Contribution ID: **63** Type: **Poster Presentations**

Low-Temperature Alpha-Particle Irradiation of Pd/4H-SiC Schottky barrier diodes

Tuesday, 5 May 2015 15:15 (1h 45m)

The effect of low-temperature alpha-particle irradiation on Pd/4H-SiC Schottky barrier diodes has been investigated. The motivation is to study the radiation damage of the sample after bombarded with 1.6 MeV a-particles [(He)ˆ(2+)] at 20 K and the annealing of the radiation-induced defects taking place with increasing in temperature. The of fluence alpha-particles amounted to 3 × (10)ˆ(13) (cm)ˆ(−2). Thermal admittance and photo-capacitance spectroscopy were employed to characterize the diodes. The shallow donors D1 and D2 were detected in the as-grown as well as in the a-bombarded samples. The defects TαAnn was stable to both irradiation and annealing at room temperature.

Are you currently a postgraduate student? (Yes/No)

Yes

At what level of studies are you currently? (Hons/MSc/PhD)

PhD

Please provide the name and email address of your supervisor.

Prof. Walter E. Meyer

Primary author: Mr OMOTOSO, Ezekiel (University of Pretoria)

Co-authors: Prof. AURET, Danie (University of Pretoria); Mr JANSE VAN RENSBURG, Johan (University of Pretoria); Dr SCHMIDT, Matthias (University of Pretoria); Dr MEYER, Walter (University of Pretoria)

Presenter: Mr OMOTOSO, Ezekiel (University of Pretoria)

Session Classification: Poster

Track Classification: SACPM