

Abstract Submitted  
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**Positron annihilation induced Auger electron spectroscopic studies of oxide surfaces**<sup>1</sup> MANORI NADESALINGAM, J.L. FRY, N. FAZLEEV, A.H. WEISS, Department of Physics, University of Texas at Arlington, TX 76019, USA — Defects on oxide surfaces are well known to play a key role in catalysis. TiO<sub>2</sub>, MgO, SiO<sub>2</sub> surfaces were investigated using Time-Of-Flight Positron induced Auger Electron Spectroscopy (TOF-PAES). Previous work in bulk materials has demonstrated that positrons are particularly sensitive to charged defects. In PAES energetic electron emission results from Auger transitions initiated by annihilation of core electrons with positrons trapped in an image-potential well at the surface. Annealed samples in O<sub>2</sub> environment show a strong Auger peak of Oxygen. The implication of these results will be discussed

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