

Abstract Submitted
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Single and multiple electron–impact ionization of Kr as a function of momentum transfer¹ OSCAR G. DE LUCIO, JARED GAVIN, ROBERT D. DUBOIS, University of Missouri-Rolla — Measurements of electron–impact ionization cross sections of Kr are being performed for an incident electron beam with energies between 100 eV and 500 eV, colliding with a Kr gas jet target. Scattered electrons are detected by means of a channeltron detector which can be positioned at angles ranging from 0 ° up to 60 ° with respect to the beam direction. An electrostatic spectrometer is used to determine the energy loss of the projectile. Ionized Kr is detected by a second channeltron detector. Signals coming from both detectors are measured in coincidence by means of a TDC. Producing time of flight spectra in which Kr^{1+,2+,3+} can be distinguished. A pulsed extraction field for detecting the Kr ions has been used in order to reduce the background. Ionization yields as a function of momentum transfer will be presented.

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