Abstract Submitted for the APR07 Meeting of The American Physical Society

Electron Impact Inner-shell Ionization including relativistic corrections. BIDHAN C. SAHA, Florida A&M University, Tallahassee, FL-32307, M. ALFAZ UDDIN, University of Rajshahi, Rajshahi, Bangladesh, ARUN K. BASAK, Rajshahi University, Rajshahi, Bangladesh — We report a simple method to evaluate the electron impact inner-shell ionization cross sections at ultra high energy regime; there still remains a sparse cross sections due to lack of reliable method. To extend the validity domains of the siBED model [1] in terms of targets and incident energies in this work we modified the RQIBED model [2], and denoted it as MUIBED. It is examined for the description of the experimental EIICS data of various target atoms up to E=250MeV. Details will be presented at the meeting. [1] W. M. Huo, Phys. Rev A 64, 042719 (2001). [2] M. A. Uddin, A. K. F. Haque, M. S. Mahbub, K. R. Karim, A. K. Basak and B. C. Saha, Phys. Rev. A 71, 032715 (2005).

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