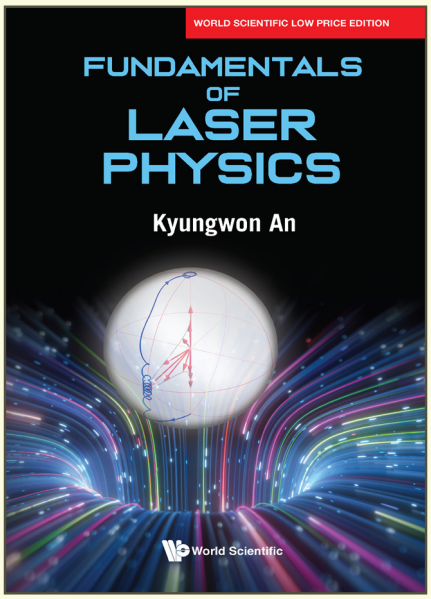
Fundamentals of Laser Physics



By **Kyungwon An**
(Seoul National University, South Korea)

ISBN	9798886131246
Extent	324pp
Binding	Paperback
Year	2025
Price	Rs. 1595

ABOUT THE BOOK

This book is intended as a textbook on laser physics for advanced undergraduates and first-year graduate students in physics and engineering who need to use lasers in their labs and want to understand the physical processes involved with the laser techniques in their fields of study. This book aims to provide a coherent theoretical framework on the light–matter interaction involved with lasers in such a way that students can easily understand the essential topics related to lasers and their applications and get accustomed to the latest cutting-edge research developments. Most of all, the content of this book is concise to be covered in a semester.

READERSHIP

Advanced undergraduates and first-year graduate students in physics and engineering who need to use lasers in their labs.

CONTENTS

- Classical Theory of Emission and Absorption
- Einstein's Theory of Matter–Field Interaction
- Semiclassical Theory of Atom–Field Interaction
- Spectral Line Broadening
- Lamb-Dip Spectroscopy
- Optical Bloch Equation
- More Applications of Bloch Equation
- Rate Equation Approximation
- Coherent Pulse Propagation
- Quantum Theory of Laser
- Strong-Coupling Regime of Cavity QED
- Survey of Various Lasers

- Pulsed Lasers and Frequency Combs
- Other Laser-Related Topics
- Single-Photon Sources and Novel Lasers
- Non-Hermitian Laser
- Exceptional-Point Lasers

For orders and enquiries, please contact us:

FEEL Books

FEELBOOKS PVT. LTD.

DELHI	**4381/4 Ansari Road, Daryaganj, New Delhi 110002**		**Tel: +91-11-47472630**
	Pushpendra Kumar	**Mobile: +91 9015043442**	**Email: orders@feelbooks.in**
BENGALURU	**C-22, Brigade MM, KR Road, Jayanagar 7th Block, Bengaluru 560070**		**Tel: +91-80-26762129**
	Shekar Reddy	**Mobile: +91 9945234476**	**Email: bangalore@feelbooks.in**
MUMBAI	**Vijay Kumar**	**Mobile: +91 9871176434**	**Email: vkumar@feelbooks.in**
CHENNAI	**G Srinivasan**	**Mobile: +91 9003047502**	**Email: gsrinivasan@feelbooks.in**
KOLKATA	**Dhrubajyoti Bhattacharjee**	**Mobile: +91 9836160013**	**Email: dbhattacharjee@feelbooks.in**
HYDERABAD	**K.S.Vishwanath**	**Mobile: +91 9871745850**	**Email: kvishwanath@feelbooks.in**

***For Catalogues & title lists*: marketing@feelbooks.in**

FOLLOW US ON LinkedIn

www.feelbooks.in

FOLLOW US ON facebook

For any queries, please email us at marketing@feelbooks.in