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Ionization Cross Sections for 10-25 keV Proton Impact on Helium[1] J. KANG, G.S. HODGES, J.D. THOMAS, T.J. KVALE, University of Toledo, D.G. SEELY, Albion College — Absolute ionization cross sections are obtained by the energy-loss spectra of helium for proton impact. Experimentally, the incident proton beam with kinetic energies of 10-25 keV was directed through a target cell containing helium gas at room temperature. The scattered proton beam was then energy analyzed to obtain energy-loss spectra. These spectra were then used to obtain absolute, differential (in energy), ionization cross sections. By integrating the differential cross sections, we also obtained absolute total ionization cross sections.

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