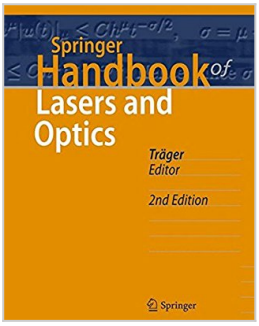

Springer Handbook of Lasers and Optics (Springer Handbooks)

From Brand: Springer

Springer Handbook of Lasers and Optics (Springer Handbooks) From Brand: Springer

This new edition features numerous updates and additions. Especially 4 new chapters on Fiber Optics, Integrated Optics, Frequency Combs and Interferometry reflect the changes since the first edition.

In addition, major complete updates for the chapters: Optical Materials and Their Properties, Optical Detectors, Nanooptics, and Optics far Beyond the Diffraction Limit.

Features
Contains over 1000 two-color illustrations.
Includes over 120 comprehensive tables with properties of optical materials and light sources.
Emphasizes physical concepts over extensive mathematical derivations.
Chapters with summaries, detailed index
Delivers a wealth of up-to-date references.

Springer Handbook of Lasers and Optics (Springer Handbooks)

From Brand: Springer

Springer Handbook of Lasers and Optics (Springer Handbooks) From Brand: Springer

This new edition features numerous updates and additions. Especially 4 new chapters on Fiber Optics, Integrated Optics, Frequency Combs and Interferometry reflect the changes since the first edition.

In addition, major complete updates for the chapters: Optical Materials and Their Properties, Optical Detectors, Nanooptics, and Optics far Beyond the Diffraction Limit.

Features
Contains over 1000 two-color illustrations.
Includes over 120 comprehensive tables with properties of optical materials and light sources.
Emphasizes physical concepts over extensive mathematical derivations.
Chapters with summaries, detailed index
Delivers a wealth of up-to-date references.

Springer Handbook of Lasers and Optics (Springer Handbooks) From Brand: Springer Bibliography

- Rank: #4533282 in Books
- Brand: Brand: Springer
- Published on: 2012-05-25
- Original language: English
- Number of items: 1
- Dimensions: 2.90" h x 7.50" w x 9.60" l, 6.75 pounds
- Binding: Hardcover
- 1694 pages

Editorial Review

Review

From the reviews of the second edition:

"Frank Träger has assembled a veritable who's who of laser researchers … . In short, go out and buy this book; it is an excellent desk reference for researchers and research students. Undergraduates will find much to interest them, especially those contemplating entering the field. My only problem is where to hide my copy before my students think it should be on their shelf!" (Barry Luther-Davies, Australian Physics, Vol. 44 (4), 2007)

"This weighty work is intended to offer comprehensive and authoritative coverage of the wide fields of optics and lasers. … Overall text is clear, well written and accompanied by appropriate tables and diagrams. … The book's content emphasis is very much on material suitable for the optical practitioner. … a worthy addition to stock for any library supporting physics at a university or specialist level." (Gareth J. Johnson, Reference Reviews, Vol. 22 (2), 2008)

"I recommend this modern, comprehensive handbook to students, educators, engineers and scientists. The chapters are clearly written and include sophisticated illustrations that augment the text. The tables of data are also exemplary. The authors strike a good balance between the theory and implementation. The reader will appreciate the explanations of both the detailed mathematics and the physical aspects of the concepts. Each chapter contains pertinent references and an index." (Barry R. Masters, Optics & Photonics News, November, 2012)

From the Back Cover

The **Springer Handbook of Lasers and Optics** provides fast, up-to-date, comprehensive and authoritative coverage of the wide fields of optics and lasers. It is written for daily use in the office or laboratory and offers explanatory text, data, and references needed for anyone working with lasers and optical instruments.

This second edition features numerous updates and additions. Especially four new chapters on **Fiber Optics, Integrated Optics, Frequency Combs, and Interferometry** reflect the major changes. In addition, chapters Optical Materials and Their Properties, Optical Detectors, Nanooptics, and Optics far Beyond the Diffraction Limit have been thoroughly revised and updated.

The now 25 chapters are grouped into four parts which cover basic principles and materials, fabrication and properties of optical components, coherent and incoherent light sources, and, finally, selected applications and special fields such as terahertz photonics, x-ray optics and holography.

Each chapter is authored by respected experts and contains the basic principles, applications and latest information in the field. Among the subjects covered are geometrical and wave optics, linear and nonlinear optics, optical materials and components, detectors, incoherent and all essential types of coherent light sources, generation of ultrashort pulses, spectroscopic techniques, laser safety as well as current trends in

such modern areas as quantum optics, femto- and attosecond physics, and nanooptics as well as optics beyond the diffraction limit.

The handbook is written and compiled for physicists, engineers and other scientists at universities and in industrial research who develop and use optical techniques.

With a Foreword by Nobel Laureate T.W. Hänsch.

Key Topics

› Basic optics principles

› Coherent and incoherent light sources

› Spectroscopies and attophysics

› Optical materials and their properties

› Fabrication and properties of optical components

› Fiber optics, integrated optics, frequency combs, and interferometry

› Selected applications and special fields: Nanooptics, quantum optics, x-ray optics, terahertz photonics, and holography

Features

› Contains over 1000 two-color illustrations

› Includes over 120 comprehensive tables with properties of optical materials and light sources

› Emphasizes physical concepts over extensive mathematical derivations.

› Chapters with summaries, detailed index

› Delivers a wealth of up-to-date references.

About the Author

Frank Träger is a Full Professor of Experimental Physics and Head of the Interdisciplinary Center for Nanostructure Science and Technology – CINSaT at the University of Kassel, Germany.

Frank Träger received the diploma in physics from the University of Heidelberg where he continued his research to earn a Ph.D. in physics in 1974. Following his habilitation, he joined the IBM Almaden Research Center in San José, California, as a guest scientist from 1981 to 1982 and for several sabbaticals until 1986.

Since 1986, he has been an associate Professor at the Institute of Physics of the University of Heidelberg, and since September 1990 a full Professor in the Physics Department of the University of Kassel, Germany.

His current research interests are the preparation and characterization of metal nanoparticles and self-assembled functional films, nonlinear optical phenomena, the study and application of nonthermal desorption and ablation phenomena, ultrafast electron dynamics on the femtosecond timescale and, last but not least, imaging of DNA by scanning probe microscopies. In his experiments, tunable laser radiation plays an essential role.

Frank Träger serves as the Editor-in-Chief of the international journal Applied Physics B – Lasers and Optics published by Springer-Verlag. He is a Corresponding Member of the Heidelberg Academy of Sciences and of acatech, Konvent für Technikwissenschaften der Union der deutschen Akademien der Wissenschaften e.V.

Users Review

From reader reviews:

Christina Love:

What do you think of book? It is just for students since they are still students or the item for all people in the world, what the best subject for that? Just simply you can be answered for that question above. Every person has diverse personality and hobby per other. Don't to be forced someone or something that they don't would like do that. You must know how great and important the book Springer Handbook of Lasers and Optics (Springer Handbooks). All type of book are you able to see on many solutions. You can look for the internet sources or other social media.

Laura Thompson:

Now a day individuals who Living in the era wherever everything reachable by connect to the internet and the resources included can be true or not demand people to be aware of each information they get. How many people to be smart in obtaining any information nowadays? Of course the reply is reading a book. Looking at a book can help individuals out of this uncertainty Information specially this Springer Handbook of Lasers and Optics (Springer Handbooks) book because book offers you rich information and knowledge. Of course the info in this book hundred percent guarantees there is no doubt in it you probably know this.

Peter Holmes:

The e-book untitled Springer Handbook of Lasers and Optics (Springer Handbooks) is the book that recommended to you to see. You can see the quality of the guide content that will be shown to you. The language that writer use to explained their ideas are easily to understand. The author was did a lot of exploration when write the book, so the information that they share to you personally is absolutely accurate. You also might get the e-book of Springer Handbook of Lasers and Optics (Springer Handbooks) from the publisher to make you more enjoy free time.

Shalon Fisk:

E-book is one of source of information. We can add our knowledge from it. Not only for students but native

or citizen will need book to know the update information of year to be able to year. As we know those ebooks have many advantages. Beside we add our knowledge, may also bring us to around the world. By book Springer Handbook of Lasers and Optics (Springer Handbooks) we can have more advantage. Don't one to be creative people? Being creative person must prefer to read a book. Just choose the best book that suitable with your aim. Don't be doubt to change your life at this book Springer Handbook of Lasers and Optics (Springer Handbooks). You can more pleasing than now.

Read Springer Handbook of Lasers and Optics (Springer Handbooks) From Brand: Springer for online ebook

Springer Handbook of Lasers and Optics (Springer Handbooks) From Brand: Springer 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 Springer Handbook of Lasers and Optics (Springer Handbooks) From Brand: Springer books to read online.

Online Springer Handbook of Lasers and Optics (Springer Handbooks) From Brand: Springer ebook PDF download

Springer Handbook of Lasers and Optics (Springer Handbooks) From Brand: Springer Doc

Springer Handbook of Lasers and Optics (Springer Handbooks) From Brand: Springer Mobipocket

Springer Handbook of Lasers and Optics (Springer Handbooks) From Brand: Springer EPub

26AQ19MKWFR: Springer Handbook of Lasers and Optics (Springer Handbooks) From Brand: Springer