

SAIP 2011

Wednesday 13 July 2011

Poster1: CMPMS - Asteria (17:00-19:00)

-Conveners: JAPIE ENGELBRECHT

title	presenter	bo d
Computational modelling study of PtAs ₂ and PtAsS structures	Ms MAKGAI, Dinah	
Structure-property relationship of sol-gel synthesised zinc-oxide nanoparticles	Ms PETERSON, Natasha Venita	
Cathodoluminescence and energy transfer between Er ³⁺ , Tm ³⁺ and Ho ³⁺ rare earth ions in SiO ₂ nanoparticles	Dr DHLAMINI, Simon	
Ab initio thermodynamic and elastic properties of Pt-Cr binary alloys	Mrs TIBANE, Malebo	
Critical behaviour near magnetic phase transition in CeCuGe	Ms SONDEZI-MHLUNGU, Buyi	
Computational study of the effect of polydimethylsiloxane (PDMS) side chain size and spacing on the wettability of the polyethylene oxide (PEO).	Mr KUBAI, Thomas	
Low temperature synthesis and characterization of ZnO nanoparticles using Polyvinylpyrrolidone (PVP)	Ms TSHABALALA, Modiehi Amelia	
The Surface Orientation Dependence of the Pre-Exponential Factors Extracted from the Segregation Profiles of a Cu(111/110) Bi-crystal	Mr JAFTA, Charl	
Electrical Resistivity and magnetic properties of (Ce _{1-x} Tbx)Pt ₂ Si ₂ (0 ≤ x ≤ 1)	Mr MAHLUBI, zwelithini	
Synthesis and photoluminescence studies of (Sr _{1-x} Al ₂ O ₄):Eu ²⁺ ;Nd ³⁺ prepared by combustion method	Ms LEPHOTO, Mantwa Annah	
Magnetic behavior of the Cr-Al alloys system round the triple point concentration	Prof. PRINSLOO, Aletta	
Effect of pH on the morphology and orientation of Fe ₂ O ₃ nanostructures grown using aqueous chemical growth	Mr NDLANGAMANDLA, Cebo	
Effect of growth rate and ZnO buffer layer on the structural and optical properties of MOCVD-grown Zn _{1-x} O thin films	Mr TALLA, Kharouna	
The solid-state interaction of palladium on 6H-SiC	Ms KABINI, Jeaneth Thokozile	
XPS analysis and luminescence properties of commercially Gd ₂ O ₃ :Tb powder phosphor	Dr DOLO, JAPPIE	
Low-lying magnetism in heavy-fermion CeRh ₂ Sn ₂	Prof. STRYDOM, Andre	
Computational study of hematite(Fe ₂ O ₃) and magnetite(Fe ₃ O ₄) structures	Mr MKHONTO, peace prince	
The annealing effects on Pt-Mo coating morphology	Mr KHUMALO, Zakhelumuzi	
Exploratory investigation of spin density wave behaviour of a (Cr ₈₆) ₁₄ (V _y) _{100-y} alloy system	Mrs JACOBS, Bincy Susan	
Effect of annealing on the Ce ³⁺ /Ce ⁴⁺ ratio measured by XPS in luminescent SiO ₂ :Ce	Mr SEED AHMED, Hassan	
Oxygen adsorption on (110) surfaces of Pyrolusite MnO ₂ and Anatase TiO ₂	Ms MAENETJA, khomotso	

] Computational study of some tin dioxide phases	Mr NTIMANE, NDUMA
] Deposition, Optical and Electrical Characterization of Silicon Carbide Thin Films for Solar Cell Applications	Mr MKHWANAZI, Sihle
] Deposition and structural properties of Silicon Carbide thin films for solar cells applications	Mr KHOELE, Joshua
] Electrical characterization of irradiated n-GaN	Mr MORONGWA, Maisela
] Synthesis and Characterization of $Y_2O_3:S:Eu$ Nanophosphors Using combustion Method	Mr ALI, Ali Abdub Guyo
] Synthesis and photoluminescence properties of $CaxSiyOz:Tb^{3+}$ nanophosphors prepared using combustion method.	Prof. DEJENE, Francis
] Computer simulation of cobalt pentlandite	Mr MEHLAPE, Mofuti
Reactive DC magnetron sputter deposition and characterization of ZrN thin films	Mr NYAWO, Thembinkosi Goodman
Heat treatment of glassy carbon implanted with strontium at room and high temperatures	Mr LANGA, Dolly
] Low-temperature magnetic ordering in $Ce_6Pd_{12}In_5$	Prof. STRYDOM, Andre
] Low Temperature Synthesis of ZnO nanoparticles and Nanorods via Wet Chemistry Route	Ms MBULE, Pontsho Sylvia
] AES and XRD study of In/Cu thin films deposited onto SiO_2 by electron beam evaporation	Mr MADITO, Moshawe
] Ion sputtering yield coefficients from In thin films bombarded by different energy Ar^{+}	Mr MADITO, Moshawe
] Crystalline Electric Field Effects in $PrNiGe_2$	Mr SNYMAN, Jasper Snyman
Defects and Reconstructions in Electron Beam Irradiated Graphene Sheets	Mr FABIANE, Mopeli
] The Magnetocaloric Effect in CeAuGe: Scaling Behaviour in the Vicinity of a Ferromagnetic Phase Transition	Mr SNYMAN, Jasper Snyman
Synthesis & Characterization of Porphyrin Nanotubes/Rods for Solar Radiation Harvesting and Solar Cells	Ms MONGWAKETSI, nametso
The synthesis and characterization of tin oxide SnO ₂ nanorods	Ms SHOZI, Nolwazi
Pt-Al ₂ O ₃ nanocoatings for high temperature concentrated solar thermal power applications	Ms NURU, Zebib Yenus
] Synthesis and Characterization of $CaAl_2O_4:Tb^{3+}$ Phosphor Solution – Combustion Method.	Ms FOKA, Kewele Emily
] Use of raman spectroscopy to study fatigue type processes in polycrystalline diamond (PCD)	Mr VHARETA, Maxwell
] Electrical and surface morphological studies of palladium and ruthenium Schottky diodes on n-Ge	Prof. CHAWANDA, Albert
] Thermoluminescence Study of Long Persistent $CaAl_2O_4:Eu^{2+}$, Nd^{3+} and/or Dy^{3+} .	Mr WAKO, Ali
] Red emission of Pr^{3+} enhancement by addition of Ba^{2+} and In^{3+} in $CaTiO_3:Pr$ phosphor	Mr NOTO, Luyanda Lunga
] Measuring the effect of surface evaporation on the segregation process	Mr CRONJE, S
] The reduction of melting temperature with size in Gold	Mr MAHLADISA, Mokete
] Intervalley and Intravalley Scattering in Diamond Structure, Si and Ge	Dr MACHATINE, Augusto
] Hydrogenation of Ti ₆ Al ₄ V alloy	Ms SENTSHO, Zeldah
] Behaviour of iodine implanted in HOPG after heat treatment	Mr MUKHAWANA, Mxolisi
] The influence of Pr^{3+} co-doping on the photoluminescence and cathodoluminescence properties of $2:Eu^{3+}/Tb^{3+}$.	Ms MHLONGO, Gugu

Non-resonant microwave absorption in FeSi thin films	Mr GAVI, Happison
Magnetic vector charges in the realization of nonzero magnetic work	Dr CHIRWA, Max
Photoluminescence Surface Mapping as a Probe for Quantum Well Disorder	Dr CHINYAMA, Kaumba Godfrey
Dependence of Aspect Ratio of InSb Self-Assembled Quantum Dots on Thickness and Indium Mole Fractions of Spacer Layers	Mr GODBOLE, MOHIT
Thermal transport in the cage-compounds RFe ₂ Al ₁₀ (R=Y, Yb)	Prof. STRYDOM, Andre
Synthesis and characterization of reproducible stoichiometry of cobalt sulfide nanoparticles using sulfur containing single-source precursors	Mr SIBOKOZA, Simon Bonginkosi
Vanadium dioxide based on nano-devices for photonic applications	Mr MADIBA, itani given
Minimization of optically active structural defects in MOCVD grown ZnO films using oxygen and NO	Dr DANGBEGNON, Kouadio Julien
Depth-resolved studies of plasma sprayed hydroxyapatite coatings by means of diffraction techniques	Mr NTSOANE, Tshepo
Optical properties of SrGa ₂ S ₄ :Ce ³⁺ films prepared by pulsed laser cross laser beam ablation method (PRCLA)	Ms MOLEME, Pulane
Graphene Coatings: Synthesis/Physical-Chemical Investigations	Mr NYANGIWE, Nangamso Nathaniel
Spectroscopic studies of nanofluorides doped with Ln ³⁺ synthesized via thermal decomposition of inorganic precursors	Dr GUSOWSKI, Marek
Thermal and electronic transport studies of the Kondo energy scale in the heavy-fermion system U _{5-x} Al _x	Prof. STRYDOM, Andre
Investigation of S diffusion in bulk Fe – a DFT study	Mr BARNARD, Pieter
Determining the bulk concentration of S in Fe-S: a Auger electron spectroscopy study	Mr BARNARD, Pieter
Synthesis and photoluminescence properties of Tb ³⁺ -doped ZnAl ₂ O ₄ nano crystals phosphor prepared via combustion process	Mr SHAAT, Samy
Ab initio studies on stabilities of products related to Li/S and Li/O batteries	Mr MASEDI, Clifton
The study of the distortion of F- and Ba- sublattices in superionic BaF ₂ at elevated temperatures using neutron annihilation technique.	Mr JILI, Thulani
Electrical characterisation of the interface in a Au \ Ni \ n -Al _{0.18} Ga _{0.82} N Schottky contact system	Dr MEYER, W. E.
Variation of different compositions of Ti-Pt within the B2 region using solid solution method employed by ASTEP	Ms MAHLANGU, Rosinah
Synthesis and characterization of PbS nanorods using the chemical bath deposition method	Mr KOAO, Lehlohonolo
Computational study of some tin dioxide phases.	Mr NTIMANE, James
Magnetic and strong correlation effect in CeT ₂ Al ₈ (T=Fe,Co)	Mr GHOSH, SARIT KUMAR
Spin-density-wave behaviour of the (100-x)Al _x (95)Mo ₅ alloy system	Mr MUCHONO, Blessed
DRS, XRD and SEM studies of the effects of metal dopants (Pt, Au and Pd) on the structural and optical properties of TiO ₂ .	Mr MOLOANTOA, Jacob Ramodika
Ab-initio study of structural stability and electronic structure of monoclinic and cubic (2-x)S _x for 0 ≤ X < 2	Mr MULAUDZI, Masilu Godfrey
The Infrared Plasma Resonance of P in SiC	Prof. ENGELBRECHT, JAPIE