



Contribution ID: 285

Type: Oral Presentation

Laplace transform deep level transient spectroscopy on n-type gallium arsenide

Thursday, 6 July 2017 12:10 (20 minutes)

A review of the progress made on characterization of defects in n-GaAs using Laplace DLTS is presented. The technique offers up to an order of magnitude higher resolution than conventional DLTS. We explored the fine structure and annealing behavior of defects which would otherwise appear as single broad based peaks in conventional DLTS. Defects induced by several processes and incident irradiation from various radionuclides are presented. The information is vital for various opto-electronic applications of Gallium arsenide especially for space applications. EL2-like defects have great potential in the field of defect engineering.

Apply to be considered for a student award (Yes / No)?

Yes

Level for award (Hons, MSc, PhD, N/A)?

PhD

Main supervisor (name and email) and his / her institution

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Would you like to submit a short paper for the Conference Proceedings (Yes / No)?

Yes

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Session Classification: Physics of Condensed Matter and Materials 1

Track Classification: Track A - Division for Physics of Condensed Matter and Materials