

OPTICAL POTENTIAL APPROACH
FOR LOW-ENERGY ELECTRON ELASTIC
FORWARD AND BACKWARD SCATTERING
BY Be, Mg, Ca, AND Yb ATOMS

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S u m m a r y

Elastic low-energy (below 2 eV) electron scattering by alkaline-earth atoms and rare-earth ytterbium atom to the energy-dependent intervals of angles of the forward and backward hemispheres is briefly considered. Energy dependences $S(E)$ that characterize scattering to the above intervals and are experimentally measured by using a hypocycloidal electron spectrometer are calculated. Using the 2P - (Be, Mg) and 2D - (Ca, Yb) shape resonances, as an example, their different influence on the function $S(E)$ is demonstrated. Graphical comparison of the theoretical values of $S(E)$ and the total elastic and differential cross sections is carried out.