

## Posters Sessions - Tuesday

Presentation numbers relate to 2min poster presentations

Display numbers relate to allocation of poster during poster session - T is for Tuesday

Presen tion #	Display #	Theme	Title	Author	
	T1	Functional Materials	Semiconductor platforms for enhanced Raman Spectroscopies	Rakesh	Arul
	T2	Functional Materials	Development of an Spr Biosensor Using a Customized Experimental Setup	Roshni	Babu
P20	T3	Functional Materials	Controlling Surface Conductivity and Chemical Reactivity at SnO <sub>2</sub> Thin Films using Aryldiazonium Ion Electrochemistry	Liam	Carroll
	T4	Functional Materials	1,3-Bis(N-carbazolyl)benzene-derivative Materials for Efficient Solution-based Blue Phosphorescent OLED	Byung Doo	Chin
	T5	Functional Materials	Withdrawn		
	T6	Functional Materials	Investigations into Photoactive MOFs	Lily	Hermanspahn
P17	T7	Functional Materials	Optical and transport properties of rare earth nitrides	William Freeman	Holmes-Hewett
	T8	Functional Materials	Withdrawn		
	T9	Functional Materials	Bio-electronic Nose Using Insect Olfactory Receptors	Roshan	Khadka
P19	T10	Functional Materials	Analysis of protein release from Polystyrene-block-Poly(Ethylene Oxide) thin films co-assembled with lysozyme	Tarek	Kollmetz
	T11	Functional Materials	Pd <sub>2</sub> L <sub>4</sub> Cage - Polymer Conjugates via a Supramolecular Approach	Natalie	Lagesse
	T12	Functional Materials	Towards switchable heterometallic supramolecular cages.	Lynn	Lisboa
	T13	Functional Materials	Investigation of IHKLSVEN Peptide film at the air-water/electrolyte interphase: A Langmuir Blodgett Study	Zainab	Makinde
	T14	Functional Materials	Exceptional Aliphatic Polymer as Singlet Oxygen Generator Based on Electron Transfer	Jung Seung	Nam
	T15	Functional Materials	Withdrawn		
	T16	Functional Materials	Protein Functionalization on Atomically Flat Gold for Electrochemical Impedance Spectroscopy Sensing	Miguel	Reis
	T17	Functional Materials	Modelling instabilities in the melting of metal nanowires using molecular dynamics simulations	Kannan	Ridings
	T18	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

	T19	Functional Materials	Withdrawn		
	T20	Functional Materials	A Vibrational Study into the Electronic Structure and Order of Self-assembling Materials	Joshua	Sutton
	T21	Functional Materials	Long Side-Chain Grafting Imparts Intrinsic Adhesiveness to Poly(thiophene phenylene) Conjugated Polymer	Min	Wang
	T22	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
	T23	Functional Materials	Optimization of oxygen reduction reaction using iron porphyrin and interacting group inspired by nature	Ting	Wu
	T24	Functional Materials	Structural Optimisation of Lennard-Jones Solids: A Computational Investigation of Superatomic Assemblies	Joy	Xu
P23	T25	Materials Synthesis and Characterisation	Co-sputtered refractory polarizers and reverse-switching thermal emitters	Matthew	Arnold
	T26	Materials Synthesis and Characterisation	Towards large area monolayer of MoS <sub>2</sub>	Piotr	Caban
	T27	Materials Synthesis and Characterisation	Growth of AlGaIn/GaN heterostructures using AlN buffer layer for HEMT's applications	Piotr	Caban
	T28	Materials Synthesis and Characterisation	Growth of smooth BN layers by MOVPE	Piotr	Caban
	T29	Materials Synthesis and Characterisation	The Formation of Si-Si and Si-Element Bonds via Catalytic Coupling Reactions	Kristel	Castillo
	T30	Materials Synthesis and Characterisation	Transient grating photoluminescence spectroscopy with high repetition rate fiber laser femtosecond amplifier	Kai	Chen
	T31	Materials Synthesis and Characterisation	Heme-containing protein nanofibers	Qun	Chen
	T32	Materials Synthesis and Characterisation	Photonic Crystals and their Application in Optical Sensing	Yusong	Dong
	T33	Materials Synthesis and Characterisation	Withdrawn		
P22	T34	Materials Synthesis and Characterisation	Nano-MOF Engineering Meets Materials Science: Toward New Functional Hybrid Materials	Jonathan	Falconer
	T35	Materials Synthesis and Characterisation	Black coatings on titanium surfaces based on multi-layered carbon coating synthesis by carbon implantation	Holger	Fiedler
	T36	Materials Synthesis and Characterisation	Measuring circular dichroism and related chiroptical effects with nanoscale samples	Adam	Francis
	T37	Materials Synthesis and Characterisation	Influence of temperature and morphology on the nonlinear conductance of semiconducting single-walled nanotube thin film networks	Erica	Happe
	T38	Materials Synthesis and Characterisation	The creation of bridged disilanes to be used as building blocks to reinforce polysilanes.	Vipin	Kumar
	T39	Materials Synthesis and Characterisation	Sintered Titanomagnetite: Towards Wider Applications of New Zealand Ironsands	Mima	Kurian

	T40	Materials Synthesis and Characterisation	Reactive Energetic Plasticizers to Improve Processability, Mechanical Property and Invulnerability of Energetic PGT-based Polyurethane Binders	Younghwan	Kwon
	T41	Materials Synthesis and Characterisation	Preparation of multifunctional iron/iron oxide nanocomposites using red grape pomace and chitosan	Lingdai	Liu
	T42	Materials Synthesis and Characterisation	Superphenylphosphines: Nanographene-based Ligands that Direct Coordination and Bulk Assembly	Nigel	Lucas
P21	T43	Materials Synthesis and Characterisation	Selective growth of ZnO nanowires	Mohsen	Maddah
	T44	Materials Synthesis and Characterisation	Pure and rare-earth doped NaMgF <sub>3</sub> nanocrystals	Hellen	Nalumaga
	T45	Materials Synthesis and Characterisation	Withdrawn		
	T46	Materials Synthesis and Characterisation	Rational design and synthesis of MOFs with different interpenetrated lattices	David	Perl
	T47	Materials Synthesis and Characterisation	Peptide Directed Self-Assembly of Organic Semiconductors for Biocompatible Electronics	Aakanksha	Rani
P24	T48	Materials Synthesis and Characterisation	Thermal post processing of FeSe <sub>1-x</sub> Tex: Changes in physical properties and enhancement of J <sub>c</sub>	David	Uhrig
P26	T49	Future Devices and Technologies	Production of selective hazardous chemical sensors using graphene decorated by nanomaterials	Ahmad	Ayesh
	T50	Future Devices and Technologies	Synthesis and Characterisation of 3D Gold Microstructures of Differing Morphologies for Electrochemical Sensing Improvements	Christian	Driver
	T51	Future Devices and Technologies	Self-powered somatic sensor inspired by skin receptors	Chang-Soo	Han
	T52	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
	T53	Future Devices and Technologies	Atmospheric plasma jet printing for tailored surfaces	Taniela	Lolohea
	T54	Future Devices and Technologies	Magnetic Tunnel Junctions Incorporating Rare-Earth Nitrides	Jackson	Miller
P25	T55	Future Devices and Technologies	Artificial olfactory sensors using insect odorant receptors and graphene FETs	Thanihaichelvan	Murugathas
	T56	Future Devices and Technologies	MESFET performance on low-cost ZnO thin films deposited by Mist-CVD	Chikezie	Onyema
	T57	Future Devices and Technologies	Bi and Sb Topological Nanostructures	Sara	Salehitaleghani
	T58	Future Devices and Technologies	Withdrawn		
	T59	Future Devices and Technologies	Stable and simple structure for improving optical properties of organic light-emitting diodes	Cheol	Shin
P27	T60	Future Devices and Technologies	The Effect of Residual Stresses and Hygroscopic Swelling on MEMS ICP Sensor Drift	Nireekshan Kumar	Sodavaram

	T61	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
	T62	Future Devices and Technologies	The Lifetime of Skyrmions in Ultrathin Films	Yao	Zhang
	T63	Materials and technologies for biological applications	Sensitive, selective, disposable electrochemical dopamine sensor based on PEDOT-modified laser scribed graphene	Alireza	Akbarinejad
	T64	Materials and technologies for biological applications	3D flexible and electrically conducting functional skin mapping for dermatological applications	Xiaoxu	Fu
	T65	Materials and technologies for biological applications	Hybrid PDMS with increased permeability for phyllosphere microbiology	Michal	Bernach
	T66	Materials and technologies for biological applications	Simulating gating response of CNT aptamers biosensors experimentally	Marissa	Dierkes
	T67	Materials and technologies for biological applications	Eye for an Eye: Hoki Fish Lens Protein Thin Films as Ocular Therapeutic Carriers	Judith	Glasson
	T68	Materials and technologies for biological applications	Combination of Ir(III) Complex and Cancer-Environment-Customized Nanogel for Efficient Photodynamic Therapy	Chae Gyu	Lee
P30	T69	Materials and technologies for biological applications	Application of the 3 $\sigma$ method to microfluidics	Claude	Meffan
	T70	Materials and technologies for biological applications	The Fabrication of 3D Nanostructures for Mimicking Natural Antimicrobial Surface	Khairudin	Mohamed
	T71	Materials and technologies for biological applications	Competitive adsorption and displacement of polysaccharides on the surface of emulsions	Saman	Sabet Ghadam Haghighi
	T72	Materials and technologies for biological applications	Optogenetic control of pain responses in experimental animals	Kyoungho	Suk
	T73	Materials and technologies for biological applications	Withdrawn		
	T74	Materials and technologies for biological applications	Modular Functionalization of Engineered Polyester Scaffolds	Jin Xiang	Wong
	T75	Theory and Modelling of Materials and Devices	Numerical Modelling of Dynamic Resistance in Single Tapes and Stacks Using Various Critical Current Relationships	Justin	Brooks
	T76	Theory and Modelling of Materials and Devices	Rational Design of a CuPd Nanoparticle Catalyst, for Electrochemical NO <sub>3</sub> -Reduction Using Computational Techniques	Caitlin	Casey-Stevens
	T77	Theory and Modelling of Materials and Devices	'Cool Black' Materials	William	Doonan
	T78	Theory and Modelling of Materials and Devices	Towards a Simulation of the Melting of Water Clusters	Edison	Florez
	T79	Theory and Modelling of Materials and Devices	Improving the hydrogen evolution activity of MoS <sub>2</sub> using tunable carbon-based supports	Calum	Gordon
	T80	Theory and Modelling of Materials and Devices	Magnetic properties of bulk and monolayer FeSe	Chang-Youn	Moon
	T81	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

	T82	Theory and Modelling of Materials and Devices	Algorithm for Extracting the Phonon Spectrum from Specific Heat Data	James	Storey
	T83	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
	T84	Soft Matter	Theoretical Investigation into Long Timescale Anomalous Diffusion in Complex Viscoelastic Systems.	Josiah	Cleland
	T85	Soft Matter	Protein-polysaccharide complex coacervates as carriers of bioactive molecules	Sunandita	Ghosh
	T86	Soft Matter	Withdrawn		
	T87	Soft Matter	Interaction of Antimicrobial peptides and cell membrane	Nur Maizura	Mohd Darbi
P32	T88	Soft Matter	Drop Impact of High Viscosity and Non-Newtonian Fluids on Patterned Polymer Surfaces	Santhosh Kumar	Pandian
	T89	Soft Matter	Protein/Polysaccharide interaction at Oil/Water Interface	Sashikumar	Ramamirtham
	T90	Soft Matter	Organisational Structure in Polyelectrolyte Gels: Formed During Assembly or Extant in Solution and Trapped by Gelling?	Benjamin	Westberry
	T91	Materials and Devices for Energy Sustainability	Electrowinning of Iron from New Zealand titanomagnetite ironsand	Chris	Bumby
P35	T92	Materials and Devices for Energy Sustainability	Light-triggered Assembly of a Discrete Tetra Ruthenium Metallocycle	Garry	Hanan
	T93	Materials and Devices for Energy Sustainability	Electrical Properties of Plain and Oxidized Metal Schottky Contacts on (010) $\alpha$ -Ga <sub>2</sub> O <sub>3</sub>	Caixia	Hou
P34	T94	Materials and Devices for Energy Sustainability	Organic Solar Cells for Indoor Application through Optimal Design	Hyeok	Kim
	T95	Materials and Devices for Energy Sustainability	B-Indandione Modified Zinc Porphyrins	Joseph	Mapley
	T96	Materials and Devices for Energy Sustainability	Experimental Fluidized Bed Reduction of New Zealand Ironsand by Hydrogen Gas	Sigit	Prabowo
	T97	Materials and Devices for Energy Sustainability	Comparative transient absorption spectroscopy of fullerene and non-fullerene blend organic photovoltaic cells	Silvina	Pugliese
P36	T98	Materials and Devices for Energy Sustainability	Surface attachment of hydrogen evolution catalysts	Santiago	Rodríguez-Jiménez
	T99	Materials and Devices for Energy Sustainability	Mixed Matrix Membranes Comprising Multicomponent MOFs for Gas Separation	Hang	Yin
P31	T100	Materials and technologies for biological applications	Dynamic peptide nanostructure formation using reversible boronate ester chemistry	Praveen	Vadakkedath