

Segmented HPGe Detector for Nuclear Reactions Research

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This work presents the results of a study of the new true coaxial high-purity germanium p-type detector with a segmented n+ region. One of the main features of the detector is flowing endcap, which is allow to place a source or target inside of the detector. Thanks to it and six-fold segmentation of the crystal, it is possible to determine the direction of individual photons emitted from the source or during a nuclear reaction between ion beam and a target inside the ionizing radiation source. At the same time the flowing endcap give's possibility to study not only $\gamma\gamma$, but also $\alpha\gamma\gamma$ - or $\beta\gamma\gamma$ - correlations, by the possibility to install the six-fold Si-detector inside of the HPGe detector.

The speaker is a student or young scientist

Yes

Section

1. Experimental and theoretical studies of nuclear reactions

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