



Enabling Technologies for High Spectral-Efficiency Coherent Optical Communication Networks (Hardback)

By Xiang Zhou, Chongjin Xie

John Wiley Sons Inc, United States, 2016. Hardback. Condition: New. Language: English . Brand New Book. Presents the technological advancements that enable high spectral-efficiency and high-capacity fiber-optic communication systems and networks This book examines key technology advances in high spectral-efficiency fiber-optic communication systems and networks, enabled by the use of coherent detection and digital signal processing (DSP). The first of this book s 16 chapters is a detailed introduction. Chapter 2 reviews the modulation formats, while Chapter 3 focuses on detection and error correction technologies for coherent optical communication systems. Chapters 4 and 5 are devoted to Nyquist-WDM and orthogonal frequency-division multiplexing (OFDM). In chapter 6, polarization and nonlinear impairments in coherent optical communication systems are discussed. The fiber nonlinear effects in a non-dispersion-managed system are covered in chapter 7. Chapter 8 describes linear impairment equalization and Chapter 9 discusses various nonlinear mitigation techniques. Signal synchronization is covered in Chapters 10 and 11. Chapter 12 describes the main constraints put on the DSP algorithms by the hardware structure. Chapter 13 addresses the fundamental concepts and recent progress of photonic integration. Optical performance monitoring and elastic optical network technology are the subjects of Chapters 14 and 15. Finally, Chapter 16 discusses...



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Reviews

This book is really gripping and interesting. Of course, it is actually perform, still an interesting and amazing literature. You will not truly feel monotony at whenever you want of your time (that's what catalogues are for concerning when you request me).

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