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Transmitted Light

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4.4.1.4 Xenon High-Pressure Arc Lamps4.4.1.5 Deuterium Lamps; 4.4.2 Optical Components; 4.4.2.1 Lenses and Mirrors; 4.4.2.2 Polarizers and Analyzers; 4.4.2.3 Optical Retarders; 4.4.3 Optical Fibers; 4.4.4 Miniaturized Spectrometers; 4.4.4.1 Gratings; 4.4.4.2 Detectors; 4.4.4.3 System Properties; 5 Thin-Film Thickness Determination; 5.1 Fast Fourier Transform; 5.1.1 Single Layer; 5.1.2 Layer Stack; 5.1.3 Accuracy, Resolution, Repeatability, and Reproducibility; 5.2 Regression Analysis with 2-Test; 5.2.1 Method of Thickness Determination
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7.4.2 Thickness of Transparent Plastic Films

Sommario/riassunto

A one-stop, concise guide on determining and measuring thin film thickness by optical methods. This practical book covers the laws of electromagnetic radiation and interaction of light with matter, as well as the theory and practice of thickness measurement, and modern applications. In so doing, it shows the capabilities and opportunities of optical thickness determination and discusses the strengths and weaknesses of measurement devices along with their evaluation methods. Following an introduction to the topic, Chapter 2 presents the basics of the propagation of light a