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Formation of Cubic Boron Nitride Nanoparticles by Boron and Lithium Ion Implantation

The structural modification of polycrystalline hexagonal boron nitride implanted with boron and lithium ions at 150keV with various fluences were investigated. This was accomplished by analysis with Raman spectroscopy before and after implantation. Micro-Raman Spectrum showed evidence of implantation induced transformation to c-BN. The shifting of c-BN peak was explained using the phonon confinement model.

Primary author: Ms ARADI, Emily (University of the Witwatersrand)

Co-authors: Mr ERASMUS, Rudolph (University of the Witwaterstand); Prof. DERRY, Trevor (University of the Witwaterstand)

Presenter: Ms ARADI, Emily (University of the Witwatersrand)

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