

Abstract Submitted
for the MAR11 Meeting of
The American Physical Society

Study of the angular-dependence of the L-alpha and L-beta radiation produced by 0-15 keV photons incident on Au targets of various thicknesses SEBASTIAN REQUENA, SCOTT WILLIAMS, Angelo State University — We report the results of experiments involving the L-alpha and L-beta x-ray lines produced by 0-15 keV bremsstrahlung incident on gold targets of various thicknesses at forward-scattered angles ranging from 20 to 160 degrees. Previous reports [1, 2] have shown the L-beta peaks to be isotropic and the L-alpha peaks to be anisotropic due to the symmetry/asymmetry associated with the orbital being filled during the transition. The relative intensities are compared to the predictions of the Monte Carlo code, PENELOPE.

[1] K. S. Kahlon, et al., Phys. Rev. A 44, 7 (1991)

[2] L. Demir, et al., Radiat. Phys. And Chem., 59, 355-359 (2000)

Scott Williams
Angelo State University

Date submitted: 16 Nov 2010

Electronic form version 1.4