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Elastic scattering of electrons and positrons by cadmium atom¹ B. C. SAHA, Department of Physics, Florida AM University, FL-32307, A. K. F. HAQUE, Department of Physics, University of Rajshahi, Rajshahi-6205, Bangladesh, M. MAAZA, Council for Scientific and Industrial Research, PO Box-395, Pretoria 0001,South Africa,, M. I. HOSSAIN, M. A. UDDIN, M. A. R. PA-TOARY, A. K. BASAK, Department of Physics, University of Rajshahi, Rajshahi-6205, Bangladesh — Using optical potential the differential, integrated total and momentum transfer cross sections for the elastic scattering of electrons and positrons by cadmium atom are calculated for E=6.4 eV to 1.0 keV. In addition to the static and polarization effects this optical potential includes exchange and absorption effects exclusively. Employing Dirac partial wave analysis these elastic cross sections are evaluated. Our results are presented along with a comparison with available experimental and some other theoretical findings.

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