

Effect of microscopic defects in n-type irradiated MCz silicon detectors: Impact on macroscopic parameters

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The resulting analysis techniques has been validated and calibrated by means of detailed comparison of the simulation with experimental measurements carried out on irradiated samples.

Summary

In order to study the effect of microscopic defects on macroscopic detector parameters, we have used synthesis T-CAD device simulator for four-level numerical modeling of radiation induced deep level traps using parameters obtained from experimental measurements.

The resulting analysis techniques has been validated and calibrated by means of detailed comparison of the simulation with experimental measurements carried out on irradiated samples.

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