

Posters Sessions - Tuesday				
	Theme	Title	Author	
P17	Functional Materials	Influence of Inhomogeneous Schottky Barrier on VOC in Small Molecular Organic Photovoltaics	Sajal	Biring
P18	Functional Materials	Organic Solar Cells for Indoor Application through Optimal Design	Hyeok	Kim
P19	Functional Materials	Light-triggered Assembly of a Discrete Tetraruthenium Metallocycle	Garry	Hanan
	Functional Materials	Analysis of protein release from Polystyrene-block-Poly(Ethylene Oxide) thin films co-assembled with lysozyme	Tarek	Kollmetz
	Functional Materials	Controlling Surface Conductivity and Chemical Reactivity at SnO <sub>2</sub> Thin Films using Aryldiazonium Ion Electrochemistry	Liam	Carroll
	Functional Materials	Modelling instabilities in the melting of metal nanowires using molecular dynamics simulations	Kannan	Ridings
	Functional Materials	A Vibrational Study into the Electronic Structure and Order of Self-assembling Materials	Joshua	Sutton
	Functional Materials	Semiconductor platforms for enhanced Raman Spectroscopies	Rakesh	Arul
	Functional Materials	Development of Novel Functional Molecules Based on Polyoxometalates	Masooma	Ibrahim
	Functional Materials	1,3-Bis(N-carbazolyl)benzene-derivative Materials for Efficient Solution-based Blue Phosphorescent OLED	Byung Doo	Chin
	Functional Materials	Protein Functionalization on Atomically Flat Gold for Electrochemical Impedance Spectroscopy Sensing	Miguel	Reis
	Functional Materials	Optimization of oxygen reduction reaction using iron porphyrin and interacting group inspired by nature	Ting	Wu
	Functional Materials	Exceptional Aliphatic Polymer as Singlet Oxygen Generator Based on Electron Transfer	Jung Seung	Nam
	Functional Materials	Long Side-Chain Grafting Imparts Intrinsic Adhesiveness to Poly(thiophene phenylene) Conjugated Polymer	Min	Wang
	Functional Materials	Spin-dependent thermoelectric effect in Co <sub>2</sub> Fe <sub>0.4</sub> Mn <sub>0.6</sub> Si thin film with perpendicular magnetic anisotropy	BoHang	Wei
	Functional Materials	Pd <sub>2</sub> L <sub>4</sub> Cage - Polymer Conjugates via a Supramolecular Approach	Natalie	Lagesse
	Functional Materials	Development of an Spr Biosensor Using a Customized Experimental Setup	Roshni	Babu
	Functional Materials	Investigations into Photoactive MOFs	Lily	Hermanspahn
	Functional Materials	Towards switchable heterometallic supramolecular cages.	Lynn	Lisboa

	Functional Materials	Investigation of IHKLSVEN Peptide film at the air-water/electrolyte interphase: A Langmuir Blodgett Study	Zainab	Makinde
	Functional Materials	Structural Optimisation of Lennard-Jones Solids: A Computational Investigation of Superatomic Assemblies	Joy	Xu
	Functional Materials	Bio-electronic Nose Using Insect Olfactory Receptors	Roshan	Khadka
	Functional Materials	Optical and thermal properties of glass Ca <sub>12</sub> Al <sub>14</sub> O <sub>33</sub> mayenite prepared by rapid high frequency electromagnetic induction heating method	Chesta	Ruttanapun
	Functional Materials	Synthesis and Luminescence Properties of LiCaAlF <sub>6</sub> :Sm <sup>3+</sup>	Go	Okada
P21	Materials Synthesis and Characterisation	Selective growth of ZnO nanowires	Mohsen	Maddah
P22	Materials Synthesis and Characterisation	Nano-MOF Engineering Meets Materials Science: Toward New Functional Hybrid Materials	Jonathan	Falconer
P23	Materials Synthesis and Characterisation	Co-sputtered refractory polarizers and reverse-switching thermal emitters	Matthew	Arnold
	Materials Synthesis and Characterisation	Thermal post processing of FeSe <sub>1-x</sub> Tex: Changes in physical properties and enhancement of Jc	David	Uhrig
	Materials Synthesis and Characterisation	Transient grating photoluminescence spectroscopy with high repetition rate fiber laser femtosecond amplifier	Kai	Chen
	Materials Synthesis and Characterisation	Superphenylphosphines: Nanographene-based Ligands that Direct Coordination and Bulk Assembly	Nigel	Lucas
	Materials Synthesis and Characterisation	Preparation of multifunctional iron/iron oxide nanocomposites using red grape pomace and chitosan	Lingdai	Liu
	Materials Synthesis and Characterisation	Black coatings on titanium surfaces based on multi-layered carbon coating synthesis by carbon implantation	Holger	Fiedler
	Materials Synthesis and Characterisation	Pure and rare-earth doped NaMgF <sub>3</sub> nanocrystals	Hellen	Nalumaga
	Materials Synthesis and Characterisation	Sintered Titanomagnetite: Towards Wider Applications of New Zealand Ironsands	Mima	Kurian
	Materials Synthesis and Characterisation	The Formation of Si-Si and Si-Element Bonds via Catalytic Coupling Reactions	Kristel	Castillo
	Materials Synthesis and Characterisation	Photonic Crystals and their Application in Optical Sensing	Yusong	Dong
	Materials Synthesis and Characterisation	Towards large area monolayer of MoS <sub>2</sub>	Piotr	Caban
	Materials Synthesis and Characterisation	Growth of AlGaN/GaN heterostructures using AlN buffer layer for HEMTs applications	Piotr	Caban
	Materials Synthesis and Characterisation	Growth of smooth BN layers by MOVPE	Piotr	Caban
	Materials Synthesis and Characterisation	Influence of temperature and morphology on the nonlinear conductance of semiconducting single-walled nanotube thin film networks	Erica	Happe

	Materials Synthesis and Characterisation	Sorption of sulfate ions at different pH to biogenically synthesized zinc oxide nanoparticles	Durr-e-Shahwar	Noman
	Materials Synthesis and Characterisation	Heme-containing protein nanofibers	Qun	Chen
	Materials Synthesis and Characterisation	Reactive Energetic Plasticizers to Improve Processability, Mechanical Property and Invulnerability of Energetic PGT-based Polyurethane Binders	Younghwan	Kwon
	Materials Synthesis and Characterisation	The creation of bridged disilanes to be used as building blocks to reinforce polysilanes.	Vipin	Kumar
	Materials Synthesis and Characterisation	Measuring circular dichroism and related chiroptical effects with nanoscale samples	Adam	Francis
	Materials Synthesis and Characterisation	Peptide Directed Self-Assembly of Organic Semiconductors for Biocompatible Electronics	Aakanksha	Rani
	Materials Synthesis and Characterisation	Microwave-Hydrothermal Synthesis of BiOCl/Bi <sub>2</sub> WO <sub>6</sub> Nanocomposites for Use as Photocatalytic Materials	Phattranit (Titipun)	Dumrongrojthanath (Thongtem)
P25	Future Devices and Technologies	Artificial olfactory sensors using insect odorant receptors and graphene FETs	Thanihaichelvan	Murugathas
P26	Future Devices and Technologies	Production of selective hazardous chemical sensors using graphene decorated by nanomaterials	Ahmad	Ayesh
	Future Devices and Technologies	Low Energy Dual Implantation of Ni and Fe into SiO <sub>2</sub> and the Formation of Ni <sub>1-x</sub> Fe <sub>x</sub> Nanoparticles	Grant	Williams
	Future Devices and Technologies	The Effect of Residual Stresses and Hygroscopic Swelling on MEMS ICP Sensor Drift	Nireekshan Kumar	Sodavaram
	Future Devices and Technologies	Copper Metallization of InGaZnO Thin Film Transistor with New Titanium Barrier Layer	Jong Hyun	Seo
	Future Devices and Technologies	Magnetic Tunnel Junctions Incorporating Rare-Earth Nitrides	Jackson	Miller
	Future Devices and Technologies	Stable and simple structure for improving optical properties of organic light-emitting diodes	Cheol	Shin
	Future Devices and Technologies	SnO <sub>x</sub> nanostructure fabrication by spontaneous growth of Sn nano-islands for light extraction in OLEDs.	Jae Man	Lee
	Future Devices and Technologies	The Lifetime of Skyrmions in Ultrathin Films	Yao	Zhang
	Future Devices and Technologies	Bi and Sb Topological Nanostructures	Sara	Salehitaleghani
	Future Devices and Technologies	Self-powered somatic sensor inspired by skin receptors	Chang-Soo	Han
	Future Devices and Technologies	Atmospheric plasma jet printing for tailored surfaces	Taniela	Lolohea
P29	Materials and technologies for biological applications	Plasmonic enhancement of singlet oxygen generation of aggregation-induced emission photosensitizer	Mohammad	Tavakkoli Yarak
P30	Materials and technologies for biological applications	Application of the 3 $\sigma$ method to microfluidics	Claude	Meffan

	Materials and technologies for biological applications	Competitive adsorption and displacement of polysaccharides on the surface of emulsions	Saman	Sabet Ghadam Haghghi
	Materials and technologies for biological applications	The Fabrication of 3D Nanostructures for Mimicking Natural Antimicrobial Surface	Khairudin	Mohamed
	Materials and technologies for biological applications	Combination of Ir(III) Complex and Cancer-Environment-Customized Nanogel for Efficient Photodynamic Therapy	Chae Gyu	Lee
	Materials and technologies for biological applications	Hybrid PDMS with increased permeability for phyllosphere microbiology	Michal	Bernach
	Materials and technologies for biological applications	Multifunctional Electrospun Fiber Bio-Interfaces for Selective Capture/Release and Direct Detection of Exosomes	Alireza	Akbarinejad
	Materials and technologies for biological applications	Simulating gating response of CNT aptamers biosensors experimentally	Marissa	Dierkes
	Materials and technologies for biological applications	Zn <sup>2+</sup> -immobilized Magnetic Microspheres for Enrichment and Identification of Multiphosphopeptides by MALDI-TOF MS analysis	Se Won	Bae
	Materials and technologies for biological applications	Optogenetic control of pain responses in experimental animals	KyoungHo	Suk
	Materials and technologies for biological applications	Eye for an Eye: Hoki Fish Lens Protein Thin Films as Ocular Therapeutic Carriers	Judith	Glasson
	Materials and technologies for biological applications	Modular Functionalization of Engineered Polyester Scaffolds	Jin Xiang	Wong
	Theory and Modelling of Materials and Devices	Enhancements of hydrogen adsorption in M-MOF-525 (M=Zr, Ti and V): A DFT study	Pornjuk	Srepusharawoot
	Theory and Modelling of Materials and Devices	Rational Design of a CuPd Nanoparticle Catalyst, for Electrochemical NO <sub>3</sub> <sup>-</sup> Reduction Using Computational Techniques	Caitlin	Casey-Stevens
	Theory and Modelling of Materials and Devices	Algorithm for Extracting the Phonon Spectrum from Specific Heat Data	James	Storey
	Theory and Modelling of Materials and Devices	Numerical Modelling of Dynamic Resistance in Single Tapes and Stacks Using Various Critical Current Relationships	Justin	Brooks
	Theory and Modelling of Materials and Devices	Towards a Simulation of the Melting of Water Clusters	Edison	Florez
	Theory and Modelling of Materials and Devices	Structure and Electronic Properties of Perovskite Solar Cells based on ZnO and TiO <sub>2</sub> : A First-Principals Study	Nishat	Sultana
	Theory and Modelling of Materials and Devices	'Cool Black' Materials	William	Doonan
	Theory and Modelling of Materials and Devices	Magnetic properties of bulk and monolayer FeSe	Chang-Youn	Moon
P31	Soft Matter	Emergent properties of Janus spheres: Experiments	Qaisar	Latif
P32	Soft Matter	Drop Impact of High Viscosity and Non-Newtonian Fluids on Patterned Polymer Surfaces	Santhosh Kumar	Pandian
	Soft Matter	Protein/Polysaccharide interaction at Oil/Water Interface	Sashikumar	Ramamirtham

	Soft Matter	Theoretical Investigation into Long Timescale Anomalous Diffusion in Complex Viscoelastic Systems.	Josiah	Cleland
	Soft Matter	Interaction of Antimicrobial peptides and cell membrane	Nur Maizura	Mohd Darbi
	Soft Matter	Protein-polysaccharide complex coacervates as carriers of bioactive molecules	Sunandita	Ghosh
	Soft Matter	Organisational Structure in Polyelectrolyte Gels: Formed During Assembly or Extant in Solution and Trapped by Gelling?	Benjamin	Westberry
P33	Materials and Devices for Energy Sustainability	Optical and transport properties of rare earth nitrides	William Freeman	Holmes-Hewett
P34	Materials and Devices for Energy Sustainability	Electrochemically driven synthesis of conjugated polymers for use as electrochromic materials and organic light-emitting diode emitters	Przemyslaw	Data
	Materials and Devices for Energy Sustainability	Surface attachment of hydrogen evolution catalysts	Santiago	Rodríguez-Jiménez
	Materials and Devices for Energy Sustainability	Mixed Matrix Membranes Comprising Multicomponent MOFs for Gas Separation	Hang	Yin
	Materials and Devices for Energy Sustainability	Experimental Fluidized Bed Reduction of New Zealand Ironsand by Hydrogen Gas	Sigit	Prabowo
	Materials and Devices for Energy Sustainability	Comparative transient absorption spectroscopy of fullerene and non-fullerene blend organic photovoltaic cells	Silvina	Pugliese
	Materials and Devices for Energy Sustainability	B-Indandione Modified Zinc Porphyrins	Joseph	Mapley
	Materials and Devices for Energy Sustainability	Electrical Properties of Plain and Oxidized Metal Schottky Contacts on (010) $\text{Oe-}$ Ga <sub>2</sub> O <sub>3</sub>	Caixia	Hou