

Abstract Submitted  
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**Spectroscopic Ellipsometry And Variable-Angle XPS Scanning**

LIZ STREIN, AMY GRIGG, DAVID ALLRED, Brigham Young University — The extreme ultraviolet portion of the EM spectrum from 10-100 nm is becoming increasingly important in various technological applications. However, the optical constants in this region are not well known and need further determination. This is done by observing the interaction of EUV light with thin metallic films. It is essential that the composition and thickness of the film are well characterized in order to determine the optical constants. Depth profiling and angle resolved x-ray photoelectron spectroscopy (XPS) are used to characterize the composition of the films. The extent of oxidation at the surface of the films is of particular interest. Current research is focused on determining how spectroscopic ellipsometry and variable-angle XPS scans increase understanding of this oxidation.

Liz Strein  
Brigham Young University

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