TOTAL REACTION CROSS SECTIONS OF NEUTRON-RICH 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 weakly bound ^{4}He, ^{6}He, ^{8}He, ^{7}Li, ^{8}Li, ^{9}Li, ^{11}Li, ^{7}Be, ^{9}Be, ^{10}Be, ^{11}Be, ^{12}Be, ^{8}B, ^{10}B, ^{11}B and ^{12}B nuclei at energy range (10–45) *A*·MeV with ^{28}Si and ^{181}Ta target are 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 600 μm degrader of aluminium was installed. The B_ρ of the second section of the fragment-separator was adjusted for measurements in energy range 10÷45 *A*·MeV. The strong absorption model reproduces the *A*-dependence of σ_R, but not the detailed structure. We are comparing our experimental data with Glauber multiple scattering theory and preliminary results are obtained.