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## Heat treatment of 6H-Silicon Carbide implanted with palladium at room temperature

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### Abstract content (Max 300 words)

The Rutherford Backscattering Spectrometry (RBS) and Scanning Electron Microscopy (SEM) were used to investigate the effects of heat treatment of 6H-Silicon Carbide (6H-SiC) implanted with palladium (Pd) ions at a fluency of  $2 \times 10^{16}$  ions /cm<sup>2</sup> at room temperature. The implanted samples were then isochronally annealed for a period of 5 hour at a temperature range of 1000°C to 1400°C. The depth profile of the implanted samples before and after annealing was obtained using RBS. The microstructure and the topography of the samples were also investigated using the scanning electron microscopy (SEM) in order to investigate the effects of implanting the ions and annealing.

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

Yes

### Level for award (Hons, MSc, PhD)?

MSc

### 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)?

No

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**Session Classification:** Poster Session

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