

Abstract Submitted
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Electron-impact ionization of the K-shells of Heavy Atoms¹ M. S. PINDZOLA, Department of Physics, Auburn University — Fully-relativistic subconfiguration-average distorted-wave (SCADW) calculations are made for the electron-impact ionization of the K-shells of heavy atoms. One set of calculations only include the two-body electrostatic interaction, while the other set includes the full two-body retarded electromagnetic interaction. The SCADW retarded electromagnetic calculations are found to be in good agreement with recent measurements made at the Institute for Physics at the University of Sao Paulo, Brazil [J. M. Fernandez-Varea et al., J. Phys. B 47, 155201 (2014)] for Au and Bi atoms. Calculations and measurements will also be presented for the K-shell ionization of the Ta atom.

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