

Defect investigation on n-type Schottky diodes based on 4H-SiC before and after irradiation with 6 MeV electrons

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We present the results of DLTS investigation of as-grown and radiation-induced defects in **n-type 4H-SiC Schottky diodes** irradiated with different fluences of **6 MeV electrons**. The only variable between the samples has been the irradiation fluence, varying from unirradiated state up to fluences as high as $6 \times 10^{14} \text{ e/cm}^2$. The DLTS spectra were analyzed and simulated to extract the defect parameters. The study also examined the annealing **behavior of defects up to 750 K** ($\sim 477^\circ\text{C}$).

The results are correlated with current literature and discussed in terms of **defect evolution, thermal stability and possible chemical identification**.

Type of presentation (in-person/online)

online presentation (zoom)

Type of presentation (I. scientific results or II. project proposal)

I. Presentation on scientific results

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