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Collana	Artech House applied photonics series
Altri autori (Persone)	DjordjevicIvan
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction to optical communications -- Optical components and modules -- Signal propagation in optical fibers -- Noise sources and channel impairment -- Advanced modulation schemes -- Advanced detection schemes -- Advanced coding schemes -- Advanced optical networking -- Optical channel capacity and energy efficiency -- Engineering tool box.
Sommario/riassunto	This resource provides the latest details on 5th generation photonic systems that can be readily applied to projects in the field. Moreover, the book provides valuable, time-saving tools for network simulation and modeling. It includes coverage of optical signal transmission systems and networks; a wide range of critical methods and techniques, such as MIMO (multiple-input and multiple-output) by employing spatial modes in few-mode and multicore optical fiber; OFDM (orthogonal frequency-division multiplexing) utilized to enhance the spectral efficiency and to enable elastic optical networking schemes; and advanced modulation and coding schemes to approach the Shannon's channel capacity limit. There are detailed discussions on the basic principles and applications of high-speed digital signal processing, as well as description of the most relevant post-detection compensation techniques. --