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4.1 General4.2 The Components; 4.3 Ellipsometer Component Configurations; 4.4 References; Chapter 5. Rotating Polarizer and Analyzer Ellipsometry; 5.1 Introduction; 5.2 Comparison of Ellipsometers; 5.3 Instrumentation Issues; 5.4 Data Reduction for the Rotating Polarizer and Analyzer Ellipsometers; 5.5 Precision Considerations; 5.6 Calibration Procedures; 5.7 Summary: Recent and Future Directions; 5.8 References; Chapter 6. Polarization Modulation Ellipsometry; 6.1 Introduction; 6.2 The Photoelastic Modulator (PEM); 6.3 Experimental Configurations of Polarization Modulation Ellipsometers; 6.4 Light Intensity Through a Polarization Modulation Ellipsometer6.5 Waveform Analysis; 6.6 Calibration Procedures; 6.7 Errors; 6.8 Further Reading and References; Chapter 7. Multichannel Ellipsometry; 7.1 Introduction; 7.2 Overview of Instrumentation; 7.3 Rotating-Element Designs; 7.4 Concluding Remarks; 7.5 References; Part 3: Critical Reviews of Some Applications; Chapter 8. SiO₂ Films; 8.1 Introduction; 8.2 Historical Perspective - Prior to 1970; 8.3 Modern Studies - Since 1970; 8.4 Conclusions; 8.5 References; Chapter 9. Theory and Application of Generalized Ellipsometry; 9.1 Introduction9.2 The Generalized Ellipsometry Concept; 9.3 Theory of Generalized Ellipsometry; 9.4 Special Generalized Ellipsometry Solutions; 9.5 Strategies in Generalized Ellipsometry; 9.6 Generalized Ellipsometry Applications; 9.7 Conclusions; 9.8 Further Reading and References; Part 4: Emerging Areas in Ellipsometry; Chapter 10. VUV Ellipsometry; 10.1 Introduction; 10.2 Historical Review of Short Wavelength Ellipsometry; 10.3 VUV Ellipsometry Today; 10.4 Importance of VUV Ellipsometry; 10.5 Survey of Applications; 10.6 Future of VUV Ellipsometry; 10.7 Acknowledgments; 10.8 References Chapter 11. Spectroscopic Infrared Ellipsometry

Sommario/riassunto

This second edition, edited by the world-renowned Dr. Rointain Bunshah, is an extensive update of the many improvements in deposition technologies, mechanisms, and applications. Considerably more material was added in Plasma Assisted Vapor Deposition processes, as well as Metallurgical Coating Applications.
