

<<经典光学及其应用>>

图书基本信息

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内容概要

This book covers a broad range of the major topics of classical optics, in the form of 37 self-contained chapters. The chapters in the first half of the book deal primarily with the basic concepts of optics, while those in the second half describe how these concepts can be used in a variety of technological applications. In each chapter, Professor Mansuripur introduces and develops a specialized topic in a comprehensive, clear and pedagogical style. The mathematical content is kept to a minimum as the book aims to provide the reader with insightful discussions of optical phenomena, at a level which is both accessible and interesting. This is aided by the numerous illustrations throughout in the form of diagrams, graphs and powerful computer simulation images. Topics covered include classical diffraction theory, optics of crystals, peculiarities of polarized light, thin-film multilayer stacks and coatings, geometrical optics and ray-tracing, various forms of optical microscopy, interferometry, coherence, holography, and nonlinear optics. As such, this book will constitute the ideal companion text for graduatelevel courses in optics, providing supplementary reading material for teachers and students alike. Industrial scientists and engineers developing modern optical systems will also find it an invaluable resource.

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