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Autore	Ivaniš Predrag
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Soggetti	Electrical engineering Coding theory Information theory Computer science—Mathematics Computer mathematics Communications Engineering, Networks Coding and Information Theory Mathematical Applications in Computer Science
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Information Sources -- Data Compression -- Information Channels -- Block Codes -- Cyclic Codes -- Convolutional Codes and Viterbi Algorithm -- Trellis Decoding of Linear Block Codes, Turbo Codes -- Low Density Parity Check Codes.
Sommario/riassunto	This book is offers a comprehensive overview of information theory and error control coding, using a different approach then in existed literature. The chapters are organized according to the Shannon system model, where one block affects the others. A relatively brief theoretical introduction is provided at the beginning of every chapter, including a few additional examples and explanations, but without any proofs. And a short overview of some aspects of abstract algebra is given at the end of the corresponding chapters. The characteristic complex examples with a lot of illustrations and tables are chosen to provide detailed insights into the nature of the problem. Some limiting cases are presented to illustrate the connections with the theoretical bounds. The

numerical values are carefully selected to provide in-depth explanations of the described algorithms. Although the examples in the different chapters can be considered separately, they are mutually connected and the conclusions for one considered problem relate to the others in the book.
