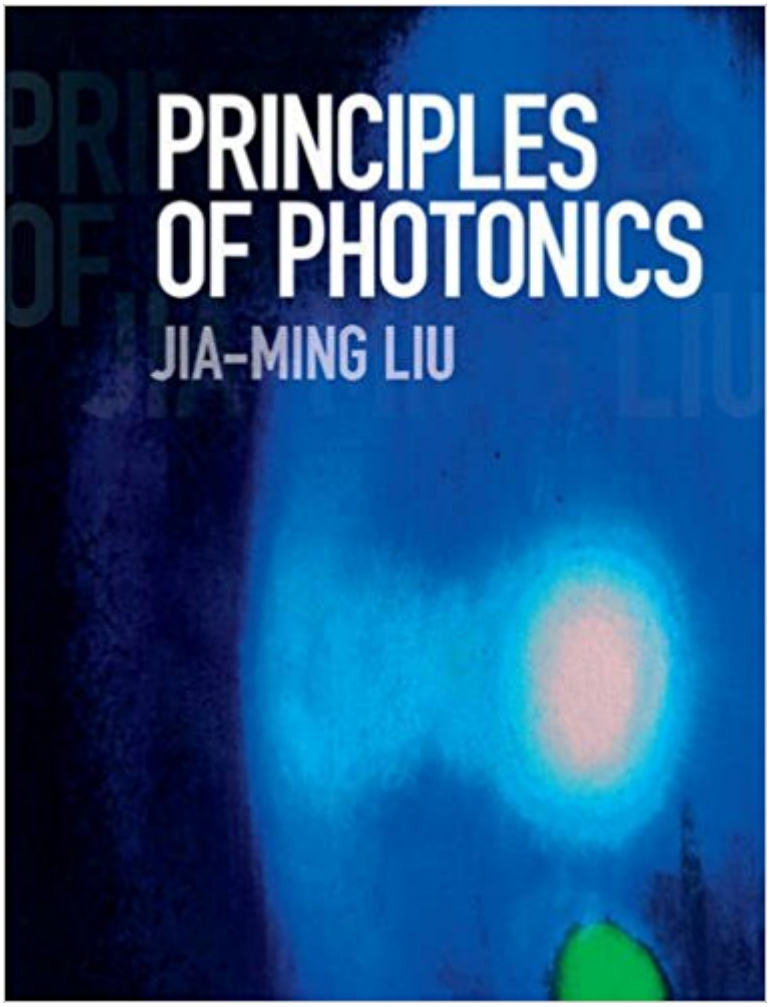
Principles Of Photonics



Synopsis

With this self-contained and comprehensive text, students will gain a detailed understanding of the fundamental concepts and major principles of photonics. Assuming only a basic background in optics, readers are guided through key topics such as the nature of optical fields, the properties of optical materials, and the principles of major photonic functions regarding the generation, propagation, coupling, interference, amplification, modulation, and detection of optical waves or signals. Numerous examples and problems are provided throughout to enhance understanding, and a solutions manual containing detailed solutions and explanations is available online for instructors. This is the ideal resource for electrical engineering and physics undergraduates taking introductory, single-semester or single-quarter courses in photonics, providing them with the knowledge and skills needed to progress to more advanced courses on photonic devices, systems and applications.

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Customer Reviews

'[Principles of Photonics] is an excellent textbook ... The book would also be suitable for physics students. ... The volume carries readers from the nature of optical fields and the properties of optical materials, through to principles of major photonics functions including the generation, propagation, amplification and detection of optical waves. Readers will thus gain a firm foundation for future forays into photonics devices and systems.' K. Alan Shore, Optics and Photonics News

A comprehensive introduction to the fundamental concepts and major principles of photonics. Including numerous examples and exercises, this text is ideal for undergraduates in electrical

engineering and physics taking single-semester courses in photonics. It is also an essential reference for students in other engineering disciplines, and for professionals who wish to gain a strong foundation in the area.

perfect

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