



Contribution ID: 97

Type: Poster Presentation

XRD and AFM studies of graphene and single-walled carbon nano tube

Tuesday, 30 June 2015 16:10 (1h 50m)

Abstract content
 (Max 300 words)
 http://events.saip.org.za/getFile.py/?target=_blank
 Formatting & Special chars

Graphene and single-walled carbon nanotubes were studied using X-ray diffraction (XRD) and atomic force microscopy (AFM). The lattice constants for both materials were determined and agree well with our computational calculation results. When preparing carbon nanotubes for AFM characterization, three solvents chloroform, toluene and ethanol were used. Chloroform was found to be the best solvent. The diameter of single-walled carbon nanotubes were determined and agree well with literature.

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

No

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

MSC

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

Thuto Mosuang, thuto.mosuang@ul.ac

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

yes

Please indicate whether this abstract may be published online (Yes / No)

yes

Primary authors: Prof. RAMMUTLA, Erasmus (university of limpopo); Ms SHAI, Moshibudi (University of limpopo)

Co-author: Dr MOSUANG, Thuto (university of limpopo)

Presenter: Ms SHAI, Moshibudi (University of limpopo)

Session Classification: Poster1

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