

SAIP2023

Tuesday 04 July 2023

Physics of Condensed Matter and Materials Track 2 (11:00-12:00)

-Conveners: Ramogholo Diale

time	[id] title	presenter
11:00	[157] Investigation of the novel tetragonal compounds $Ba_{1-x}P_{2-x}S_{2+x}$ (Co, Ru, Pd)	VAN DER SPUY, Arthur
11:20	[330] Magnetic properties of Cr doped CoV_2O_6 : A binary phase study	Mr MULIBANA, Murei
11:40	[317] Emulating magnetic skyrmions with light	ORNELAS, Pedro

Physics of Condensed Matter and Materials Track 2 (14:00-15:20)

-Conveners: Rosinah Modiba

time	[id] title	presenter
14:00	[63] Computational studies of pressure dependence on Monazite-(Ce)	Ms MOTSOMONE, Lebogang
14:20	[115] Interaction of methanoic acid with arsenopyrite (001) and sperrylite (100) surfaces: A DFT-D and atomistic simulations studies	NTOBENG, Thapelo
14:40	[166] Effect of pressure on structural, mechanical, electronic and optical properties of $LiAlS_2$, $NaAlS_2$ and $KAlS_2$ chalcogenides: A density functional theory study	Mr PHALE, Boitemogelo

Wednesday 05 July 2023

Physics of Condensed Matter and Materials Track 2 (09:40-10:40)

-Conveners: Edwin Mapasha

time	[id] title	presenter
09:40	[37] Fluorination of Li _{1.2} Mn _{0.8} O ₂ Cathode Material: A Computational Study	MIKOSI, Vusani
10:00	[164] FERMI ENERGY PREDICTION OF SODIUM-ION BATTERY CATHODE MATERIALS: A MACHINE LEARNING REGRESSION APPROACH	Ms MONARENG, Keletso
10:20	[188] Variation of Statistical Ensembles to Optimise Complex Core-Shell Cathode Models: A Molecular Dynamic Approach	MAKHUBELA, Precious

Physics of Condensed Matter and Materials Track 2 (11:00-12:00)

-Conveners: Wendy Mdlalose

time	[id] title	presenter
11:00	[233] Structural, Mechanical and Electronic Properties of Lithium Nickel Oxide Bulk(LiNiO ₂) and Surface Stability	HIINE, Mmeshi
11:20	[263] Investigation of structural, electronic, elastic and dynamical properties of Li ₂ Mn _{0.5} Ru _{0.5} O ₃ cathode material for Li-ion batteries: A first-principles study	MPHAHLELE, Mamonamane
11:40	[71] Investigation of surface stability and interaction of thionocarbamate collectors on pentlandite (Fe ₅ Ni ₄ S ₈) mineral	Ms ZAVALA, Nontobeko

Physics of Condensed Matter and Materials Track 2 (14:00-15:00)

-Conveners: Chinedu Christian Ahia

time	[id] title	presenter
14:00	[18] Kinetic analysis and dosimetric features of thermoluminescence of tanzanite	OPOKU, Kingsley Acheampong
14:20	[86] Probing isothermal and non-isothermal annealing of Sn/Ti bimetallic thin films using Rutherford Backscattering Spectrometry (RBS) as a probing tool.	LEBESANA, Keletso
14:40	[217] Tin Oxide nanoparticle structural modification with ZnO/Zn for gas sensing applications.	Mr MNGOMEZUULU, Philani S.

Physics of Condensed Matter and Materials Track 2 (15:20-17:40)