

Posters Sessions - Monday			
Theme	Title	Author	
Functional Materials	Microwave-assist synthesis of CoFe <sub>2</sub> O <sub>4</sub> /RGO nanocomposite and photocatalytic activity	Kun-Yauh	Shih
Functional Materials	Directing of 3D conducting polymer micro arrays for biological sensing and stimulation	Peikai	Zhang
Functional Materials	Colossal Dielectric Permittivity in (Sc <sup>3+</sup> +Ta <sup>5+</sup> ) Co-Doped Rutile-TiO <sub>2</sub> Ceramics	Prasit	Thongbai
Functional Materials	Enhanced Catalytic Effects by Incorporation of Heteroatoms on Fibrous Carbon Electrodes for Vanadium Redox Flow batteries	Hyoung-Joon	Jin
Functional Materials	The Role of Disorder in the Spin Gapless Semiconductor, Mn <sub>2</sub> CoAl	Robert	Buckley
Functional Materials	Electrochemical Odorant Sensing using Insect Odorant Receptors	Jamal	Cheema
Functional Materials	Graphene oxide and its derivatives for removal of inorganic and organic contaminants	Wlodzimierz	Czepa
Functional Materials	Graphene oxide hybrid with sulphur-nitrogen polymer for high-performance pseudocapacitors	Samanta	Witomska
Functional Materials	Potential of Fullerene/Phthalocyanine Nanocomposite Thin Films For Chemiresistive Gas Sensing	Jaroslav	Otta
Functional Materials	Poly-Ionic Liquid/Fullerene Nanocomposite Materials For Gas Sensing	Jan	Vlcek
Functional Materials	Quartz Crystal Microbalance Gas Sensors based on Black Metal Films	Premysl	Fitl
Functional Materials	Microstructural and Thermoelectric Properties of Bi <sub>1-x</sub> BaxCuSeO/Cu <sub>2</sub> Se Composites Fabricated by Spark Plasma Sintering	Kyeongsoon	Park
Functional Materials	Emission Improvement of Tb <sup>3+</sup> -activated Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> Phosphors by Adding Li <sup>+</sup>	Kyeongsoon	Park
Functional Materials	Heterocyclic-based 'SIFSIX' MOFs designed to show high stability and selective gas sorption capabilities	Nathan	Harvey-Reid
Functional Materials	Measuring the Dye Adsorption Kinetic as A function of Different Immersion Time.	Amira	Alghamdi
Functional Materials	Magneto-transport properties of gadolinium nitride film	Tanmay	Maity
Functional Materials	Proper Design of Ion-exchange Membranes for Membrane Capacitive Deionization	Moon-Sung	Kang
Functional Materials	Development of Pore-filled Ion-exchange Membranes for Efficient Energy Conversions	Moon-Sung	Kang
Functional Materials	Study on the Nanolization and Antioxidant Properties of Chinese Herb Extracts	Kun-Yauh	Shih
Functional Materials	Effect of Sintering Temperature on the luminescence properties of BaSiO <sub>3</sub> : Eu <sup>3+</sup> phosphors with Graphene Oxide	Kun-Yauh	Shih
Functional Materials	Giant Dielectric Properties of 10%(Mg <sup>2+</sup> ,Nb <sup>5+</sup> ) Co-Doped TiO <sub>2</sub> Ceramic	Vittaya	Amornkitbamrung

P1	Materials Synthesis and Characterisation	Bis-perymidyne segment as novel conjugated polymer-building blocks	Mieczyslaw	Lapkowski
P2	Materials Synthesis and Characterisation	Adsorption isotherms of dyes on metallic nanoparticles: the pitfalls of centrifugation	Xiaohan	Chen
P3	Materials Synthesis and Characterisation	What happened to the quadrupolar plasmon resonance of silver nanospheres?	Johan	Grand
P4	Materials Synthesis and Characterisation	Electrochemical behaviour of chain transfer agents for RAFT polymerisation	Lisa	Strover
	Materials Synthesis and Characterisation	Highly reactive hierarchical TiO <sub>2</sub> nanoflower photocatalysts for dye degradation and solar H <sub>2</sub> production	Wan-Ting	Chen
	Materials Synthesis and Characterisation	Cucurbit[n]uril mediated aggregation of quantum dots: self-assembly, energy transfer and molecular sensing	William	Peveler
	Materials Synthesis and Characterisation	Improving the stability of DSA electrodes by the addition of TiO <sub>2</sub> nanoparticles	Asad	Kariman
	Materials Synthesis and Characterisation	ZnS:Ag Nanoparticles For The Fabrication Of Ultrafiltration Membrane Scintillators	Luiz	Jacobsohn
	Materials Synthesis and Characterisation	Using Bulk-like Nanocrystals To Probe Intrinsic Optical Gain Characteristics of Inorganic Lead Halide Perovskites	Pieter	Geiregat
	Materials Synthesis and Characterisation	Enhancing of Photocatalytic Properties of Bi <sub>2</sub> O <sub>2</sub> CO <sub>3</sub> Synthesized by a Microwave Method	Nitjawan	Plubphon
	Materials Synthesis and Characterisation	Towards Cu/II switchable complexes using polypyridyl ligands.	Daniel	Ross
	Materials Synthesis and Characterisation	Femtosecond Laser Nanofabrication, Nanostructures for High Energy Physics & Satellite Propulsion, and Devices for Trapping of Fluorescent Nanoparticles	Lloyd	Davis
	Materials Synthesis and Characterisation	Homogenization and Plastic Deformation of Noble TiMoVZrCr High Entropy Alloy	Kwangmin	Lee
	Materials Synthesis and Characterisation	Study of Charge Transfer Dynamics in Dye with Vibrational Spectroscopy and Computational Method	Wang-Hyo	Kim
	Materials Synthesis and Characterisation	Low-frequency vibrational modes of MoS <sub>2</sub> edges	Sam	Brooke
	Materials Synthesis and Characterisation	Tetraarylene-Bridged Cavitands from Resorcin[4]arene Derivatives	Jordan	Smith
	Materials Synthesis and Characterisation	Structural Investigation of Doped Quaternary Antimonates	Sneh	Patel
	Materials Synthesis and Characterisation	New on the Physics Menu: Superconducting Sandwiches	Andrew	Chan

	Materials Synthesis and Characterisation	Synthesis and characterization of novel asymmetric bolaform surfactants	Kenneth	Ortega
	Materials Synthesis and Characterisation	Effect of pH on the Formation of BiOIO <sub>3</sub> and Bi <sub>2</sub> O <sub>3</sub> and Their Photocatalytic Performance	Panudda (Titipun)	Patiphatpanya (Thongtem)
P5	Theory and modelling of materials and devices	On the involvement of d-electrons in the superatom model	James	Gilmour
P6	Theory and modelling of materials and devices	Droplet Motion on Superhydrophobic Surfaces	Alexander	Smith
P7	Theory and Modelling of Materials and Devices	Impurities limit the capacitance of carbon-based supercapacitors.	Timothy	Duignan
	Theory and modelling of materials and devices	Non-graphitising carbon: a multilayered 3D graphene	Jacob	Martin
	Theory and modelling of materials and devices	Stability of Self-assembled Janus Nanoparticles in Fluids: A Molecular Dynamics Study	Sina	Safaei
	Theory and modelling of materials and devices	Modelling of microdroplets moving on surfaces with switchable wettability	Rebecca	Hawke
	Theory and modelling of materials and devices	On the involvement of d-electrons in the superatom model	James	Gilmour
	Theory and modelling of materials and devices	Sensitivity improvement of gold SPR sensors by using long-wavelength laser diodes	Hamish	Colenso
	Theory and modelling of materials and devices	Structural Influence on Electronic Properties in Metal Halide Perovskites: Insight from First Principles	Dani	Metin
	Theory and modelling of materials and devices	Simulation of flux-pinning effects on HTS dynamos	Ratu	Mataira
P9	Materials and technologies for biological applications	Dynamic peptide nanostructure formation using reversible boronate ester chemistry	Praveen	Vadakkedath
P10	Materials and technologies for biological applications	"An in vitro investigation of cytotoxic effects of InP/ZnS quantum dots with different surface chemistries"	Déanna	Ayupova
P11	Materials and technologies for biological applications	Facile Characterization of Nanopipettes	Nicola	Lacalendola
P12	Materials and technologies for biological applications	Antibacterial Activity of Quaternized Chitosan/ Polyvinyl Alcohol Nanofiber Membrane	Yu-Kaung	Chang
	Materials and technologies for biological applications	Development of a Micro Robotic Hand for Microorganism Separation Task	Ebubekir	Avci
	Materials and technologies for biological applications	Designing Plasmonic Nanoarchitectures for Single-particle Biosensing	Sang Jun	Sim

	Materials and technologies for biological applications	Washing-Free and Rapid Electrochemical Detection of Amplified Double-Stranded DNAs Using a Zinc Finger Protein	Haesik	Yang
	Materials and technologies for biological applications	Novel liquid crystal optical sensor for the detection of endotoxin based on aptamer-specific reaction	Chang-Hyun	Jang
	Materials and technologies for biological applications	Synergistic role of stiffness and growth factor gradients on cells	Badri Narayanan	Narasimhan
	Materials and technologies for biological applications	Fabrication and Characterization of Conductive Hydrogels	Matthew Sheng	Ting
	Materials and technologies for biological applications	Potent Anticancer [Pd <sub>2</sub> L <sub>4</sub> ] <sup>4+</sup> Cages	Roan	Vasdev
	Materials and technologies for biological applications	PolyHEMA Grids for Cell Sorting and Force Measurements	Christine	Franke
	Materials and technologies for biological applications	Ultrafast and Stoichiometric HNO Release from a Photocaged (6-Hydroxy-2-naphthalenyl)methyl Analogue of Piloty's Acid	Ruth	Cink
	Materials and technologies for biological applications	Ultrafast transient absorption dynamics of eumelanin	Aleksandra	Irina
	Materials and technologies for biological applications	Towards bone implants: 3D printing using blended inks vs biomimetic mineralisation of hydrogel scaffolds	Mima	Kurian
	Materials and technologies for biological applications	Formation of Polysaccharide-DNA Strings OR MATION OF POLYSACCAHARIDE-DNA STRINGS	Nimisha	Mohandas
	Materials and technologies for biological applications	Development of lemon myrtle essential oil-loaded electrospun cellulose acetate nanofibers for active food packaging	Sara	Beikzadeh
	Materials and technologies for biological applications	Photosensitization Enhancement by Intramolecular Energy Transfer of Iridium(III) Complexes for Low Energy Photodynamic Therapy	Chaiheon	Lee
P13	Future Devices and Technologies	Preferential Growth Mechanisms of Rare Earth Nitrides Thin Films	Ali	Shaib
P14	Future Devices and Technologies	Sensor-based Air Quality Network Measurements	Kyle	Alberti
P15	Future Devices and Technologies	Colorimetric aptasensors for methamphetamine detection	Anindita	Sen
P16	Future Devices and Technologies	PEDOT electrochemical sensor for flavonoid analysis	Paul	Kilmartin
	Future Devices and Technologies	Hydrogel functionalization of micro-resonators for chemo-selective sensing in liquids	Julian	Menges
	Future Devices and Technologies	2D dosimetry using the luminescence of doped fluoroperovskites	Joseph	Schuyt

Future Devices and Technologies	Size dependence of optical and electrical properties in GaN-based micro light-emitting diodes	Sung-Nam	Lee
Future Devices and Technologies	Atomically Thin Tunnelling Layer for Improved Contact Resistance and Dual Channel Transport in MoS <sub>2</sub> /WSe <sub>2</sub> Heterostructure	Gil-Ho	Kim
Future Devices and Technologies	Hematite based Virtual Electrode driven by Light	Taek Dong	Chung
Future Devices and Technologies	Synthesis and Photochemical Actuation of Ru(bis-bipyridyl) 2-Pyridyl-1,2,3-Triazole Ferrocene Rotors	James	Findlay
Future Devices and Technologies	SAM investigation of aptamer-based electrochemical biosensor for methamphetamine detection	Clement	Sester
Future Devices and Technologies	Sensing accuracy of CNT network FET aptasensors	Hong Phan	Nguyen
Future Devices and Technologies	Vertical transport properties for hBN encapsulated MoS <sub>2</sub>	Hanul	Kim
Materials and Devices for Energy Sustainability	Enhanced Methanol Production in CO <sub>2</sub> Reduction of Titania by Deposited with Ruthenium-Gold Clusters	Siriluck	Tesana
Materials and Devices for Energy Sustainability	Magnetic, Magnetotransport, and Thermopower Study of Polycrystalline Bi <sub>2</sub> Te <sub>3</sub> :Mn	Shen	Chong
Materials and Devices for Energy Sustainability	Enhancing the Performance and Stability of Perovskite Solar Cells by Applying Multifunctional Pt(II) Complexes	Eunhye	Hwang
Materials and Devices for Energy Sustainability	Improvement of Thermoelectric Power Factor in Nanostructured n-type Bismuth Antimony Telluride Thin Films	Peter	Murmu
Materials and Devices for Energy Sustainability	Exciton Dynamics of Polymeric Solids Blended with Non-Fullerene Type Acceptors	Chan	Im
Materials and Devices for Energy Sustainability	Exploring the Effects of Low Charge-Transfer Driving Forces on Photovoltaic Dynamics in Small Molecule Systems	Paul	Hume
Materials and Devices for Energy Sustainability	Non-symmetrical macrocyclic complexes as catalysts for hydrogen evolution	Sriram	Sundaresan
Materials and Devices for Energy Sustainability	Design Strategies for Capture and Fixation of Harmful Gases by Metal-Organic Frameworks	Komal	Patil
Materials and Devices for Energy Sustainability	Photoluminescence study of ligand effects on indium phosphide quantum dots	Isabella	Wagner