

Quantum Optics

By Girish S. Agarwal



Quantum Optics By Girish S. Agarwal

In the last decade many important advances have taken place in the field of quantum optics, with numerous potential applications. Ideal for graduate courses on quantum optics, this textbook provides an up-to-date account of the basic principles of the subject. Focusing on applications of quantum optics, the textbook covers recent developments such as engineering of quantum states, quantum optics on a chip, nano-mechanical mirrors, quantum entanglement, quantum metrology, spin squeezing, control of decoherence and many other key topics. Readers are guided through the principles of quantum optics and their uses in a wide variety of areas including quantum information science and quantum mechanics. The textbook features end-of-chapter exercises with solutions available for instructors at www.cambridge.org/9781107006409. It is invaluable to both graduate students and researchers in physics and photonics, quantum information science and quantum communications.



Read Online Quantum Optics ...pdf

Quantum Optics

By Girish S. Agarwal

Quantum Optics By Girish S. Agarwal

In the last decade many important advances have taken place in the field of quantum optics, with numerous potential applications. Ideal for graduate courses on quantum optics, this textbook provides an up-to-date account of the basic principles of the subject. Focusing on applications of quantum optics, the textbook covers recent developments such as engineering of quantum states, quantum optics on a chip, nanomechanical mirrors, quantum entanglement, quantum metrology, spin squeezing, control of decoherence and many other key topics. Readers are guided through the principles of quantum optics and their uses in a wide variety of areas including quantum information science and quantum mechanics. The textbook features end-of-chapter exercises with solutions available for instructors at www.cambridge.org/9781107006409. It is invaluable to both graduate students and researchers in physics and photonics, quantum information science and quantum communications.

Quantum Optics By Girish S. Agarwal Bibliography

• Sales Rank: #675916 in Books

• Brand: Brand: Cambridge University Press

Published on: 2012-12-28Original language: English

• Number of items: 1

• Dimensions: 9.69" h x .94" w x 7.44" l, 2.73 pounds

• Binding: Hardcover

• 504 pages



Editorial Review

Review

"The reader will find this book to be an excellent, modern review of the field of quantum optics and its applications. It is written for graduate students with a strong background in quantum mechanics and classical electrodynamics. If you studied quantum optics more than a decade ago, it is a must-read to refresh your knowledge of this rapidly advancing field. Early on, the author presents quantized radiation fields and later moves to the interactions of radiation and matter. Its value as a textbook is enhanced by the inclusion of exercises and solutions, references and an index. The inexperienced reader may find the concise exposition somewhat daunting, but those with more advanced knowledge will find exciting modern developments that can be incorporated into new devices and techniques."

Barry R. Masters, Fellow of AAAS, OSA and SPIE for Optics & Photonics News

"The amount of material the author covers is breathtaking. There is hardly any subject in modern quantum optics that is not covered in this book. His language is clear and precise, and the text is enriched with many figures and graphs of good quality. Working through this book will be the ideal preparation to start with a research project in the field. For experimental physicists who hope to get a better theoretical understanding of their laboratory work, this book will definitely be a challenge (though certainly not of the kind that cannot be mastered). I recommend it to anyone with a serious interest in one of the most fascinating branches of modern physics."

Thomas Peters, University of Zurich for Contemporary Physics

About the Author

Girish S. Agarwal is Noble Foundation Chair and Regents Professor at Oklahoma State University. A recognised leader in the field of theoretical quantum optics, he is a fellow of the Royal Society, UK and has won several awards, including the Max-Born Prize from the Optical Society of America and the Humboldt Research Award.

Users Review

From reader reviews:

Clara Lee:

Do you have favorite book? For those who have, what is your favorite's book? Guide is very important thing for us to understand everything in the world. Each guide has different aim or perhaps goal; it means that book has different type. Some people experience enjoy to spend their the perfect time to read a book. These are reading whatever they have because their hobby is reading a book. Consider the person who don't like reading a book? Sometime, person feel need book after they found difficult problem or even exercise. Well, probably you will require this Quantum Optics.

Grace Godwin:

Nowadays reading books become more than want or need but also become a life style. This reading practice give you lot of advantages. Associate programs you got of course the knowledge the actual information inside the book that will improve your knowledge and information. The knowledge you get based on what

kind of guide you read, if you want drive more knowledge just go with education books but if you want sense happy read one using theme for entertaining for example comic or novel. Typically the Quantum Optics is kind of publication which is giving the reader unforeseen experience.

James Drake:

The e-book untitled Quantum Optics is the publication that recommended to you to study. You can see the quality of the e-book content that will be shown to you actually. The language that writer use to explained their way of doing something is easily to understand. The author was did a lot of analysis when write the book, to ensure the information that they share to your account is absolutely accurate. You also can get the e-book of Quantum Optics from the publisher to make you much more enjoy free time.

Sophia Hardee:

The book untitled Quantum Optics contain a lot of information on that. The writer explains the woman idea with easy way. The language is very clear to see all the people, so do not worry, you can easy to read it. The book was compiled by famous author. The author brings you in the new period of time of literary works. You can read this book because you can read on your smart phone, or gadget, so you can read the book within anywhere and anytime. In a situation you wish to purchase the e-book, you can available their official web-site in addition to order it. Have a nice examine.

Download and Read Online Quantum Optics By Girish S. Agarwal #HMK6RUZGQX2

Read Quantum Optics By Girish S. Agarwal for online ebook

Quantum Optics By Girish S. Agarwal Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Quantum Optics By Girish S. Agarwal books to read online.

Online Quantum Optics By Girish S. Agarwal ebook PDF download

Quantum Optics By Girish S. Agarwal Doc

Quantum Optics By Girish S. Agarwal Mobipocket

Quantum Optics By Girish S. Agarwal EPub

HMK6RUZGQX2: Quantum Optics By Girish S. Agarwal