SAIP2016 / Programme Tuesday 05 July 2016

SAIP2016

Tuesday 05 July 2016

<u>Division for Physics of Condensed Matter and Materials (1): PhD Orals for Award</u> - LT1 (10:00-10:40)

-Conveners: Malili Matshaba

time [id] title	presenter
10:20 [109] Beyond Lithium-Ion Batteries: A Computational Study on Advanced Lithium – Sulphur Battery	Mr MASEDI, CLIFFTON

Division for Physics of Condensed Matter and Materials (1): PhD Orals for Award - LT1 (11:10-12:10)

-Conveners: Mmantsae Diale

time	[id] title	presenter
	[124] Evaluation of sputtering-induced surface roughness of polycrystalline Ni/Cu multilayers thin films with AES and ToF-SIMS depth profiling	Mr YAN, XinLiang
11:30	[127] Ultrafast Excited state dynamics of a direct hetroarylation derived bithiophene-isoindigo copolymer and application in inverted ITO free solar cells.	Mrs TEGEGNE, Newayemedhin
11:50	[182] Synthesis of ZrC coatings in a vertical-wall CVD system	Ms BIIRA, Saphina

Division for Physics of Condensed Matter and Materials (1): PhD Orals for Award - LT1 (14:00-15:40)

-Conveners: Francis Dejene

time	[id] title	presenter
14:00	[268] Interactions of xanthates and dithiophosphate on (110) nickel-rich pentlandite (Fe ₄ Ni ₅ S ₈) mineral surface	Mr MKHONTO, Peace
14:20	[274] Colloidal InSe nanostructures: effect of morphology on their chemical sensitivity to methanol and formaldehyde fumes	Ms AIRO, Mildred
14:40	[329] Combustion synthesis and characterization of Eu3+ doped Ba5(PO4)3OH phosphors	Ms MOKOENA, Puseletso Pricilla
15:00	[338] Structural and optical properties of Holmium doped α-Fe ₂ O ₃ nanoparticles	Ms MATHEVULA, Langutani
15:20	[397] The SCC-DFTB study of H ₂ O interaction with TiO ₂ supported Pd catalyst	Ms CHUMA, Moyahabo Hellen

SAIP2016 / Programme Wednesday 06 July 2016

Wednesday 06 July 2016

<u>Division for Physics of Condensed Matter and Materials (1): Non-Specialist Lectures</u> - LT1 (09:40-10:40)

-Conveners: Japie Engelbrecht

time	[id] title	presenter
09:40	[525] NON-SPECIALIST LECTURE: Optical Fibre Communication: Silica Information Super-Highways	Dr GIBBON, Timothy
10:20	[107] Characterization of inclusions and defects in natural zirconia	Prof. LEE, Mike

Division for Physics of Condensed Matter and Materials (1): PhD Orals for Award - LT1 (11:10-12:10)

-Conveners: Mike LEE

time	[id] title	presenter
	[398] Characterization of elastic constants and electronic property of diamond-like carbon films.	Mr MBIOMBI, wilfred
	[432] Optical and electronic properties of silicon nanowires fabricated by Metal Assisted Chemical Ecthing	Mr KHANYILE, Sfiso
	[478] Tuning the Energetic Driving Force of P3HT-ZnO heterostructures for Enhanced Electron Transfer in Organic PV solar cells	Mr KABONGO, GUY LEBA

Division for Physics of Condensed Matter and Materials (1): PhD/MSc Orals for Award - LT1 (14:00-15:40)

-Conveners: Craig Comrie

time	[id] title	presenter
14:00	[502] Modelling of Pyrite (FeS ₂) surfaces and adsorption of dithiophosphate (DTP) onto pyrite surface.	Mr MULAUDZI, Masilu Godfrey
14:20	[395] A study into the rate of photo-bleaching undergone by radiation damaged plastic scintillators	Ms JIVAN, Harshna
14:40	[47] Investigation of Luminescence Properties of Dy3+ Doped different Alkaline based White-light emitting Phosphors	Dr AVULA, Balakrishna
15:00	[531] Division Meeting: DPCMM	Prof. ENGELBRECHT, Japie

SAIP2016 / Programme Thursday 07 July 2016

Thursday 07 July 2016

<u>Division for Physics of Condensed Matter and Materials (1): MSc Orals for Award</u> - LT1 (09:40-10:40)

-Conveners: Richard Harris

time	[id] title	presenter
09:40	[400] Room temperature CH4 gas sensor based on Au loaded ZnO nanorods: The effect of Au loading concentration on sensing properties.	Ms SHINGANGE, Katekani
10:00	[405] Effect of Hydrochloric Acid on the Structure, Defect States and Gas Sensing Properties of TiO ₂ Nanotubes by Hydrothermal Method	Mrs TSHABALALA, Zamaswazi
	[492] Sol-gel Synthesis and Characterization studies of Er ³⁺ doped TiO ₂ nanoparticles	Mr TALANE, Tsholo

Division for Physics of Condensed Matter and Materials (1): MSc Orals for Award & General Orals - LT1 (11:10-12:10)

-Conveners: Hendrik Swart

time [id] title	presenter
11:10 [100] Formation of a Thin Film of AB compound Layer at a Low Irradiation Temperature under the Influence of Radiation Induced Interstitial.	Mr AKINTUNDE, Samuel
11:50 [373] Computational modelling of sulphides mineral (FeS ₂)	Dr LETSOALO, Thabo

SAIP2016 / Programme Friday 08 July 2016

Friday 08 July 2016

<u>Division for Physics of Condensed Matter and Materials (1): General Orals</u> - LT1 (09:40-10:40)

-Conveners: Max Chirwa

time	[id] title	presenter
	[34] Exceptionally Crystalline TiO2 Mesocrystals with Enhanced Light Harvesting Characteristics for solar energy conversion	Dr HEGAZY, Aiat
	[39] Structural and luminescence properties of sol-gel derived BaMg2Al6Si9O30: Eu2+nanophosphors	Dr KUMAR, Ashwini
10:20	[45] NIR quantum-cutting OF Pr3+ and Yb3+ Codoped Fluoride crystal	Dr YAGOUB, Mubarak

<u>Division for Physics of Condensed Matter and Materials (1): General Orals</u> - LT1 (11:10-12:10)

-Conveners: Shunmugam Ramsamy Naidoo

time	[id] title	presenter
11:10	[72] Spectroscopic investigation of Tm3+ containing Lithium borate glasses	Dr RAMTEKE, Durgaprasad
11:30	[132] Ferromagnetism in magnetic 4f-systems	Dr NOLTING, Volkmar
	[206] Effect of calcination on structural and magnetic properties of nickel chromite	Dr MOHANTY, Pankaj

<u>Division for Physics of Condensed Matter and Materials (1): General Orals</u> - LT1 (14:00-15:40)

-Conveners: Volkmar Nolting

time	[id] title	presenter
	[279] Simonkolleite nano-platelets: Synthesis and temperature effect on hydrogen gas sensing properties	Dr SITHOLE, Joseph
	[379] Ion beam modification of diamond to DLC: A SBS, Raman and HRTEM study.	Prof. NAIDOO, Shunmugam Ramsamy
	[452] Electrical characterisation of defects induced in GaN by electron beam exposure	Mr NGOEPE, Phuti
	[455] Sustained pairing frees dipolar traits and the circular current's own magnetic dipolar nature	Dr CHIRWA, Max
	[476] Search for dilute magnetism in 3 <i>d</i> doped III-Nitrides - Results from Mössbauer Spectroscopy	Dr MASENDA, Hilary