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ABSOLUTE VALUES OF THE INELASTIC e^-/Kr CROSS SECTIONS.

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Absolute integral cross sections (ICSs) for inelastic scattering of electrons by krypton atom have been determined from the inelastic differential cross sections (DCSs) measured in the energy range from 20 to 80 eV, and for scattering angles from 10° to 150° (D.Filipović, Book of Inv. Lect. and Prog. Rep., 14th SPIG, Sarajevo, 1988., to be published).

Absolute inelastic DCSs for the 9 lowest excited states of krypton (only $5p[3/2]_1$ and $5p[3/2]_2$ are unresolved in our experiment) have been obtained on the basis of normalized measured elastic DCSs and separately measured elastic-to-reference inelastic (state $5s[3/2]_1$) intensity ratios.

The intensities of the individual features with respect to the reference feature were determined by utilizing computer processing of the energy-loss spectra. We obtained the ICSs by extrapolation of the DCSs to 0° and 180° , and numerical integration. The overall errors are estimated to be within 45% for the $5s[3/2]_1$ state and within 60% for the others.

The maxima of our ICSs curves are, generally, shifted to higher energies with respect to the only available experimental results obtained by S.Trajmar, S.K.Srivastava, H.Tanaka, and H.Nishimura (Phys. Rev. A, 23 (1981) 2167).