

INFLUENCE OF THE COULOMB INTERACTION  
AND NUCLEAR SURFACE DIFFUSENESS  
ON THE DIFFRACTION DEUTRON-NUCLEI  
ELASTIC SCATTERING

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S u m m a r y

We propose the method of removing a logarithmic divergence which appears in the deuteron-nuclei elastic scattering differential cross section when the Coulomb interaction is taken into account. The influence of the nuclear surface diffuseness and deuteron structure on cross sections is researched. The calculated cross section angular dependences for  $^{208}\text{Pb}$ ,  $^{68}\text{Zn}$  satisfactorily fit the experimental data for neighbourhoods of the first diffraction maximum and secondary maxima.