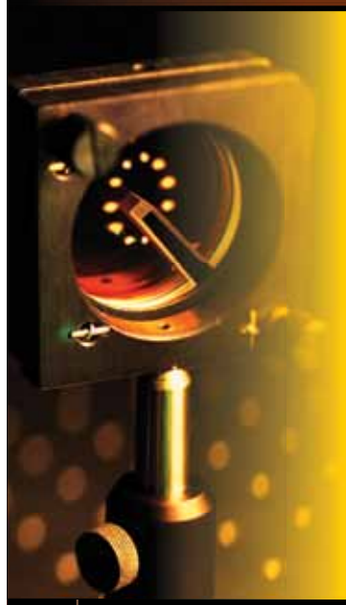
In-Depth Coverage of Photonics and Laser Engineering

Written by an internationally acclaimed laser expert, this comprehensive volume provides the background in theoretical physics necessary to understand practical applications of lasers and optics. ***Photonics and Laser Engineering: Principles, Devices, and Applications*** discusses theories of electromagnetism, geometrical optics, quantum mechanics, and laser physics and connects them to relevant implementations in areas such as fiber optics, optical detection, laser resonator design, and semiconductor lasers. Each chapter contains detailed equations, illustrations, sample problems, and solutions to reinforce the concepts presented.

Photonics and Laser Engineering covers:



- Electromagnetic wave theory of light with applications
- Geometrical optics
- Laser beams and resonators
- Classical and quantum theories of light-matter interactions
- Laser technology, including optical gain, oscillation, solid-state lasers, Q-switching, and laser mode locking
- Semiconductor lasers
- Anisotropic media and modulation of light
- Noise and optical detection
- Dielectric waveguides and optical fibers
- Nonlinear optics and the Raman effect

ISBN 978-0-07-160608-0
MHID 0-07-160608-4

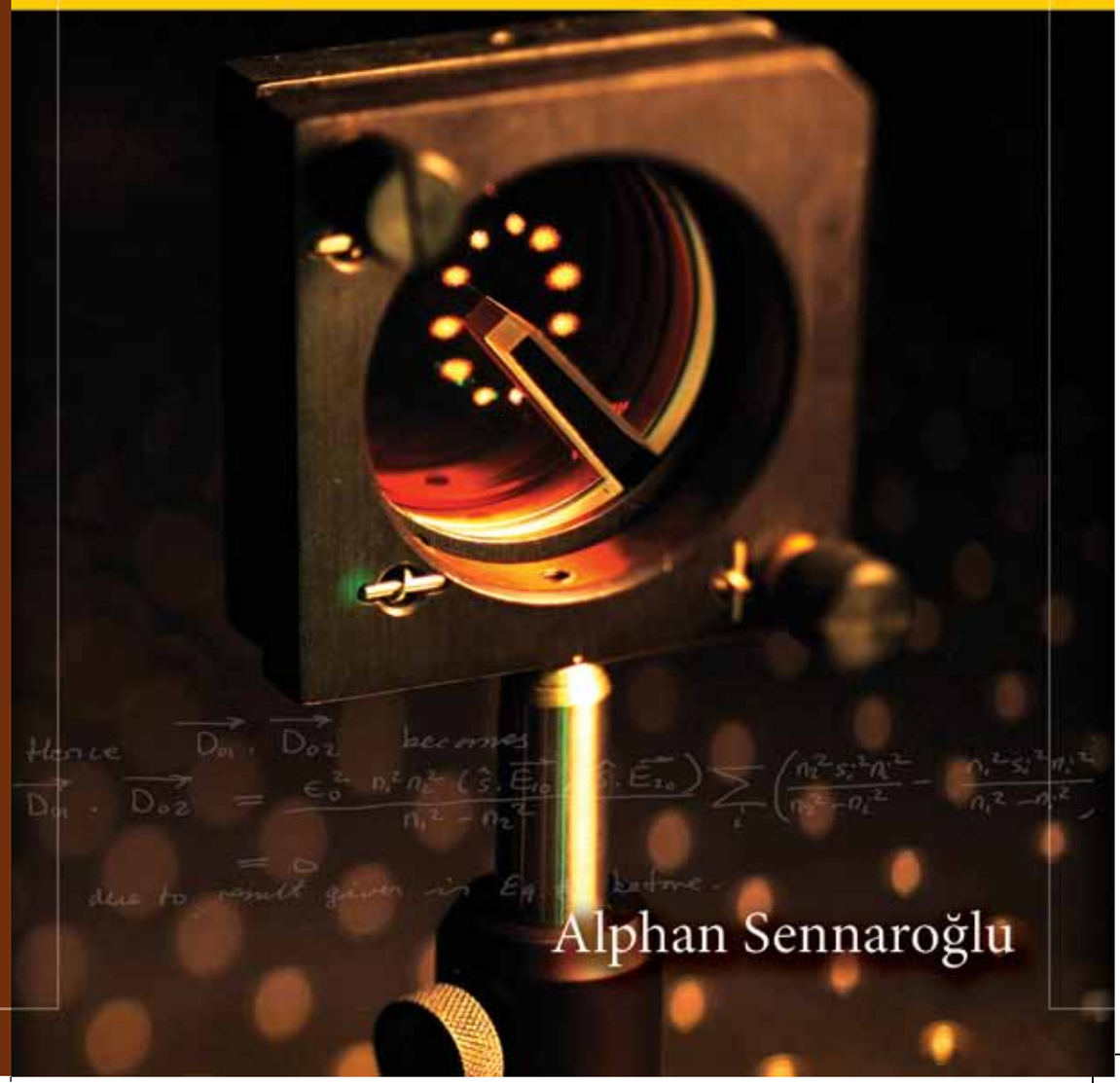
PHOTONICS and LASER ENGINEERING

Sennaroğlu

Mc Graw Hill

PHOTONICS and LASER ENGINEERING

Principles, Devices, and Applications



Alphan Sennaroğlu