

Status of the Si-detector development for FAZIA

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A unit detector of the FAZIA (Forward-angle A and Z Identification Array) telescope consists of three layers with two silicon sensors and a CsI scintillator. The silicon sensors measure the energy loss of charged particles passing through or stopped in the detector. The FAZIA detector can distinguish charges up to $Z = 52$ and isotopes up to $Z = 25$ by using ΔE -E correlation and the pulse shape analysis (PSA). The Korean FAZIA group has developed silicon sensors with the thickness of about 750 and 115 μm , employing various configurations. The energy resolutions measured by using the Am-241 alpha radiation source can provide one of the criteria for adoption. In this presentation, the characteristics of the prototype FAZIA silicon chips, measured by using the Am-241 source, are presented.

Research field of your presentation

Experimental Low-energy nuclear physics

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