DESCRIPTION

NOW UPDATED—THE HIGHLY PRACTICAL GUIDE TO ANALYZING LIQUID CRYSTAL DISPLAYS

The subject of liquid crystal displays has vigorously evolved into an exciting interdisciplinary field of research and development, involving optics, materials, and electronics. Updated to reflect recent advances, the Second Edition of Optics of Liquid Crystal Displays now offers a broader, more comprehensive discussion on the fundamentals of display systems and teaches readers how to analyze and design new components and subsystems for LCDs. New features of this edition include:

• Discussion of the dynamics of molecular reorientation

• Expanded information of the method of Poincaré sphere in various optical components, including achromatic wave plates and compensators

• Neutral and negative Biaxial thin films for compensators
Circular polarizers and anti-reflection coatings

- The introduction of wide field-of-view wave plates and filters

- Comprehensive coverage of VA-LCD and IPS-LCD

- Additional numerical examples

This updated edition is intended as a textbook for students in electrical engineering and applied physics, as well as a reference book for engineers and scientists working in the area of research and development of display technologies.

ABOUT THE AUTHOR

Pochi Yeh, PhD, is Professor in the Department of Electrical and Computer Engineering at University of California, Santa Barbara. He is known for several important contributions in optics, including the development of a matrix method for optics of layered media, the theory of photorefractive phase conjugators, and the theory of wave mixing in nonlinear media.

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NEW TO EDITION

Discussion of the dynamics of molecular reorientation
FEATUES

Presents a clear picture of the fundamental principles of LCDs

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