



Study of the reaction based on the scattering of deuterons by a ${}^9\text{Be}$ nucleus at an energy of 23 MeV

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Introduction

An experiment on the scattering of 23 MeV deuterons by ${}^9\text{Be}$ nucleus was carried out (CIAE, Beijing). Differential scattering cross sections are obtained for the following states: g.s., 1.68 MeV, 2.43 MeV, 2.78 MeV, 3.05 MeV, 3.82 MeV, 4.70 MeV, 5.59 MeV, 6.38 MeV, 6.76 MeV and 7.94 MeV. The obtained data were analyzed using the distorted wave Born approximation (DWBA) and modified diffraction model (MDM).

