CONTRIBUTION OF DIRECT PROCESSES TO CROSS SECTIONS OF FAST NEUTRON SCATTERING BY COPPER NUCLEI

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S u m m a r y

Adaptability of the optical-statistical approach, based on the spherical optical model, excited core model, and modern versions of the statistical model, for description of the experimental data on neutron total and scattering cross sections for ^{63,65}Cu and Cu nuclei in the 0.5 – 15 MeV energy range is studied. It is shown that these experimental data can be adequately described in this approach by using the individual set of optical potential parameters only. The results of theoretical analysis are used for study of fast neutron interaction mechanisms with the nuclei under consideration.