Abstract

Theoretical results for positron and electron elastic scattering from beryllium atom at incident energies ranging from the first inelastic threshold to 200 eV are presented. Elastic, total, momentum transfer, and differential cross sections are computed using both the first order distorted wave Born approximation and the optical potential approaches utilizing a complex potential. We have shown that our data agree fairly well with the available data and provided the details of the Physics in case of discrepancies. This study demonstrates the importance of accurate atomic elastic scattering cross sections.