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Crystals

4.1 The Propagation of Polarized Light in Twisted Nematic Liquid Crystal Cells
4.2 The Various Types of TN Cells; 4.2.1 The regular TN cell; 4.2.2 The supertwisted nematic LC cell (STN-LCD); 4.2.3 The mixed mode twisted nematic cell (MTN cell); 4.2.4 Reflective TN cells;
4.3 Electronically Controlled Birefringence for the Generation of Colour;
5 Descriptions of Polarization; 5.1 The Characterizations of Polarization; 5.2 A Differential Equation for the Propagation of Polarized Light through Anisotropic Media; 5.3 Special Cases for Propagation of Light
5.3.1 Incidence of linearly polarized light
5.3.2 Incident light is circularly polarized;
6 Propagation of Light with an Arbitrary Incident Angle through Anisotropic Media; 6.1 Basic Equations for the Propagation of Light; 6.2 Enhancement of the Performance of LC Cells;
6.2.1 The degradation of picture quality; 6.2.2 Optical compensation foils for the enhancement of picture quality; 6.2.2.1 The enhancement of contrast; 6.2.2.2 Compensation foils for LC molecules with different optical axes; 6.2.3 Suppression of grey shade inversion and the preservation of grey shade stability
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6.4.3.3 PVA cells with two subpixels (CS-S-PVAs)

Sommario/riassunto

In this second edition of Liquid Crystal Displays, Ernst Lueder provides a timely update to his successful text. His unique combination of theory and practice presents all the information required for the development and manufacture of modern high performance and energy saving LCDs. The author also strives for an easy to understand description of complex facts. The second edition focuses on a variety of liquid crystal cells and their electronic addressing, and outlines new developments including: High performance VA cells, especially for TV, due to two subpixels with excell
