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Characterization of three planar germanium detectors fabricated with the crystals grown at USD<sup>1</sup> HOSSAIN NAZIR, MIANLIANG HUANG, MUHAMMAD KHIZAR, DONGMING MEI, GUOJIAN WANG, HAO MEI, YU-TONG GUAN, University of South Dakota, UNIVERSITY OF SOUTH DAKOTA TEAM — We characterized the performance of planar germanium detectors developed in the University of South Dakota (USD). The planar detectors were made from high purity germanium crystals with amorphous germanium contacts. These detectors were developed possible for the neutrinoless double beta-decay measurements and dark matter search underground. They were tested in a temporary cryostat to investigate the depletion voltage, leakage current, efficiency and resolution using a  $^{60}$ Co  $\gamma$  ray source.

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