ON THE EFFECTS OF NUCLEAR STRUCTURE AND THE COULOMB INTERACTION AT DIFFRACTION DEUTERON-NUCLEUS SCATTERING

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Within diffraction model framework it has been proposed the method of cross section calculation of deuteron-nucleus scattering at intermediate energies. The deuteron wave function was chosen as Hülten one, the Coulomb interaction and nuclear surface diffuseness of targets were taken into account. The calculating cross sections of 700 MeV deuteron elastic scattering from ⁴⁰Ca and ⁵⁸Ni satisfactorily fit the experimental data.