

Double-sided strip sensors for Limadou-CSES project

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Production of 60 AC-coupled double-sided silicon microstrip sensors, designed to equip the two layers of the HERD detector in the Limadou-CSES project, has been recently completed at FBK. The sensors, fabricated on 150 mm silicon wafers, have an overall size of 10.96 cm x 7.76 cm = 85.05 cm².

Sensor testing and quality control has been performed at INFN Trieste and TIFPA. After presenting an overview of the test procedures and results, the contribution will focus on the analysis of some characteristic defects, which were severely limiting the production yield. As a result of this study, a modification of the fabrication process has been proposed, leading to an increased yield.

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