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A new method for obtaining the mole fraction in Al_xGa_{1-x}N epilayers

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Abstract content
   (Max 300 words)

The properties of thin films of Al_xGa_{1-x}N are determined by the mole fraction of aluminium. It is thus of importance to determine this mole fraction in grown films. Various techniques to determine the mole fraction have been employed in the past, and some of these will be presented. Infrared reflectance measurements at near-normal incidence were obtained of thin films of Al_XGa_{1-X}N, grown on c-plane oriented sapphire substrates by Metal Organic Chemical Vapour Deposition. A shifting of a reflectance peak at ˜ 800 cm⁻¹ was observed, apparently dependent upon the aluminium mole fraction. Results will be presented and discussed, indicating that the mole fraction of aluminium can also be established from the shift in this particular reflectance peak.

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

Yes

Level for award
 (Hons, MSc,
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3rd

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

JAA Engelbrecht, Japie.Engelbrecht@nmmu.ac.za, NMMU

Would you like to <br> submit a short paper <br> for the Conference
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No

Primary author: Ms DEYZEL, Genevéve (Nelson Mandela Metropolitan University)

Co-author: Prof. ENGELBRECHT, Japie (NMMU)

Presenter: Ms DEYZEL, Genevéve (Nelson Mandela Metropolitan University)

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