerations. -- 5.3 Optimal Detection. -- 5.4 Distance Spectrum of RLST Codes. -- 5.5 Iterative Decoding: Basic Considerations. -- 5.6 Design and Performance of SISO Detectors. -- 5.7 Simulations on T-BLAST. -- 5.8 Summary and Discussion. -- 5.9 Appendix. -- 6 Turbo-MIMO Systems. -- 6.1 Bit-Interleaved Coded Modulation. -- 6.2 Turbo-MIMO Theory and ST-BICM. -- 6.3 ST-BICM. -- 6.4 Iterative Detection and Decoding. -- 6.5 Suboptimal MIMO Detection. -- 6.6 Simulation for Narrowband Turbo-MIMO. -- 6.7 Wideband Turbo-MIMO (ST-BICM). -- 6.8 Summary. -- Appendix 6.1. -- Appendix 6.2. -- Bibliography. -- Index.

Sommario/riassunto

Discover cutting-edge research in wireless communications This book presents cutting-edge research in wireless communications, particularly in the fast-growing subject of multiple-input multiple-output (MIMO) wireless communication systems. It begins with an introduction, which includes historical notes and a review of turbo-information processing and MIMO wireless communications, and goes on to cover: . MIMO channel capacity. BLAST architectures. Space-time turbo codes and turbo decoding principles. Turbo-BLAST. Turbo-MIMO systems The material is complemented with abundant illustrations and computer experiments that are designed to help readers reinforce their understanding of the underlying subject matter. Space-Time Layered Information Processing for Wireless Communications is an ideal resource for researchers in academia and industry and an excellent textbook for related courses at the graduate level.
