Basics Of Holography
Synopsis
Basics of Holography is a general introduction to the subject written by a leading worker in the field. It begins with the theory of holographic imaging, the characteristics of the reconstructed image, and the various types of holograms. Practical aspects of holography are then described, including light sources, the characteristics of recording media and recording materials, as well as methods for producing different types of holograms and computer-generated holograms. Finally, important applications of holography are discussed, such as high-resolution imaging, holographic optical elements, information processing, and holographic interferometry.

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Customer Reviews
This book is intended as an introduction to the subject for science and engineering students as well as people with a scientific background who would like to learn more about holography and its applications. A comprehensive bibliography and references to original papers identify sources of additional information. Numerical problems and their solutions are provided at the end of each chapter to clarify the principles discussed and give the reader a feel for the numerical aspects of each topic. Chapters 1 through 3 review image formation by a hologram, the characteristics of the reconstructed image, and the basic types of holograms while the next three chapters discuss available light sources, the characteristics of hologram recording media, and practical recording materials. Chapters 7 through 9 describe methods for the production of different types of holograms for displays, including multicolor holograms, and methods for making copies of holograms, as well as a chapter describing the production of computer-generated holograms. The next two chapters...
review some of the most important technical applications of holography, such as high-resolution imaging, holographic optical elements, and holographic information storage and processing. The final three chapters of the book describe the techniques of holographic interferometry, including the application of digital electronic techniques to holographic interferometry. Unfortunately, trying to describe a 3D process in the 2D pages of a book is a challenge - one that Hariharan does not always successfully face. Thus this book reads a little like the voice-over on a TV science documentary. One expects the narrative to be accompanied by dynamic footage demonstrating the process being described.

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