**Electron impact K-shell ionization cross sections at various projectile energies** BIDHAN C. SAHA, Department of Physics, Florida A&M University, Tallahassee, FL 32307, ARUN K. BASAK, M. ALFAZ UDDIN, None, A.K.F. HAQUE, Department of Physics, University of Rajshahi, Rajshahi-6205, Bangladesh — Recently Cengiz [1] has reported the inelastic interactions of electrons in a medium with approximate expressions for evaluating the differential scattering due to distance and close interactions. For inner-shell ionization it is shown that the two interactions produce almost identical results and thus the total effect can be taken approximately twice the contribution from the distance interactions. This simple empirical formula of Ref. [1] (see Eq. 41) is modified by incorporating both the ionic and relativistic corrections for the electron impact ionization cross section (EI-ICS) and applied to evaluate the K-shell ionization cross sections of both neutral and ionic targets over wide ranges of incident energies.

[1] A. Cengiz, Rad. Phys. Chem. 65 (2002) 33.

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