



Contribution ID: 435

Type: Poster Presentation

Synthesis of vanadium oxide (V_xO_y) using CO₂ Laser Pyrolysis

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

**Abstract content
 (Max 300 words)
Formatting &
Special chars**

We make use of CO₂ Laser Pyrolysis to deposit vanadium oxide on Corning glass using several concentration of precursors. The effect of precursors concentration on the vanadium oxide phases and crystallization has been investigated using XRD, Raman spectroscopy, AFM and SEM. We observed that as the precursor concentration varies the crystallization and the vanadium oxide phases vary as well. Vanadium pentoxide (V₂O₅) nano-rods and nano-stars like structure were produced after the vanadium oxide films were annealed in atmospheric pressure of Argon at 500oC.

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

No

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

N/A

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

N/A

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

NO

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

No

Primary author: Ms MASINA, Bathusile (CSIR-NLC)

Co-author: Prof. FORBES, Andrew (CSIR-NLC)

Presenter: Ms MASINA, Bathusile (CSIR-NLC)

Session Classification: Poster1

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