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ELASTIC SCATTERING OF DEUTERONS FROM ^{16}O IN THE $\alpha\text{-CLUSTER}$ MODEL WITH DISPERSION

On the basis of the α -cluster model with dispersion, multiple diffraction scattering theory and diffraction model the calculations of $d^{-16}O$ scattering observables at 700 MeV have been performed. The used approach could allow us to describe interaction of two-cluster incident particles with light α -cluster nuclei in the energy region $E \ge 100$ MeV/nucleon. It was shown that the calculated observables are in qualitative agreement with the existing experimental data.

Keywords: diffraction scattering theory, diffraction model, α -clusters, elastic scattering, d, ¹⁶O.