

SAIP2017

Tuesday 04 July 2017

Physics of Condensed Matter and Materials 1 - A403A (10:00-10:40)

-Conveners: Emmanuel Igumbor

time	[id] title	presenter
10:00	[70] Intermediate Valence behavior in the new ternary compound Yb ₁₃ Pd ₄₀ Sn ₃₁	Ms DJOUMESSI FOBASSO, Redrisse
10:20	[132] Implementation of Quantum Hall Effect Based Precision Resistance Measurement System	Mr MABOKO, Mporome

Physics of Condensed Matter and Materials 1 - A403A (11:10-12:10)

-Conveners: Volkmar Nolting

time	[id] title	presenter
11:10	[16] Mechanical milling effect on the structural and magnetic properties of sintered La _{0.67} Sr _{0.33} MnO ₃	Mr EZEKIEL, Itegbeyogene
11:30	[53] Mass-loading effect of graphene foam (GF) on the electrochemical performance of nickel phosphate as an electrode for supercapacitor application	Mr MIRGHNI, Abdulmajid A.
11:50	[56] Investigation of the Magnetic Ground State of PrRu ₂ Ga ₈ Compound	Mr OGUNBUNMI, Michael Olawale

Physics of Condensed Matter and Materials 1 - A403A (14:00-15:40)

-Conveners: Mahlaga Molepo

time	[id] title	presenter
14:00	[12] Electrical levels induced by thulium (Tm ³⁺) in germanium: a hybrid density functional study	Dr IGUMBOR, Emmanuel
14:20	[24] Using the Barkhausen Effect to Measure the Microstructure of Ferromagnetic Materials	Dr NOLTING, Volkmar
14:40	[28] Computational modelling study on elastic properties and temperature variation in Ti ₅₀ Pt _{50-x} Cu _x shape memory alloys	Dr MODIBA, Rosinah
15:00	[75] Electrical characterization of deep level defects created by bombarding the n-type 4H-SiC with 1.8 MeV proton irradiations	Dr OMOTOSO, Ezekiel
15:20	[181] Computational studies of Na/MgMn ₂ O ₄ Spinels.	Dr LETHOLE, Ndanduleni

Wednesday 05 July 2017

Physics of Condensed Matter and Materials 1 - A403A (10:00-10:40)

-Conveners: peace prince mkhonto

time	[id] title	presenter
10:00	[163] Structural evolution of tin catalyst heated during x-ray photoelectron spectroscopy	Ms MODIBA, Fortunate Mofao
10:20	[174] The structural and sensing properties of cobalt and indium doped zinc oxide nanopowders synthesised through high energy ball milling technique	Ms MANAMELA, Mahlatse

Physics of Condensed Matter and Materials 1 - A403A (11:10-12:10)

-Conveners: Daniel Wamwangi

time	[id] title	presenter
11:10	[177] COMPUTATIONAL MODELLING STUDIES OF Fe-Al-X (X= Pt, Ru) ALLOYS 	Ms MKHONTO, Christine
11:30	[246] Nano-fabricated SiN holograms for probing matter with structured waves	Mr WEBSTER, Jason
11:50	[349] Structural evolution and ion diffusion of TiO ₂ nanosheet at different temperatures for anode material Li-ion batteries.	Ms RIKHOTSO, Blessing N

Physics of Condensed Matter and Materials 1 - A403A (14:00-15:40)

-Conveners: Damilola Momodu

time	[id] title	presenter
14:00	[65] Evolution of "spinel-layered-spinel" Composites in the Li-Mn-O Nanoarchitectures	Ms LEDWABA, Raesibe Sylvia
14:20	[176] Charge generation from Fullerene Exciton in Low band Gap polymer based solar cells.	Mrs TEGEGNE, Newayemedhin
14:40	[206] Simple approach to growth and characterization of ZnO/GO/P3HT layered nanostructures for solar cell devices	Mr MOLEFE, Fokotsa
15:00	[225] Properties of photoactive organic/inorganic hybrid thin films for solar cell applications	Mr KHANYILE, Sfiso
15:20	[234] Synthesis and Characterization of Spherical Gold and Silver Nanoparticles	Mr OLALERU, Akin

Thursday 06 July 2017

Physics of Condensed Matter and Materials 1 - A403A (10:00-10:40)

-Conveners: Japie Engelbrecht

time	[id] title	presenter
10:00	[280] Non-specialist Talk - Structure Property correlation in SOFC & SOEC materials	Prof. BILLING, David

Physics of Condensed Matter and Materials 1 - A403A (11:10-13:10)

-Conveners: Moise Bertin Tchoula Tchokonte

time	[id] title	presenter
11:10	[353] mK-Scale Cooling of Nanoelectronic Devices in South Africa	Mr WOLSKI, Samuel
11:50	[249] Thermoelectric properties of $\text{CH}_3\text{NH}_3\text{PbI}_3$ using density functional theory and Boltzmann transport calculations	Mr ABDALLAH, Ibrahim
12:10	[285] Laplace transform deep level transient spectroscopy on n-type gallium arsenide	Mr TUNHUMA, Shandirai
12:30	[309] Computational Modelling Study on Stability of Li-S/Se System	Mr MASEDI, Clifton
12:50	[322] Effects of growth time on structural and optical properties of ZnO nanorods on Ga-doped ZnO seed layer for dye-sensitized solar cells photoanode	Mr UNGULA, Jatani

Physics of Condensed Matter and Materials 1 - A403A (14:00-15:40)

-Conveners: Japie Engelbrecht

time	[id] title	presenter
14:40	[386] Spin induced switching in gadolinium functionalized multiwall carbon nanotube nanocomposites	Ms NCUBE, Siphephile
15:00	[190] Verification of phase transformation temperatures of 9%Cr ferritic steel using dilatometry and neutron powder diffraction	Ms SENTSHO, zeldah
15:20	[449] DPCMM AGM	

Physics of Condensed Matter and Materials 1 - A403A (16:10-17:10)

-Conveners: Thabo Letsoalo

time	[id] title	presenter
16:10	[199] First-principles study of <i>graphane</i> with <i>3d</i> transition-metal adatoms	Dr MOLEPO, Mahlaga
16:30	[202] Critical behaviour at paramagnetic to ferromagnetic phase transition in $\text{Nd}_2\text{Pt}_2\text{In}$	Prof. TCHOULA TCHOKONTE, Moise
16:50	[209] Computational and experimental study on effect of xanthate chain length on pyrite (FeS_2) mineral surfaces	Dr MKHONTO, Peace

Friday 07 July 2017

Physics of Condensed Matter and Materials 1 - A403A (10:00-10:40)

-Conveners: Setumo Victor Motloung

time	[id] title	presenter
10:00	[247] Characterisation of the optical properties of silver nanoparticles (Ag NPs) for enhancing organic photovoltaic (OPV) device performance.	Dr KIRUI, Joseph
10:20	[276] Density functional based tight binding (DFTB+) studies of pentlandites (Fe, Co, Ni) ₉ S ₈ minerals	Dr LETSOALO, Thabo

Physics of Condensed Matter and Materials 1 - A403A (11:10-13:10)

-Conveners: Joseph Kirui

time	[id] title	presenter
11:10	[301] Elastic properties of chalcogenide based phase change memories by surface Brillouin scattering	Dr WAMWANGI, Daniel
11:30	[357] Structure and Phase Stability Study of Nickel Doped Spinel LiMn ₂ O ₄ using Cluster Expansion Method	Dr MAPHANGA, Rapela Mr MALATJI, Kemeridge Tumelo
11:50	[400] Effect of Tb ³⁺ concentration on the structure and photoluminescence of Zn _{0.5} Mg _{0.5} Al ₂ O ₄ :x% Tb ³⁺ (0 < x ≤ 1) nanophosphor synthesized by citrate sol-gel method	Dr MOTLOUNG, Setumo Victor
12:10	[417] Transformation of plant biomass waste into resourceful activated carbon materials for mixed-assembly type electrochemical capacitors	Dr MOMODU, Damilola