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Anyone mastering the contents of this textbook will be well prepared to understand advanced treatises and research papers in laser science and technology" - Arthur L. Schawlow, 1981 Nobel Laureate in Physics
This fifth edition accurately incorporates all corrections and is the first version available also as an eBook
Every chapter contains a good set of problems and selected answers are given in the back of the book
This new Fifth Edition of Principles of Lasers incorporates corrections to the previous edition. The text's essential mission remains the same: to provide a wide-ranging yet unified description of laser behavior, physics, technology, and current applications. Dr. Svelto emphasizes the physical rather than the mathematical aspects of lasers, and presents the subject in the simplest terms compatible with a correct physical understanding.

Praise for earlier editions:

"Professor Svelto is himself a longtime laser pioneer and his text shows the breadth of his broad acquaintance with all aspects of the field _ Anyone mastering the contents of this book will be well prepared to understand advanced treatises and research papers in laser science and technology." (Arthur L. Schawlow, 1981 Nobel Laureate in Physics)

"Already well established as a self-contained introduction to the physics and technology of lasers _ Professor Svelto's book, in this lucid translation by David Hanna, can be strongly recommended for self-study or teaching at the final-year undergraduate or first-year post-graduate levels." (Physics Bulletin)

"A thorough understanding of this book in conjunction with one of the existing volumes on laser safety will go a long way in providing the health physicist with the understanding he needs _ Highly recommended." (Health Physics)

"Introduces laser science and technology with the accessibility appropriate for the nonspecialist and the enthusiasm of the pioneer." (Laser Focus)

"A very good introduction to laser theory and practice _ aimed at upper-level undergraduate students. It is logically organized and easy to read _ Most of the basic mathematical framework needed to understand this evolving field is presented. Every chapter contains a good set of problems, answers to some of which are given in the back." (Sci-Tech News)

Orazio Svelto is Professor of Quantum Electronics at the Polytechnic Institute of Milan and Director of the Quantum Electronics Center of the Italian National Research Council. His research has covered a wide range of activity in the field of laser physics and quantum electronics, starting from the very beginning of these disciplines. This activity includes ultrashort-pulse generation and applications, development of laser resonators and mode-selection techniques, laser applications in biology and medicine, and development of solid-state lasers. Professor Svelto is the author of more than 150 scientific papers and his researches have been the subject of more than 50 invited papers and international conferences. He has served as a program chair of the IX International Quantum Electronics Conference (1976), as a chair of the European program committee for CLEO '85 and CLEO '90, and he was general co-chair for the first CLEO-Europe Conference (1994). He is an elected member of the Italian "Accademia dei XL" and a Fellow of the IEEE.

Content Level » Graduate

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Related subjects » Electronics & Electrical Engineering - Optics & Lasers - Radiology

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