Springer Handbook of Lasers and Optics

F. Träger, Editor. Foreword by **T. W. Hänsch**

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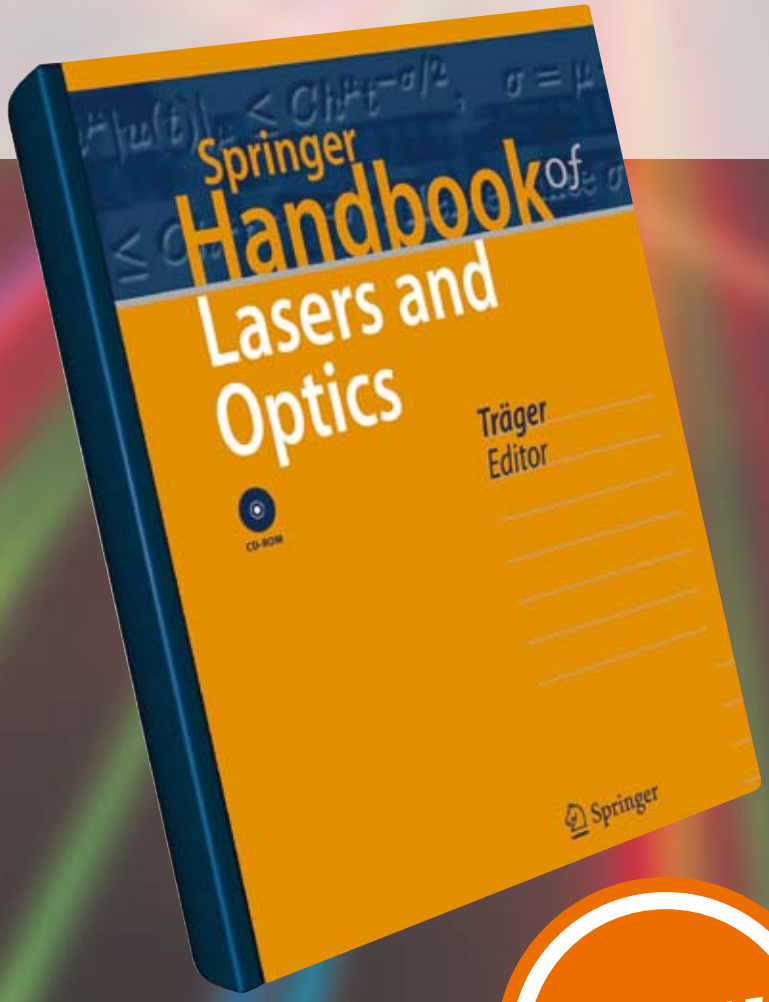

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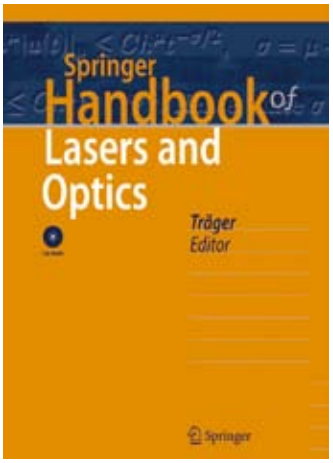

Springer Handbook of Lasers and Optics

Comprehensive, up-to-date, and easy-to-use, the Springer Handbook of Lasers and Optics provides you with expert rundowns of the latest developments in this applied and rapidly developing field in a lab-friendly format.

Written by acknowledged experts from around the world (including a foreword by 2006 Nobel Laureate T. W. Hänsch), each chapter provides descriptive text, graphics, illustrations, charts, and references for easy use in the laboratory or the office. The included disc contains the text of the Handbook, making it easy to consult while writing or performing desk research.

Organized into four parts, the Handbook's 22 chapters cover basic principles and materials, fabrication and properties of optical components, coherent and incoherent light sources, as well as selected applications and special fields such as terahertz photonics, X-ray optics, and holography.

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- Coherent and Incoherent Light Sources
- Ultrafast Physics and Spectroscopies
- Optical Materials and Their Properties
- Fabrication and Properties of Optical Components
- Selected Applications and Special Fields: Nanooptics, Quantum Optics, X-Ray Optics, Terahertz Photonics and Holography

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About the Editor:

Frank Träger is a full professor of experimental physics and head of the Interdisciplinary Center for Nanostructure Science and Technology – CINST 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 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. He is a corresponding member of the Heidelberg Academy of Sciences and of acatech, des Konvents für Technikwissenschaften der Union der deutschen Akademien der Wissenschaften e.V.

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