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Titolo	Coding Theory in Optical Wireless Communication Systems : Volume I / / by Xizheng Ke
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Descrizione fisica	1 online resource (261 pages)
Collana	Optical Wireless Communication Theory and Technology, , 2731-5975
Disciplina	621.382
Soggetti	Telecommunication Coding theory Information theory Optical communications Lasers Communications Engineering, Networks Microwaves, RF Engineering and Optical Communications Coding and Information Theory Optical Communications Laser
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Response characteristics of semiconductor lasers and photodetectors -- Analysis of PPM-Coded Modulated Signals -- MPPM coded modulation signal analysis -- Analysis of DPPM-coded modulation signals -- TCM code-modulation technology -- Wavefront Correction System -- Sixty-four-QAM modulation -- Dual-amplitude pulse-position modulation -- Performance analysis of quasi-pulse-position modulation methods -- Error control based on RS codes -- Error control based on turbo codes -- Error control based on LDPC codes -- Research on polar codes in optical-wireless communication systems -- Channel measurements and error-control experiments -- Adaptive coding based on channel estimation -- Time-domain equalization based on adaptive filtering -- Channel blind equalization based on

higher-order statistics.

Sommario/riassunto

This book focuses on optical-wireless communication systems. It summarizes the author's optical-wireless communication coding work while carrying out pertinent scientific research programs. The primary topics covered in the book are channel coding, coding modulation, error control (channel coding), and channel equalization. The author's mathematical analysis and experimental studies on the key theoretical issues are discussed in the book. One of the book's outstanding aspects is its thorough and methodical discussion of practical optical-wireless communication challenges. This makes the book especially appealing to readers who are eager to learn about applicable solutions in this area. Researchers, engineers, and graduate students in the subject of telecommunications can all profit from the book. It is appropriate for senior undergraduates, lecturers at colleges and universities, graduate students, and engineering and technical workers involved in optical communication.
