

Abstract Submitted  
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**Oxidation of Hafnium as studied by X-ray Photoelectron Spectroscopy**<sup>1</sup> A. CHOURASIA, RICHARD MILLER, Texas A&M Univ-Commerce — Thin films of hafnium were deposited on stainless steel substrate at various temperatures in an oxygen atmosphere. The technique of X-ray photoelectron spectroscopy was used to study the oxidation of hafnium. The zirconium anode (energy = 2042.4 eV) was used as the source of excitation. The 3d core levels of hafnium (energy ~1660 eV) and the x-ray excited MNN Auger region of hafnium were investigated. The Auger parameter was determined from the core levels and the main peak in the Auger region. The data are correlated with the oxidation of hafnium as a function of the temperature. The thickness of the oxide films were determined by using the QUASES software. The dependence of the film thickness on the substrate temperature will be presented.

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