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Dual Cell Gaps; 2.4.2 Transflective LCDs Using Dual Gamma Curves; 2.4.3 Transflective LCDs Using Dual Electric Fields; 2.4.4 Transflective LCDs Using Dual Alignment; 2.5 Summary; Appendix 2.A; References; 3 Light Polarization and Wide Viewing Angle; 3.1 Poincaré Sphere for Light Polarization in LCDs; 3.2 Compensation of Linear Polarizers; 3.2.1 Deviation of the Effective Angle of Crossed Linear Polarizers; 3.2.2 Compensation of Linear Polarizers using Uniaxial Films 3.2.3 Compensation of Linear Polarizers using Biaxial Films 3.3 Compensation of Circular Polarizers; 3.3.1 Broadband and Wide-view Circular Polarizers; 3.3.2 Narrow-band and Wide-view Circular Polarizers; 3.4 Summary; References; 4 Wide-view Transflective LCDs; 4.1 Overview; 4.2 Transflective LCD Using MVA Mode; 4.2.1 MVA Technology Overview; 4.2.2 Mobile MVA Technology; 4.3 Transflective LCD Using IPS Mode; 4.3.1 IPS and FFS Technology Overview; 4.3.2 Transflective IPS and FFS Technology; 4.4 Summary; References; 5 Color Sequential Mobile LCDs; 5.1 Overview 5.2 Color Sequential Driving Schemes 5.3 Fast-response LC Modes; 5.3.1 Thin Cells with High Birefringence LC Material; 5.3.2 Bend Cells; 5.4 Fast-response Transflective LCDs; 5.4.1 Conventional Transflective LCDs Using OCB Modes; 5.4.2 Color Sequential Transflective LCDs; 5.5 Summary; References; 6 Technological Perspective; 6.1 Unique Role of Transflective LCDs; 6.2 Emerging Touch Panel Technology; 6.3 Summary; References; Index

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Sommario/riassunto

Sunlight readable transflective liquid crystal displays, used on devices from cell phones and portable media players, to GPS and even some desktop monitors, have become indispensable in our day-to-day lives. Transflective Liquid Crystal Displays is a methodical examination of this display technology, providing a useful reference to the fundamentals of the topic. Including thorough descriptions of the essential physics of transflective LCD technologies, the book also compares transflective LCD technology with alternatives, such as OLED displays, to enable display engineers to appropri

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