CAMBRIDGE: The Authority in Optics

The Art and Science of Optical Design

Robert R. Shannon

This comprehensive introduction to lens design covers the fundamental physical principles and key engineering issues. Several practical examples of modern computer-aided lens design are worked out in detail from start to finish, beginning with basic lens design forms, and progressing to advanced systems, such as gradient index and diffractive optical components.

1997	512 pp.	
45414-X	Hardback	$100.00
58868-5	Paperback	$39.95

Lasers and Electro-Optics

Fundamentals and Engineering

Christopher C. Davis

"...this book can be warmly recommended."

—Miles Padgett, Nature

"...a comprehensive undergraduate text that provides a broad but detailed introduction to the basic underpinnings of lasers and modern optical systems."

—Physics Today

This comprehensive book provides a detailed introduction to the basic physics and engineering aspects of lasers, as well as to the design and operational principles of a wide range of optical systems and electro-optic devices.

1996	741 pp.	
30831-3	Hardback	$125.00
48403-0	Paperback	$44.95

Laser Fundamentals

William T. Silfvast

"...Silfvast does an excellent job of presenting a well-organized and thoughtful book. The figures are exceptionally clear and informative, and the use of highlighting equations throughout is particularly useful..."

—Jim Tatum, Optics & Photonics News

"Silfvast is an excellent explainer...a fresh approach. Laser Fundamentals *is a good read, and I recommend it to students and teachers alike."*

—Physics Today

Laser Fundamentals provides a clear, up-to-date, and comprehensive introduction to the physical and engineering principles of laser operation and design.

1996	543 pp.	
55424-1	Hardback	$95.00
55617-1	Paperback	$39.95

Theoretical Problems in Cavity Nonlinear Optics

Paul Mandel

This book provides a thorough description of cavity nonlinear optics in terms of modern dynamical systems theory. Several of the topics treated cannot be found in other books, including swept control parameter dynamics, laser stability, multimode rate equations, and antiphase dynamics.

Cambridge Studies in Modern Optics 21

1997	200 pp.	
55385-7	Hardback	$59.95

Quantum Optics

Marlan O. Scully *and* ***M. Suhail Zubairy***

This is an in-depth and wide-ranging introduction to quantum optics, emphasizing the basic principles and their applications. The book begins by developing the basic tools of quantum optics, and goes on to show the application of these tools in a variety of quantum optical systems, including lasing without inversion, squeezed states, and atom optics. The final four chapters discuss quantum optical tests of the foundations of quantum mechanics, and particular aspects of measurement theory.

1996	500 pp.	
43458-0	Hardback	about $79.95
43595-1	Paperback	$39.95

Introduction to Optical Engineering

Francis T. S. Yu *and* ***Xiangyang Yang***

This presents basic optical principles, particularly reflection, refraction, diffraction and interference. Building on this foundation, a wide variety of optical devices and processes are then discussed, including photodetectors, spatial light modulators, holography and lasers. Two chapters are devoted to linear system transforms and signal processing, and the book concludes with a chapter on fiber optics.

1997	448 pp.	
57366-1	Hardback	about $110.00
57493-5	Paperback	$44.95

Available in bookstores or from CAMBRIDGE UNIVERSITY PRESS

40 West 20th Street, New York, NY 10011-4211
Call toll-free 800-872-7423.
Web site: http://www.cup.org
MasterCard/VISA accepted. Prices subject to change.

https://doi.org/10.1017/S0263034600010673 Published online by Cambridge University Press

Information for Contributors

1. Manuscripts must be written in English. All manuscripts will be referred to acknowledged experts in the subject. Only those receiving favorable recommendations from the referees will be accepted for publication. Manuscripts may be sent to any Board member, any Associate Editor, or the Editor.
2. Manuscripts should be double spaced, on one side of good grade paper, allowing a reasonable left-hand margin. An original and two copies should be submitted with the author's full postal address, phone and/or fax numbers, position, and affiliations. Authors are urged to send in their final manuscripts on disks as well as on hard copy.
3. The title and section headings should highlight the significant points. A short abstract should precede the main text.
4. One copy of photographs, prints, or transparencies of good quality and unmarked should be submitted. Where lines or lettering are to appear on the photograph, an additional print should be supplied appropriately marked. Each should have, lightly written on the back, the author's name, the figure number, and an indication of which is the top of the picture.
5. One copy of each line diagram should be submitted at approximately twice final size and unlettered. Diagrams must be drawn in indian ink on plain white or transparent paper. A second copy should be supplied with lettering included. The author's name and the figure number should be written on this copy.
6. Tables should be typewritten on separate sheets. Avoid, where possible, very wide tables.
7. References and footnotes should be cited according to the Harvard (Author/date) system, also known as the "British form." In the text, author and year are cited in parentheses, e.g. "... was found by McCarthy (1980, 1980a)..." or "(Emmett *et al.* 1972)". Full references are listed in alphabetic order at the end of the paper. References are not numbered. An example of a reference list is:

   DEUTSCH, C. & KLARSFELD, S. 1973 *Phys. Rev. A* **7**, 2081.
   NICHOLSON, D.R. 1983 *Plasma Theory* (John Wiley, New York).
   OOMURA, H. *et al.* 1982a *Res. Rep. ILE*, ILE-8207p.
   OOMURA, H. *et al.* 1982b *Trans. Ans.* **43**, 617.

   Note that the year of publication appears after the author's name. If possible, all authors names should be listed in preference to "*et al.*" If one author or team is referred to more than once in any year, the letters *a*, *b*, etc., should be added after the year to distinguish the individual references.
8. Correction to proofs should be restricted to printers' errors only. Authors are entitled to 25 offprints of their article free of charge. Additional offprints may be purchased if they are ordered on the form sent with the proofs.

ISSN 0263-0364
© 1997 Cambridge University Press
Printed in the United States of America

Cambridge University Press
40 West 20th Street, New York, NY 10011, USA
The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU
10 Stamford Road, Oakleigh, Melbourne 3166, Australia

https://doi.org/10.1017/S0263034600010673 Published online by Cambridge University Press

Special Issue

LASER AND PARTICLE BEAMS

Pulse Power and High Energy Densities
Volume 15, Number 1, 1997

In Honor of E.I. Zababakhin

Guest Editor
E.N. Avronin

CAMBRIDGE
UNIVERSITY PRESS

0263-0346(199702)15:1;1-9

https://doi.org/10.1017/S0263034600010673 Published online by Cambridge University Press