

Light-emitting diodes: materials, processes, devices and applications

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20509158&lokasi=lokal>

Abstrak

Comprehensive in scope, this book covers the latest progresses of theories, technologies and applications of LEDs based on III-V semiconductor materials, such as basic material physics, key device issues (homoepitaxy and heteroepitaxy of the materials on different substrates, quantum efficiency and novel structures, and more), packaging, and system integration. The authors describe the latest developments of LEDs with spectra coverage from ultra-violet (UV) to the entire visible light wavelength. The major aspects of LEDs, such as material growth, chip structure, packaging, and reliability are covered, as well as emerging and novel applications beyond the general and conventional lightings. This book, written by leading authorities in the field, is indispensable reading for researchers and students working with semiconductors, optoelectronics, and optics.

- Addresses novel LED applications such as LEDs for healthcare and wellbeing, horticulture, and animal breeding;
- Editor and chapter authors are global leading experts from the scientific and industry communities, and their latest research findings and achievements are included;
- Foreword by Hiroshi Amano, one of the 2014 winners of the Nobel Prize in Physics for his work on light-emitting diodes.