Contribution ID: **66** Type: **Presentation**

Elemental composition analysis, morphological, and photoluminescence properties of pulsed laser ablated SrAl2O4:Eu2+,Dy3+ thin films

Abstract: SrAl2O4:Eu2+,Dy3+ films ablated in different deposition atmospheres were characterized by Auger electron spectroscopy (AES), scanning electron microscopy (SEM), atomic force microscopy (AFM), and fluorescence spectrophotometer. Superior photoluminescence properties were recorded by films deposited in the different gas atmospheres. Surface morphology played a major role in the luminescent properties of the thin films. Electron degradation during prolonged electron bombardment was also monitored.

Primary author: Mr NSIMAMA, Patrick (The university of the Free State)

Co-authors: Prof. SWART, Hendrik (The University of the Free State); Prof. NTWAEABORWA, Martin (The University of the Free State)

Presenter: Mr NSIMAMA, Patrick (The university of the Free State)

Track Classification: Track A - Condensed Matter Physics and Material Science