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Form Birefringence; 6.9 Order-Induced Birefringence; 6.10 Optical Properties of Liquid Crystals and Oriented Polymers
References
7 Practical Polarization Optics with the Microscope; 7.1 Introduction; 7.2 Microscope Characteristics; 7.3 Polarization Microscope; 7.4 Polarizers; 7.5 Polarization Colors; 7.6 Compensation and Retardation Measurement; 7.7 Conoscopy; 7.8 Local Polarization Mapping; References; 8 Optics of Liquid Crystal Textures; 8.1 Introduction; 8.2 Calculation of Liquid Crystal Director Distributions; 8.3 Optical Properties of Uniform Textures; 8.4 Optical Properties of Liquid Crystal Defects; 8.5 Surface Line Defects in Nematics; 8.6 Defects in Smectic Phases
8.7 Confined Nematic Liquid Crystals
8.8 Instabilities in Liquid Crystals; 8.9 Deformation of Liquid Crystal Directors by Fringing Fields; 8.10 Resolution Limit of Switchable Liquid Crystal Devices; 8.11 Switching in Layered Phases; References; 9 Refractive Birefringent Optics; 9.1 Birefringent Optical Elements; 9.2 Fabrication of Refractive Components; 9.3 Optical Properties of Modified Birefringent Components; 9.4 Liquid Crystal Phase Shifters; 9.5 Modal Control Elements; 9.6 Interferometers Based on Polarization Splitting; 9.7 Birefringent Microlenses
9.8 Electrically Switchable Microlenses

Sommario/riassunto

Polarized Light in Liquid Crystals and Polymers deals with the linear optics of birefringent materials, such as liquid crystals and polymers, and surveys light propagation in such media with special attention to applications. It is unique in treating light propagation in micro- and nanostructured birefringent optical elements, such as lenses and gratings composed of birefringent materials, as well as the spatial varying anisotropic structures often found in miniaturized liquid crystal devices.
