

TOTAL REACTION CROSS SECTIONS OF LIGHT NUCLEI MEASURED BY THE COMBAS FRAGMENT-SEPARATOR

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Preliminary results of measurements of the total reaction cross sections σ_R for ^3He , ^4He , ^6Li , ^7Be , ^8B , ^{10}B , ^{9-11}C , and ^{12}N nuclei at energy range (10–45) A MeV with ^{28}Si target is presented. The secondary beams of light nuclei were produced by bombardment of the ^{15}N (50 A MeV) primary beam on Be target and separated by COMBAS fragment-separator. In dispersive focal plane a horizontal slit defined the momentum acceptance as 1% and a wedge degrader of 600 μm Al was installed. The B_p of the second section of the fragment-separator was adjusted for measurements in energy about 25 A MeV. The strong absorption model reproduces the A-dependence of σ_R , but not the detailed structure. We are comparing our experimental data's with results of Glauber model and preliminary results are obtained.