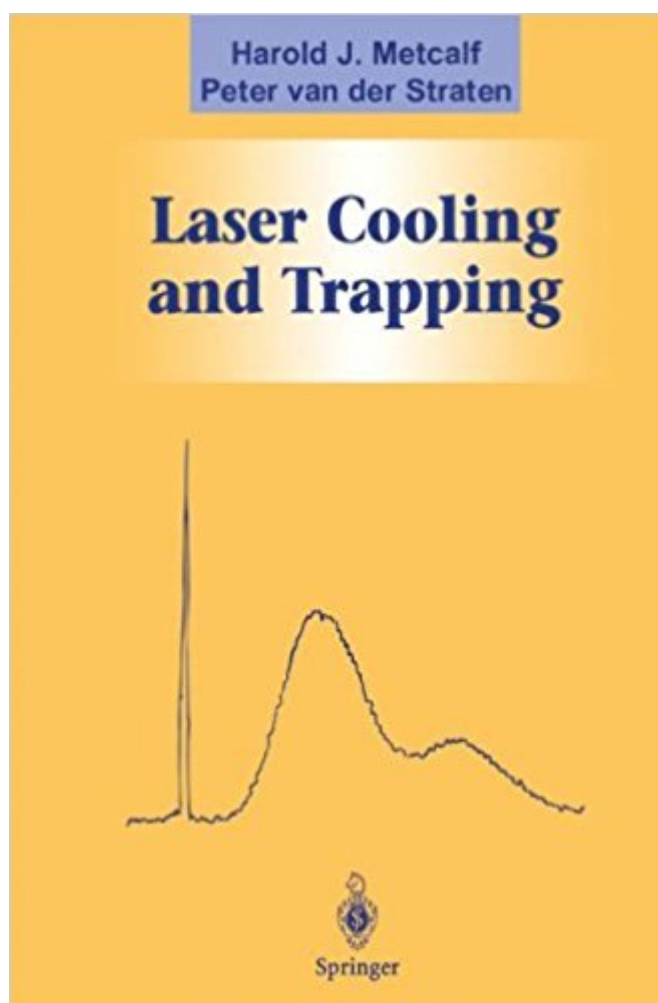


The book was found

Laser Cooling And Trapping (Graduate Texts In Contemporary Physics)



Synopsis

Intended for advanced undergraduates and beginning graduates with some basic knowledge of optics and quantum mechanics, this text begins with a review of the relevant results of quantum mechanics, before turning to the electromagnetic interactions involved in slowing and trapping atoms and ions, in both magnetic and optical traps. The concluding chapters discuss a broad range of applications, from atomic clocks and studies of collision processes, to diffraction and interference of atomic beams at optical lattices and Bose-Einstein condensation.

Book Information

Series: Graduate Texts in Contemporary Physics

Paperback: 324 pages

Publisher: Springer; Corrected edition (November 9, 2001)

Language: English

ISBN-10: 0387987282

ISBN-13: 978-0387987286

Product Dimensions: 6.1 x 0.8 x 9.2 inches

Shipping Weight: 1.4 pounds (View shipping rates and policies)

Average Customer Review: 3.8 out of 5 stars 2 customer reviews

Best Sellers Rank: #690,380 in Books (See Top 100 in Books) #84 in [Books > Science & Math > Physics > Nuclear Physics > Atomic & Nuclear Physics](#) #103 in [Books > Science & Math > Physics > Light](#) #108 in [Books > Science & Math > Physics > Molecular Physics](#)

Customer Reviews

From the reviews: "A strong recommendation for any book in one's own field is to see it written the way you would have written it. This is certainly the case here. If you are a researcher or a teacher in laser cooling and trapping or a related field of atomic, molecular, and optical physics, then this is a must buy text for your bookshelf. And buy one for your students too, because your copy will inevitably disappear." *The Physicist*... "For its intended use, which is to guide newcomers into the field of laser cooling and trapping, the book does a superb job. The book is well placed to evolve with the field for many years to come." *Physics Today* From the reviews: "A strong recommendation for any book in one's own field is to see it written the way you would have written it. This is certainly the case here. If you are a researcher or a teacher in laser cooling and trapping or a related field of atomic, molecular, and optical physics, then this is a must buy (TM) text for your bookshelf. And buy one for your students too, because your copy will inevitably disappear." *The Physicist* .. "For its

intended use, which is to guide newcomers into the field of laser cooling and trapping, the book does a superb job. The book is well placed to evolve with the field for many years to come."

Physics Today

The book is okay. I am collaborating on a research venture and wanted to sharpen my knowledge on this topic. I find this book helpful.

Laser cooling and trapping techniques have given researchers new tools to explore the atom's dynamics and control. The book gives a good introduction to the forces that arise when an atom interacts with a light (laser) field, and puts a lot of emphasis on giving the reader an excellent idea of what's going on when atoms and photons interact. Rather than giving all the details of the mathematical and quantum mechanics background that is needed to understand the subject the authors concentrate on giving a clearer picture of the real physics involved. The book starts with a review of the quantum mechanics principles used to understand laser cooling and trapping, which serves as a good remainder for a person who already has a basic grasp of it. Although all the mathematical analysis that shows how the formulas and mathematical expressions are derived is not done in the book, the presentation is sufficient to guide the readers interested in it do the work by themselves. The book also has an excellent reference guide that an interested person can use to get all the mathematical and experimental details on the field.

[Download to continue reading...](#)

Laser Cooling and Trapping (Graduate Texts in Contemporary Physics) American National Standard for Safe Use of Lasers: ANSI Z136.1-2000 (ANSI (Laser Institute of America)) (ANSI (Laser Institute of America)) (ANSI (Laser Institute of America)) Physics of Atoms and Ions (Graduate Texts in Contemporary Physics) Atoms, Molecules and Optical Physics 2: Molecules and Photons - Spectroscopy and Collisions (Graduate Texts in Physics) Atoms, Molecules and Optical Physics 1: Atoms and Spectroscopy (Graduate Texts in Physics) Particle Accelerator Physics (Graduate Texts in Physics) Geometry, Particles, and Fields (Graduate Texts in Contemporary Physics) Conformal Field Theory (Graduate Texts in Contemporary Physics) Light Science: Physics and the Visual Arts (Undergraduate Texts in Contemporary Physics) Laser Moose and Rabbit Boy (Laser Moose and Rabbit Boy series, Book 1) Laser Moose and Rabbit Boy: Disco Fever (Laser Moose and Rabbit Boy series, Book IEC/TR 60825-3 Ed. 1.0 b:1995, Safety of laser products - Part 3: Guidance for laser displays and shows Laser Interaction and Related Plasma Phenomena (Laser Interaction & Related Plasma Phenomena) NEW! PICOSURE MEDICAL LASER TATTOO

REMOVAL SYSTEM: FINALLY A NO B.S. GUIDE TO THE WORLD'S NEWEST/LATEST

MEDICAL LASER TATTOO REMOVAL SYSTEM Regenerative Laser Pain Therapy:

Low-Level-Laser-Therapy The Physics Of Laser Plasma Interactions (Frontiers in Physics)

Transmission Electron Microscopy and Diffractometry of Materials (Graduate Texts in Physics)

Particles and Nuclei: An Introduction to the Physical Concepts (Graduate Texts in Physics) Books of

Breathing and Related Texts -Late Egyptian Religious Texts in the British Museum Vol.1 (Catalogue

of the Books of the Dead and Other Religious Texts in the British Museum) Biophotonics: Concepts

to Applications (Graduate Texts in Physics)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)