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Influence of the semiconductor material quality on the reliability of active electronic components

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Abstract
The quality of semiconductor wafers is defined by some parameters (planeity, roughness, resistivity, etc.), but the crystallographic defects have the higher influence on the reliability of the future product, fabricated on the wafer. In this paper, the main types of crystallographic defects are presented, together with the possible failure risks.

Keywords: semiconductor, crystallographic defect, failure mechanism

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