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Elastic scattering of Electrons and Positrons by Cadmium Atom*) B. C. SAHA, Deoartment of Physics, Florida AM University, Tallahassee, FL-32307., A. K. F. HAQUE, Department of Physics, University of Rajshahi, Rajshahi-6205, Bangladesh, M. I. HOSSAIN, Deoartment of Physics, Florida AM University, Tallahassee, FL-32307., M. A. UDDIN, M. A. R. PATOARY, Department of Physics, University of Rajshahi, Rajshahi-6205, Bangladesh, M. MAAZA, Council for Scientific and Industrial Research, PO Box-395, Pretoria 0001, South Africa, A. K. BASAK, Department of Physics, University of Rajshahi, Rajshahi-6205, Bangladesh — The differential, integrated elastic, total and momentum transfer cross sections with Sherman functions for the elastic scattering of electrons and positrons by cadmium atom have been calculated. These calculations are done within the framework of complex electron/positron-atom optical potential and relativistic Dirac partial wave analysis at energies 6.4 to 1000 eV for both electrons and positrons impact. Our results are compared with available experimental and other theoretical cross section values. Details of our findings will be presented at the conference. *) BCSaha is thankful to NNSA for partial support.

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