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Highly efficient materials for photonic crystal-based optical

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demultiplexer for DWDM systems -- Chapter 8. Investigation of Ultra-Small Efficient Encoders and Decoders for High-Speed Optical Communication Systems -- Chapter 9. Photonic Crystal Fibers for Sensing Applications -- Chapter 10. Photonic Crystal biosensors for

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health care and pathologic diagnostic application -- Chapter 11. High frequency Photonic Crystal based Terahertz Antenna for Medical Applications -- Chapter 12. Role of photonics in energy crisis.

This book covers the advanced fabrication techniques, challenges, and applications of photonic crystals for next-generation systems in various applications such as high-speed networks, photonic integrated circuits, health care, sensors, energy, and environmental. This book highlights the literature and works put forward by various scientists, researchers, and academicians in photonic crystals and their real-time applications. The content of the book appeals to readers such as students, researchers, and industrial engineers who are working in the design and development of photonics-based concepts, components, and devices for various applications.