1. Record Nr. UNINA9910360850403321

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Titolo	Channel Coding Techniques for Wireless Communications / / by K. Deergha Rao
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2019
ISBN	981-15-0561-6
Edizione	[2nd ed. 2019.]
Descrizione fisica	1 online resource (484 pages)
Collana	Forum for Interdisciplinary Mathematics, , 2364-6748
Disciplina	003.54
Soggetti	Information theory Wireless communication systems Mobile communication systems Signal processing Image processing Speech processing systems Coding theory Computers Information and Communication, Circuits Wireless and Mobile Communication Signal, Image and Speech Processing Coding and Information Theory Information Systems and Communication Service
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Introduction -- Chapter 2. Performance of Digital Communication Over Fading Channels -- Chapter 3. Galois Field Theory -- Chapter 4. Linear Block Codes -- Chapter 5. Convolutional Codes -- Chapter 6. Turbo Codes -- Chapter 7. Bandwidth Efficient Coded Modulation -- Chapter 8. Low Density Parity Check codes -- Chapter 9. LT and Raptor Codes -- Chapter 10. Polar Codes -- Chapter 11. MIMO System -- Chapter 12. Space–Time Coding -- Chapter 13. Channel Codes Evolution for 5G.
Sommario/riassunto	This book discusses the latest channel coding techniques, MIMO systems, and 5G channel coding evolution. It provides a comprehensive

overview of channel coding, covering modern techniques such as turbo codes, low-density parity-check (LDPC) codes, space–time coding, polar codes, LT codes, and Raptor codes as well as the traditional codes such as cyclic codes, BCH, RS codes, and convolutional codes. It also explores MIMO communications, which is an effective method for high-speed or high-reliability wireless communications. It also examines the evolution of 5G channel coding techniques. Each of the 13 chapters features numerous illustrative examples for easy understanding of the coding techniques, and MATLAB-based programs are integrated in the text to enhance readers' grasp of the underlying theories. Further, PC-based MATLAB m-files for illustrative examples are included for students and researchers involved in advanced and current concepts of coding theory.