

Abstract Submitted
for the DAMOP09 Meeting of
The American Physical Society

K-x-ray emission in MeV/u O⁵⁺ on Ar collisions T. ELKAFRAWY, J.A. TANIS, Department of Physics, Western Michigan University, Kalamazoo, Michigan 49008, USA — K-X-ray emission has been investigated for 1.5 and 2 MeV/u O⁵⁺ on Ar collisions. Emission lines resulting from O-K α , Ar-K α and Ar-K β transitions have been observed. This work was done at Western Michigan University using the tandem Van de Graaff. For oxygen, the observed x rays may be attributed to K-shell excitation and in the case of Ar to excitation or ionization. The K-x-ray production cross sections have been determined taking into account the detector solid angle and detection efficiency, and are compared with related measurements from other investigators. Coincidence measurements are planned to investigate in detail the K-x-ray production mechanisms.

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Date submitted: 19 Feb 2009

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