



# SACPM2015

## Tuesday 05 May 2015

**Poster: Poster Session 1 (15:15-17:00)**

[id] title	presenter	board
[43] TOF SIMS Analysis, Structure and Photoluminescence Properties of Pulsed Laser Deposited CaS:Eu <sup>2+</sup> thin films	Mr NYENGE, Raphael	
[63] Low-Temperature Alpha-Particle Irradiation of Pd/4H-SiC Schottky barrier diodes	Mr OMOTOSO, Ezekiel	
[67] Synthesis and characterisation of copper sulphide quantum dots for photovoltaic cell applications	Ms BRANDT, Leandre'	
[82] The influence of oxygen partial pressure on material properties of Eu <sup>3+</sup> -doped Y <sub>2</sub> O <sub>3</sub> thin films deposited by Pulsed Laser Deposition method.	Mr ALI, ABDUB	
[84] Wavelength-modulated photocurrent spectroscopy of GaSb/GaAs quantum ring solar cells	Mr HASINJATOVO MANDANIRINA, Nambinintsoa Romeoh	
[24] Self-Assembled Nanotubular Mesoporous Layered Double Hydroxides with Tunable Photoluminescence	Dr MUSTAFA, Danilo	
[20] Spectroscopic properties of Pr <sup>3+</sup> ions embedded in lithium borate glasses	Dr RAMTEKE, Durgaprasad	
[47] The effect of the Optical System on the Electrical Performance of III-V Concentrator Triple Junction Solar Cells	Prof. VAN DYK, Ernest	
[44] Advances in phosphors based on purely organic materials for solid state lighting applications	Dr SHARMA, Kashma	
[28] Effect of doping concentration on the conductivity and optical properties of p-type ZnO thin films	Mr PATHAK, Trilok Dr KUMAR, Vinod	
[29] Ab initio studies of Split<110> and Tetrahedral Di-interstitials of Germanium (Ge) using Hybrid functional HSE06	Mr IGUMBOR, Emmanuel	
[7] Structural and luminescence properties of SrAl <sub>2</sub> O <sub>4</sub> :Eu <sup>2+</sup> , Dy <sup>3+</sup> /Nd <sup>3+</sup> phosphor thin films grown by pulsed laser deposition	Mr WAKO, ALI HALAKE	
[9] Influence of varying Cr <sup>3+</sup> mol% in MgAl <sub>2</sub> O <sub>4</sub> :0.1% Eu <sup>3+</sup> , x% Cr <sup>3+</sup> nanophosphor synthesized by sol-gel process	Mr MOTLOUNG, Setumo Victor	
[52] The effect of high temperatures on the electrical characteristics of Au/n-GaAs Schottky diodes	Mr TUNHUMA, Shandirai	
[11] The effect of urea ratio on structural and luminescence properties of YVO <sub>4</sub> :Dy phosphor	Mrs FOKA, Kewele Emily	
[15] Analysis of temperature-dependent current-voltage characteristics and extraction of series resistance in Pd/ZnO Schottky diode	Mr MAYIMELE, Meehleketo Advice	
[95] The Synthesis and Characterization of Magnetic/ Luminescent Fe <sub>3</sub> O <sub>4</sub> -InP/ZnSe Core-Shell Nanocomposite	Ms PAULSEN, Zuraan	
[91] Structure and optical properties of undoped and Mn-doped ZnO(1-x)S <sub>x</sub> nano powders prepared by precipitation method	Mr KOAO, Lehlohonolo	

<b>[13] Effects of the copper content on the structural and electrical properties of Cu<sub>2</sub>ZnSnSe<sub>4</sub> bulks used in thin-film solar cells</b>	Dr YIHUNIE, Moges Tsega	
<b>[89] Magneto-optical investigation of the cyclic redox R<sub>2</sub>O<sub>2</sub>S ↔ R<sub>2</sub>O<sub>2</sub>SO<sub>4</sub> (R: Eu, Tb) reactions</b>	Prof. HÖLSÄ, Jorma	
<b>[32] Preparation of ZnO nanorods and their gas sensing properties</b>	Ms SHINGANGE, Katekani	
<b>[50] Characterization of TiO<sub>2</sub> nanostructures prepared by microwave method for gas sensing</b>	Ms TSHABALALA, zamaswazi portia	

# Wednesday 06 May 2015

## Poster: Poster Session 2 (13:30-15:00)

[id] title	presenter	board
[58] Systematic Study of Up-Conversion Luminescence in NaYF <sub>4</sub> :Yb <sup>3+</sup> ,R <sup>3+</sup>	Mr LAIHINEN, Tero	
[56] Rare earth doped lanthanum strontium borate (La <sub>2</sub> Sr <sub>3</sub> (BO <sub>3</sub> ) <sub>4</sub> : xTb <sup>3+</sup> ) polycrystalline green phosphors	Ms MADIHLABA, Roz	
[35] A study of the interface kinetics affecting cylindrical phase separation in PS-b-PMMA copolymer thin films	Dr URGESSA, Zelalem N.	
[87] Interplay between phase transitions and thermoluminescence in BaAl <sub>2</sub> O <sub>4</sub>	Prof. HÖLSÄ, Jorma	
[27] Electrical Characterisation of Electron Beam Exposure Induced Defects in Silicon	Ms DANGA, Helga	
[21] Zn <sub>2</sub> SiO <sub>4</sub> :Mn <sup>2+</sup> co-doped with Tm <sup>3+</sup> and other Re ions (Re = Rare-earth): Synthesis, Structure and Optical Properties	Dr MBULE, Pontsho	
[23] n-WO <sub>3</sub> /p-Si tandem layer solar cells as new candidates on the Shockley-Queisser chart of photovoltaic efficiency	Mr MPANZA, Funda	
[46] The influence of reaction times on structural, optical and luminescence properties of CdTe nanoparticles prepared by wet-chemical process.	Ms KIPROTICH, Sharon	
[40] An Ab-initio Study into possible metastability of the Antimony-vacancy (Sb - V) complex in Germanium.	Mr WEBB, Geoffrey	
[68] AZO as a transparent conductive oxide for inversion-layer silicon solar cells	Mr NAMBALA, Fred Joe	
[39] Microwave assisted synthesis of ZnO nanoparticles for lighting and dye removal application	Dr KUMAR, Vijay	
[74] Analysis of deep level emission bands in solution grown ZnO nanorods	Mr MBULANGA, Crispin Mnyelele	
[72] Pd doped ZnO nanostructures: Structural, luminescence and gas sensing properties	Dr MHLONGO, Gugu	
[94] Effect of solvent medium on the material properties of ZnO nanoparticles synthesized by sol-gel method.	Mr UNGULA, Jatani	
[10] Luminescence properties of CaO:Bi <sup>3+</sup> phosphor	Dr MOHMED, Abdelrhman	
[59] Chemical and electrical characteristics of annealed Ni/Ir/Au and Ni/Au contacts on AlGaN	Mr NGOEPE, Phuti	
[48] Synthesis and characterization of structural and luminescence properties of TiO <sub>2</sub> nanoparticles for water treatment application	Prof. DEJENE, Francis	
[57] Surface morphology and structural properties of iron oxide thin film photoanode prepared by dip coating: effect of electrochemical oxidation	Ms KELEBOGILE, Maabong	
[34] Electrical characteristics of a nearly ideal Ni/4H-SiC interface studied by I-V-T and Admittance techniques	Mr LEGODI, Matshisa	
[19] Interaction mechanism for energy transfer from Ce to Tb ions in silica	Dr KROON, Ted	
[31] Synthesis and Characterization of a Novel Rare-Earth Oxyorthosilicates (R <sub>2</sub> SiO <sub>5</sub> ) (R = La, Gd, Y) Doped Dy <sup>3+</sup> Nanophosphors	Mr OGUGUA, Simon. N	

**Poster: Poster Session 2 Continued (15:20-16:00)**