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Nota di contenuto	Note continued: 12.5 Chapter 5 Three-Stage Serially Concatenated Turbo Equalization -- 12.6 Chapter 6 Joint Source and Channel Coding -- 12.7 Chapter 7-9 EXIT-Chart Matching -- 12.8 Chapter 8 GA-Aided Design of Irregular VLC Components -- 12.9 Chapter 9 Joint EXIT-Chart Matching of IRVLCs and IRURCs -- 12.10 Chapter 10 Iteratively Decoded VLC Space-Time Coded Modulation -- 12.11 Chapter 11 Iterative Detection of Three-Stage Concatenated IrVLC FFH-MFSK -- 12.12.Future Work -- 12.13.Closing Remarks -- Appendix A VLC Construction Algorithms -- A.1.First RVLC Construction Algorithm -- A.2.Second RVLC Construction Algorithm -- A.3.Greedy Algorithm and Majority Voting Algorithm (MVA) -- Appendix B SISO VLC Decoder -- Appendix C APP Channel Equalization.
Sommario/riassunto	Recent developments such as the invention of powerful turbo-decoding and irregular designs, together with the increase in the number of potential applications to multimedia signal compression, have increased the importance of variable length coding (VLC). Providing

insights into the very latest research, the authors examine the design of diverse near-capacity VLC codes in the context of wireless telecommunications.The book commences with an introduction to Information Theory, followed by a discussion of Regular as well as Irregular Variable Length Coding and their applications in joint source and channel coding. Near-capacity designs are created using Extrinsic Information Transfer (EXIT) chart analysis. The latest techniques are discussed, outlining radical concepts such as Genetic Algorithm (GA) aided construction of diverse VLC codes. The book concludes with two chapters on VLC-based space-time transceivers as well as on frequency-hopping assisted schemes, followed by suggestions for future work on the topic.. Surveys the historic evolution and development of VLCs. Discusses the very latest research into VLC codes. Introduces the novel concept of Irregular VLCs and their application in joint-source and channel coding.