



## SAIP2013

Tuesday 09 July 2013

**Poster1 (17:40-18:40)**

[id] title	presenter	board
[272] Tuneable Gaussian to Flat-top resonator by amplitude beam shaping	Mr NGCOBO, Sandile	
[273] Electrical and magnetic properties of NdAuGe compound	Mr BASHIR, Aiman	
[525] Magnetic properties of Sn <sub>0.2</sub> Cr <sub>1.8-x</sub> Fe <sub>x</sub> O <sub>4</sub> nanooxides.	Mr MBELA, Kalengay	
[528] Synthesis and characterization of tin oxide nanostructures for gas sensing applications	Mr THABETHE, Bongani	
[191] Influence of magnetic field on the transition temperature of the (Cr <sub>84</sub> Re <sub>16</sub> ) <sub>89.6</sub> V <sub>10.4</sub> alloy	Mrs JACOBS, Bincy Susan	
[445] Raman spectroscopy of biological and chemical samples	Dr NEETHLING, Pieter	
[346] Thermal stability studies on Palladium Schottky contacts on n- Si (111) and the defects introduced during fabrication and annealing processes.	Ms DANGA, Helga	
[349] Effects of Combinational Doping on the Phase Transformation of Nano Titanium Dioxide	Mr NUBI, Olatunbosun Nubi	
[298] Sn and Sb segregation in single and polycrystalline Cu	Dr ASANTE, Joseph	
[293] Effect of annealing on undoped and Ce, Dy, Eu, Ni-doped ZnO properties synthesized by sol-gel method using zinc acetate and sodium hydroxide in aqueous ethanol solution.	Mr UNGULA, Jatani	
[290] Molecular dynamics simulations of Ti and Y impurities in tin-dioxide (SnO <sub>2</sub> )	Dr MOSUANG, Thuto	
[108] Structural and electronic properties of chalcopyrite AlAgX <sub>2</sub> and AlCuX <sub>2</sub> (X= S, Se, Te)	Mr DONGHO NGUIMDO, Guy Moise	
[100] Magnetic properties of Cr/Cr <sub>99.65</sub> Ru <sub>0.35</sub> hetero-structures	Mrs JACOBS, Susan	
[105] Structural and electronic properties of transition metal chalcogenides (MoS <sub>2</sub> , Mo <sub>2</sub> S <sub>4</sub> , and Mo <sub>6</sub> S <sub>8</sub> )	Mr ONDZIBOU, Ninon Gildas	
[439] Comparative analysis of fabricated Titanium Schottky diodes on silicon and gold doped silicon	Mr NAMBALA, Fred Joe	
[95] Synthesis and characterization of magnetron sputter deposited Ge-nanowires.	Mr THETHWAYO, Charles Thulani Mr NYAWO, Thembinkosi	
[94] Luminescent properties of Ca <sub>5</sub> (PO <sub>4</sub> ) <sub>3</sub> OH:Gd <sup>3+</sup> , Pr <sup>3+</sup> phosphor powder	Ms MOKOENA, Puseletso	
[97] Growth and characterization of carbon nanotubes on ZrN thin film surfaces	Prof. NDWANDWE, Muzi Mr NYAWO, Thembinkosi	
[559] Synthesis and characterization of luminescence properties of CaAl <sub>2</sub> O <sub>4</sub> :Eu <sup>2+</sup> , Tm <sup>3+</sup> phosphors powder	Prof. DHLAMINI, Mokhotjwa Simon	
[558] Sol-gel synthesis and characterization of terbium ion doped zinc oxide nanoparticles	Mr KABONGO, Guy Leba	

[556] Annihilation of Positrons with High Momentum states in Lithium Flouride using Local Density Approximation and Generalized Gradient Approximation	Mr JILI, Thulani	
[552] One step synthesis and characterization of Indium Monoselenide nanoparticles for photovoltaic application	Ms AIRO, Mildred	
[233] Static electrical characteristics of silicon diodes at different temperatures: For radiation-hard detectors.	Dr MOLOI, Sabata	
[144] Quantum entanglement with a Hermite-Gaussian pump	Ms MCLAREN, Melanie	
[140] Production and characterisation of silicon nanoparticles for printed electronics	Mr UNUIGBE, David	
[132] Analysis of electron diffraction patterns in DCNQI salts	Mr OLAOYE, Olufemi Opeyemi	
[26] Theoretical Study of Positron States in Barium Flouride using Independent Particle Model and Generalized Gradient Approximation	Mr JILI, Thulani	
[88] Synthesis and Characterization of white light emitting $\text{Sr}_2\text{SiO}_4:\text{Tb}^{3+},\text{Eu}^{3+}$ phosphor	Ms TSHABALALA, Modiehi Amelia	
[89] Raman Spectral Analysis of Organometallic Composite Film Synthesized by Electrochemical Route	Dr KUMAR, Vijay	
[81] Azimuthal beam superpositions with intra-cavity rings	Mr NAIDOO, Darryl	
[87] Effect of different annealing times on the structure of $\text{Y}_3(\text{Al,Ga})_5\text{O}_{12}:\text{Tb}$ thin film grown by PLD	Mr YOUSIF, A.	
[246] Spin-dependent electronic properties of random layered semiconductor systems	Mr MPSHE, Kagiso	
[241] A Theoretical Investigation of the Structural, Electronic and Phase transition of Molybdenum Selenide compounds	Mr ABDULSALAM, Mahmud	
[510] Thermodynamic, structural, electronic and mechanical stability study of olivine $\text{LiMPO}_4$ (M: Mn, Fe, Co)	Mr LETHOLE, NDANDULENI LESLEY	
[450] A reflection setup for Terahertz time-domain spectroscopy	Mr SMITH, Shane	
[452] Modelling and simulation of a Distributed Feedback Erbium Ytterbium doped fiber laser	Mr MPOYO, Justice Sompo	
[175] Evaporation models for segregation	Mr CRONJE, Shaun	
[174] Synthesis and characterization of ZnO nanoparticles	Dr GONFA, Girma Goro	
[182] Characterization of epitaxial Cr thin films	Mr FERNANDO, P R	
[180] Control of Magnetism near Metal to Insulator Transitions of $\text{VO}_2$	Mr NKOSI, Steven	
[2] Study of Nanomaterials under High Pressure	Mr MORUTI, Kao Mr MOLEKO, Nkuebe Dr TLALI, Spirit	
[187] Electrospun polyethylene oxide nanocomposite fibers reinforced with $\text{VO}_2$ nanoparticles: Fabrication and optical analysis	Ms SIMO, Aline	
[189] Development of Durban LIDAR system for aerosol and temperature measurements in the neutral atmosphere	Dr MBATHA, Nkanyiso	
[15] Encoding mutually unbiased bases in orbital angular momentum for quantum key distribution	Dr DUDLEY, Angela	
[17] On the metastability of the C center in Silicon: An ab initio study	Mr OUMA, Cecil	
[322] Synthesis, structural and magnetic properties of $\text{Mn}_x\text{Ni}_{1-x}\text{Fe}_2\text{O}_4$ nanoferrites	Dr ABDALLAH, Hafiz M I	

[326] Synthesis and magnetic characterizations of $Mn_xFe_{3-x}O_4$ nanoferrites	Dr ABDALLAH, Hafiz M I	
[71] Luminescent properties of $Y_2O_3:Bi^{3+}$	Mrs MOHAMMED JAFER BAKEET, Rasha	
[543] Synthesis and magnetic properties of $Mg_{1-x}Zn_xFe_2O_4$ nanoferrites	Dr MOYO, Thomas	
[544] First-Principles Study of Thermodynamic and Dynamic Stability of Ru-Cr Alloys	Dr TIBANE, Malebo	
[545] Structural studies of Y and Zr doped nano-crystalline tin oxide using EXAFS and Raman Scattering techniques.	Prof. RAMMUTLA, Erasmus Koena	
[548] Optical delivery of anti-HIV-1 drugs into CD <sup>+</sup> cells through a diffraction limited femtosecond laser beam spot	Ms BOITUMELO, Mokae	
[571] Effect of the alpha particle charge state and energy on irradiation induced deep level defects in ZnO	Dr MTANGI, Wilbert	
[570] Electrical characterization of 5.4 MeV alpha-particle irradiated 4H-SiC with low doping density	Mr PARADZAH, Alexander	
[575] Luminescence properties of blue-red emitting $SrAl_xO_y:1$ percent $Eu^{2+}$ , x percent $Cr^{3+}$ phosphors prepared using sol-gel method	Ms TEBELE, Angelina Seithati	
[64] Thermodynamic stability of VO <sub>2</sub> in contact with thin metal films	Ms THABEZHE, Nokwethemba Fortunate	
[250] Efficient Ho:YLF laser pumped by a Tm: fiber laser	Mr KOEN, Wayne	
[506] Computational studies of the bulk cobalt pentlandite ( $Co_9S_8$ ): Validation of the potential model.	Dr MEHLAPE, Mofuti	
[464] Surface Brillouin scattering characterization of Diamond-like carbon thin films on silicon substrate	Mr MBIOMBI, Wilfred	
[466] Thermoluminescence study of beta -irradiated $SrAl_2O_4:Eu^{2+}, Dy^{3+}$ phosphors.	Mr WAKO, ALI	
[462] Design and evaluation of a low-cost photovoltaic system with semi-diffuse structured Aluminium reflectors	Mr SIMFUKWE, Joseph	
[357] Microstructural Characterization of Sub-micron Copper Powder Consolidated by Spark plasma sintering for Heat Sink.	Dr ASANTE, Joseph	
[212] Effect of Ag nanoparticles on the luminescence of Tb doped sol-gel silica	Mr ABBASS, Abd Ellateef	
[211] Blue luminescence from Bi doped $MgAl_2O_4$ prepared by the combustion method	Mr TABAZA, Wael	
[289] The determination of critical behavior of ferromagnetic CeCuGe using magnetocaloric effect	Ms SONDEZI, Buyi	
[282] The elastic properties and the phonon dispersions of TiPtCo shape memory alloy using the supercell approach	Ms MAHLANGU, Rosinah	
[287] Mathematical model for interferometric noise in a Raman distributed fiber sensor	Ms SHIMAPONDA, Mulundumina	
[286] Synthesis and Characterization of $CaB_xO_y:Eu^{3+}$ nano-phosphors prepared using Solution - Combustion Method	Mr SITHOLE, THOKOZANE MOSES	
[261] Modal decomposition of Bessel-Gaussian beams	Ms MHLANGA, Thandeka	
[54] Effects of different $TiO_2$ phases on the luminescence of $CaTiO_3:Pr^{3+}$	Mr NOTO, Luyanda Lunga	
[57] Luminescent properties of $Pr^{3+}$ doped $SrF_2$ at different synthesis	Mr YAGOUB, MYA	

[56] Competitive Growth Texture of Pulse Laser Deposited VO <sub>2</sub> Nanostructures on Glass Substrate	Mr MADIBA, itani given	
[538] A circular current's duo Cartesian magnetic dipolar model and limitations on fields as spatial derivatives of potentials	Dr CHIRWA, Max	
[110] Experimental Setup in Cold Atom Experiment	Mr DLAMINI, Sanele	
[113] Effect of zinc acetate concentrations on the structure, morphology and optical properties of ZnO nanoflakes synthesized by chemical bath deposition method	Dr DOLO, JAPPIE	
[303] Plasma dynamics and species emission study of vanadium (IV) oxide (VO <sub>2</sub> ) in oxygen background	Ms MASINA, Bathusile	
[561] Magnetic Symmetry for Hexagonal Manganite RMO <sub>3</sub>	Dr MACHATINE, Augusto Mr NIYONGABO, Prime	
[226] Energy transfer and photoluminescence properties of Ce <sup>3+</sup> and/or Tb <sup>3+</sup> -doped PbS nanorods.	Prof. DEJENE, Francis	
[223] Luminescent properties of Dy <sup>3+</sup> , Eu <sup>3+</sup> , Tb <sup>3+</sup> and Sm <sup>3+</sup> doped barium borate phosphors synthesized by solution combustion process.	Prof. DEJENE, Francis	
[221] Dependence of central spot size, propagation distance, and number of rings of a Bessel beam on the axicon's apex angle.	Ms RATSIBI, Edzani	
[154] Effect of synthesis temperature on the structure, morphology and optical properties of PbS nanoparticles prepared by chemical bath deposition method	Mr KOAO, Lehlohonolo	
[112] YVO <sub>4</sub> :Eu <sup>3+</sup> thin films prepared by PLD	Ms FOKA, Kewele Emily	
[44] Effects of Cr <sup>3+</sup> ions concentration in Cr-doped ZnAl <sub>2</sub> O <sub>4</sub> nanocrystals synthesized using sol-gel process	Mr MOTLOUNG, Setumo Victor	
[42] Assessment of Neutron-Irradiated 3C-SiC	Prof. ENGELBRECHT, Japie	
[5] Room Temperature and High Temperature Ion Implantation of Cadmium (Cd) in Glassy Carbon: Diffusion behaviour and Raman Analysis.	Mr SEBITLA, LESOLLE	
[484] SSC-DFTB parameterization of Pd and TiO <sub>2</sub> systems	Ms CHUMA, Moyahabo Hellen	
[482] computer modelling studies of pressure dependence on cobalt pentlandite mineral	Ms MPHAHLELE, Mallasaitiwa	
[475] Photoluminescence properties of rare-earths and manganese doped strontium aluminate phosphors prepared by combustion method.	Mr MMAKGABO, Manaka	