

<<非线性光学 第3版>>

图书基本信息

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前言

It has been a great pleasure for me to have prepared the latest edition of my book on nonlinear optics. My intrigue in the subject matter of this book is as strong as it was when the first edition was published in 1992. The principal changes present in the third edition are as follows : (1) The book has been entirely rewritten using the SI system of units. I personally prefer the elegance of the gaussian system of units , which was used in the first two editions , but I realize that most readers would prefer the SI system , and the change was made for this reason. (2) In addition , a large number of minor changes have been made throughout the text to clarify the intended meaning and to make the arguments easier to follow. I am indebted to the countless comments received from students and colleagues both in Rochester and from around the world that have allowed me to improve the writing in this manner. (3) Moreover , several sections that treat entirely new material have been added. Applications of harmonic generation , including applications within the fields of microscopy and biophotonics , are treated in Subsection 2.7.1. Electromagnetically induced transparency is treated in Section 3.8. Some brief but crucial comments regarding limitations to the maximum size of the intensity induced refractive-index change are made in Section 4.7. The use of nonlinear optical methods for inducing unusual values of the group velocity of light are discussed briefly in Section 3.8 and in Subsection 6.6.2. Spectroscopy based on coherent anti-Stokes Raman scattering (CARS) is discussed in Section 10.5. In addition , the appendix has been expanded to include brief descriptions of both the SI and gaussian systems of units and procedures for conversion between them.

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内容概要

It has been a great pleasure for me to have prepared the latest edition of my book on nonlinear optics. My intrigue in the subject matter of this book is as strong as it was when the first edition was published in 1992.

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