



20th International Union of Materials Research Societies International Conference in Asia  
22 – 26 September 2019  
Perth Convention & Exhibition Centre



SUNDAY 22 SEPTEMBER 2019

Riverside Theatre Foyer & Southern Foyer

16:30 - 17:30

Welcome Reception  
Riverview & Southern Foyer

16:30 - 17:30

MONDAY 23 SEPTEMBER 2019

Riverside Theatre

8:45 - 9:15

Opening Ceremony  
Welcome to Country - Richard Walley  
Welcome by Co-Chairs: Prof Lan Fu & Prof Julian Gale  
AMRS & IUMRS Executives Welcome

8:45 - 9:15

Chairperson: Lan Fu

9:15 - 10:00

577: Nanomaterials and Light for Sustainability and Societal Impact  
Prof Naomi Halas

9:15 - 10:00

Chairperson: Lan Fu

10:00 - 10:45

351: Transparent Oxide Semiconductors : from materials design to display application as TFTs  
Prof Hideo Hosono

10:00 - 10:45

10:45 - 11:15

Morning Tea

10:45 - 11:15

	Riverside Theatre Chairperson: Ian Chen	River View Room 4 Chairperson: Hoe Tan	River View Room 5 Chairperson: Raffaella Demichellis	Meeting Room 6 Chairperson: Tamio Endo & Victoria Coleman	Meeting Room 7 Chairperson: Satoru Kaneko & Shunichu Arisawa	Meeting Room 8 Chairperson: Christopher Hutchinson	Meeting Room 9 Chairperson: Thomas Nann	
	B. Energy and Environment Materials	A. Electronic and Optical Materials	F. Computational Materials	D8. Australia-Japan joint forum on Oxide thin films and Nano-composites (Surface-related Science and Engineering)	D7. Australia-Japan joint forum on Carbon and Related Materials – Synthesis, Evaluation and Applications	E. Advanced Structured Materials	D. Advanced Functional Materials	
11:15								11:15
11:20					532: Fluorescence imaging using nanoparticles A/Prof Olga Shimoni			11:20
11:25	10: Nanomaterial Properties And Functions Studied In Transmission Electron Microscope Prof Dmitri Golberg	407: Semiconducting Layered Chalcogenide Materials: Strategies for Chemical Functionalization and Transformation Prof Qing Hua Wang	514: Predictive quantum-mechanical modeling of materials structure, defects, and properties Dr Paul Kent	516: Magnetic, Dielectric and Optical Anomaly in Nano Structural Controlled Strain Gradient Garnet Ferrite Films Prof Hitoshi Tabata		118: Self healing in creep steels and ceramics: from proving the concept to their computational design Prof Sybrand Van Der Zwaag	570: Design and application of novel composite materials for analytical applications Emily Hilder	11:25
11:30								11:30
11:35								11:35
11:40					508: Anti-Fouling, CVD Graphene based membrane for water purification Dr Dong Han Seo			11:40
11:45								11:45
11:50	378: Perovskites for high efficiency tandem solar cells Prof Kylie Catchpole	339: Properties and applications of atomically thin boron nitride Dr Luhua Li	523: Cell Membrane Penetration without Pore Formation: Chemeleonic Properties of Dendrimers in Response to Hydrophobic and Hydrophilic Environments Prof Sean Smith	81: Preparation and control of thin films of metal oxide nanoparticles using air-aqueous interfaces A/Prof Cathy Mcnamee		510: Next Generation High Entropy Brasses and Bronzes Prof Michael Ferry	295: Loss of magnetism and emergence of superconductivity in cobalt and a self-organized superconductor-ferromagnet hybrid structure Prof Bhupendra Nath Dev	11:50
11:55								11:55
12:00								12:00
12:05					503: Plasma-surface modification of carbon or related materials in aqueous solution for highly functional, flexible, and tough composite materials with slide-ring materials Mr Taku Goto			12:05
12:10	533: Product selectivity control in photocatalytic organic synthetics and exploring plasmonic metal nanoparticles Dr Sarina Sarina	482: Biophotonics applications of upconversion nanoparticles: to see, to touch and to feel the nanoscale world Dr Fan Wang	237: Tuning the properties of Ag-supported silicene by surface modification A/Prof Michelle Spencer	110: AC magnetic susceptibility: A tool to track the transformations of magnetic nanoparticles Dr Lucia Gutierrez		331: Direct observation of hydrogen trapping in steels by using cryo atom probe tomography Prof Julie Cairney	367: Soft Electronic Devices using Flexible, Stretchable and Mendable Polymeric Materials Dr Wei Lin Leong	12:10
12:15								12:15
12:20								12:20
12:25	14: Anion interactions with vapour deposited PEDOT A/Prof Drew Evans	26: Graphene nanoelectronic devices with asymmetric metal electrodes for high performances Prof Jeon-Kook Lee	276: ZDMatPedia: A Library of 2D Materials by Top-down and Bottom-up Approaches Prof Yuan Ping Feng	520: Defects and Small Polarons in Oxides Prof Anderson Janotti		353: Novel nanocomposites materials for additive manufacturing Dr Xiaopeng Li	518: Mechanical properties of non-crystalline carbons Dr Irene Suarez-Martinez	12:25
12:30								12:30
12:35								12:35
12:40	17: Interfacial Engineering of Metal Catalysts with Functional Supports for Efficient Electrochemical CO2 Reduction Dr Caiyun Wang	313: Direct imaging of the nanoscale phase distribution in PVDF based blend films for sensing application Prof Dong Guo	86: Li-battery material design using multi-scale modeling and materials Informatics Dr Abhijit Chattopadhyay		405: Carbon nanomaterials in improving electrochemical properties of electrodeposited polypyrrole coatings Dr Alina Pruna			12:40
12:45								12:45
12:50				186: Localized magnetic nanoheating - generating hotspots with iron oxide-based nanoparticles Dr Raluca Maria Fratila		527: High Entropy Alloys for Recycling and Mining? Prof Matthew Barnett	323: Mechanical, electrical and crystallographic property dynamics of bent Ge/Si core-shell nanowires as revealed by in situ transmission electron microscopy Mr Chao Zhang	12:50
12:55								12:55
13:00								13:00

13:00 - 14:00

Lunch break

13:00 - 14:00

13:00 - 14:00

Meeting Room 7  
**Lunch session: Meet the editors**  
(Catering supplied outside room)  
For more information: [click here](#)

13:00 - 14:00

MONDAY 23 SEPTEMBER 2019

	Riverside Theatre <i>Chairperson: Rachel Caruso</i>	River View Room 4 <i>Chairperson: Francesca Iacopi</i>	River View Room 5 <i>Chairperson: Yuan Ping Feng</i>	Meeting Room 6 <i>Chairperson: Jin Zou</i>	Meeting Room 7 <i>Chairperson: Kate Fox</i>	Meeting Room 8 <i>Chairperson: Ross Marceau</i>	Meeting Room 9 <i>Chairperson: Emily Hilder</i>	
	B. Energy and Environment Materials	A. Electronic and Optical Materials	F. Computational Materials	D8. Australia-Japan joint forum on Oxide thin films and Nano-composites (Surface-related Science and Engineering)	D7. Australia-Japan joint forum on Carbon and Related Materials – Synthesis, Evaluation and Applications	E. Advanced Structured Materials	D. Advanced Functional Materials	
14:00		164: Tuning properties of Black phosphorus <b>Ms Sruthi Kuriakose</b>	51: Computational Discovery and Design of Dirac and Multiferroic Materials for Electronics Applications <b>Prof Aijun Du</b>	315: Metal oxide nanoparticles as phosphors for white light emitting diodes <b>Dr Alexandra Apostoluk</b>	488: Recent Topics of Diamond-like Carbon Films Prepared by Filtered Arc Deposition <b>Prof Hirofumi Takikawa</b>	399: Massive Transformation in Ti-6Al-4V <b>Dr Shenglu Lu</b>	430: Design and characterisation of quantum matter at atomic-scale <b>Dr Muhammad Usman</b>	14:00
14:05	374: Challenges in Perovskite Device Fabrication: materials approaches to improve performance and large scale fabrication <b>Prof John Bell</b>							14:05
14:10		100: Aesthetically Pleasing Luminescent Solar Concentrators <b>Dr Andrew Nattestad</b>						14:10
14:15								14:15
14:20	543: Hybrid nanostructures as electrode materials for potassium ion batteries <b>Zaiping Guo</b>		368: Predicting the Structural and Electronic Properties of van der Waals Heterostructures using Artificial Intelligence <b>Prof Mike Ford</b>	524: Development of testing methodologies and documentary standards for advanced nanoscale thin films and composites <b>Dr Victoria Coleman</b>	89: Graphitic films growth on insulators: paper and oxide substrate <b>Dr Satoru Kaneko</b>	109: Microstructure Evolution of Mg Sheets During Bending Deformation <b>Mr Yuhang Huang</b>	370: Potential of graphene for interconnect applications <b>Dr Inge Asselberghs</b>	14:20
14:25								14:25
14:30		382: Interfacial assembly of nanosheets into porous macrostructures <b>Prof Franklin Kim</b>						14:30
14:35								14:35
14:40	88: Self-Recovery Chemistry of In Operando Electrodeposition Enables Stable Operation of Aqueous Zinc-ion Batteries <b>Mr Yijun Zhong</b>		502: In Silico Materials Design for Next Generation Batteries <b>A/Prof Nikhil Medhekar</b>	43: Study of hexagonal Y1-x(Tb/Ce)xMnO3+d for oxygen separation from air <b>Dr Alicja Klimkowicz</b>	197: Nanoscale graphene wrinkles: chemistry, physics and confinement effects <b>A/Prof Jana Kalbacova Vejpravova</b>	132: Dynamic precipitation in aluminium alloys <b>Prof Christopher Hutchinson</b>	135: Development of High Breathable Composite containing Phase Change Material <b>Dr Mohanapriya Venkataraman</b>	14:40
14:45								14:45
14:50	261: Fast Li ion diffusion and charge transfer kinetics in amorphous TiO2-x nanotubes for high-rate Li ion storage anodes <b>Ms Yu Jiang</b>	427: Nanostructure fabrication and functionalization using in situ electron beam and plasma chemistry. <b>A/Prof Charlene Lobo</b>	208: Disconnections and resulting grain boundary mobilities in face centred cubic metals <b>Dr Christian Brandl</b>					14:50
14:55								14:55
15:00	308: Lithiation of multilayered ZnO quantum dot/carbon composite as revealed by in situ transmission electron microscopy <b>Mr Joseph Fernando</b>	156: Shape and phase control on colloidal ZnSe nanocrystal by tailoring Se precursor reactivity <b>Miss Wei Chen</b>	390: Machine learning feature engineering of molecules on materials <b>Dr Melisande Julia Fischer</b>	476: Anomalous magnetotransport behavior in a ferromagnetic perovskite oxide with interfacially engineered metal-oxygen bonds <b>Dr Daisuke Kan</b>	39: A tool box for rational functionalization of graphene <b>Dr Martin Kalbac</b>	153: Training precipitate strengthened Al alloys for improved fatigue performance <b>Miss Qi Zhang</b>	177: Multilayer Textiles with Improved Thermal Management Based on Back Reflection of Human Body Thermal Radiation <b>A/Prof Dana Kremenakova</b>	15:00
15:05								15:05
15:10						212: Design of new maraging steels for additive manufacturing <b>Mr Timothy Murray</b>		15:10
15:15							341: Tunable dielectric properties in aligned nanofibres <b>Prof Thomas Nann</b>	15:15
15:20								15:20
15:25								15:25

Afternoon tea

	Riverside Theatre <i>Chairperson: Rachel Caruso</i>	River View Room 4 <i>Chairperson: Liangliang Li</i>	River View Room 5 <i>Chairperson: Benyamin Motevalli</i>	Meeting Room 6 <i>Chairperson: Paolo Mele &amp; Shunichi Arisawa</i>	Meeting Room 7 <i>Chairperson: Tamio Endo &amp; Shrikant Saini</i>	Meeting Room 8 <i>Chairperson: Julie Cairney</i>	Meeting Room 9 <i>Chairperson: Irene Suarez-Martinez</i>	
	B. Energy and Environment Materials	A. Electronic and Optical Materials	F. Computational Materials	D8. Australia-Japan joint forum on Oxide thin films and Nano-composites (Surface-related Science and Engineering)	A7. Australia-Japan joint forum on thermoelectric materials for sustainable development	E. Advanced Structured Materials	D. Advanced Functional Materials	
16:00		477: Low-dimensional metal halide perovskites for integrated photonics <b>Prof. Xiao Wang</b>	511: Universal hidden order in amorphous cellular geometries <b>Dr Gerd Schroeder-Turk</b>	42: High performance oxide superconducting films with designed nano-structures <b>Prof Yutaka Yoshida</b>		165: The Effect of Molybdenum on Clustering and Precipitation Behaviour of Niobium-Containing Strip-Cast Steel <b>Dr Ross Marceau</b>	555: Deformable Electronics for Human Machine Interface : from self-assembly to designer smart materials and devices <b>Prof PoolSee Lee</b>	16:00
16:05	52: Materials for Energy Applications: How Theoretical Modeling Contributes to the Experiment? <b>Prof Aijun Du</b>							16:05
16:10								16:10
16:15								16:15
16:20	25: Fabricating high performance - lightweight - lowcost - safe batteries <b>Dr Md Mokhlesur Rahman</b>		249: A novel coarse-graining approach to simulate suspensions of soft deformable particles <b>Prof Massimo Ciamarra</b>	417: Development of MgB2 based composites for superconducting applications <b>Prof Petre Badica</b>	3: Thermoelectric performance of IV-VI compounds with octahedral-like coordination: a chemical-bonding perspective <b>Prof Matthias Wuttig</b>	171: Sacrificial corrosion protection achieved by surface precipitation in aluminium alloys <b>Mr Thang Vu Dinh</b>		16:20
16:25								16:25
16:30		486: Organic and Perovskite-Based Solar Inks for Roll-to-Roll Printed Solar Cells <b>Dr Doojin Vak</b>						16:30
16:35								16:35
16:40	73: Highly efficient radial-junction microwire solar cells by acid based doping process <b>Mr Wonjoo Jin</b>							16:40
16:45		400: Photoresponse of hyperdoped Si photodiodes <b>Ms Shao Qi Lim</b>		387: Vortex matter and dynamics in YBa2Cu3O7-x superconducting films with correlated and synergetic pinning centres. <b>Prof Adrian Crisan</b>	548: Atomic scale defects responsible for high performance thermoelectric materials <b>Kim SungWng</b>	189: Strength-toughness-wear resistance relationship in Ti microalloyed martensitic steels <b>Dr Andrii Kostryzhev</b>	483: Materials and defect engineering for cross-disciplinary applications <b>Dr Sumeet Walla</b>	16:45
16:50			213: Systematically coarse-grained anisotropic-site dynamical simulation models <b>A/Prof David Huang</b>					16:50
16:55								16:55
17:00	435: Rational design of MOFs and their derivatives as robust substrates for electrochemical energy storage <b>Prof Jiewu Cui</b>							17:00
17:05								17:05
17:10		597: Next-generation Non-devices Enabled by Tailoring the van der Waals Interactions <b>Yuerui Lu</b>	519: Computing a glass-transition temperature in amorphous carbons from molecular dynamics <b>A/Prof Nigel Marks</b>	263: Tuning the Electronic Structure of High-Temperature Superconducting Films by Field Induced Oxygen Diffusion <b>Dr Anna Palau</b>	547: "Metability" of thermoelectric semiconductors... Focused on Bi2Te2 <b>Sudong Park</b>	206: Thermally activated dislocation mobility in body-centred cubic Cr <b>Dr Christian Brandl</b>	304: Mechanical Properties of AlN Nanowires as Revealed by in situ Transmission Electron Microscopy <b>Dr Konstantin Faershteyn</b>	17:10
17:15								17:15
17:20	389: Perfecting the Imperfections in Nanomaterials for CO2 Conversion <b>Prof Vivek Polshettiwar</b>							17:20
17:25								17:25
17:30								17:30
17:35								17:35
6:45 - 8:45 PM	VIP RECEPTION - Invitation only The Island, Elizabeth Quay							6:45 - 8:45 PM





20th International Union of Materials Research Societies International Conference in Asia  
22 – 26 September 2019  
Perth Convention & Exhibition Centre



TUESDAY 24 SEPTEMBER 2019

Riverside Theatre

Chairperson: Gerd Schröder-Turk

8:30 - 9:15

580: Nanomaterials and Nanosystems for Catalytic, Energy and Biomedical Applications  
Prof Jackie Ying

8:30 - 9:15

Chairperson: Mariusz Martyniuk

9:15 - 10:00

586: Perovskite Solar Cell: The Viable Alternative to Fossil Fuel  
Prof Nam-Gyu Park

9:15 - 10:00

10:00 - 10:30

Morning Tea

10:00 - 10:30

	Riverside Theatre Chairperson: Rachel Caruso	River View Room 4 Chairperson: Qing Hua Wang	River View Room 5 Chairperson: Amanda Barnard	Meeting Room 6 Chairpersons: Yukiko Yamada-Takamura & Cathy McNamee	Meeting Room 7 Chairperson: Tamio Endo & Saratchandra Babu	Meeting Room 8 Chairperson: Matthew Barnett	Meeting Room 9 Chairperson: Prashant Sonar	
	B. Energy & Environment Materials	A. Electronic and Optical Materials	F. Computational Materials	D8. Australia-Japan joint forum on Oxide thin films and Nano-composites (Surface-related Science and Engineering)	D7. Australia-Japan joint forum on Carbon and Related Materials – Synthesis, Evaluation and Applications	E. Advanced Structured Materials	D. Advanced Functional Materials	
10:30								10:30
10:35								10:35
10:40	505: Insight into catalyst materials and reactor design for a circular economy of CO2 Prof Juan Ramon Morante Leonart	522: Versatile Localized Surface Plasmon Resonance of Silver Nanoparticles in Polymer Solar Cells Prof Jin Young Kim	321: Building Connections: Harnessing Informatics to Discover Pathways for Materials Discovery Prof Krishna Rajan	480: Paper Applications Prof Rodrigo Martins	473: Diamond implants for improving the biointerface A/Prof Kate Fox	579: Additive Manufacturing of Titanium Prof Tim Sercombe	529: Recent progress in sustainable mechanoluminescence materials Prof Chao-Nan Xu	10:40
10:45								10:45
10:50								10:50
10:55								10:55
11:00								11:00
11:05	376: Transmission electron microscopy for the analysis of materials for "beyond lithium and sodium" high voltage batteries Dr Alexey Glushenkov	9: Efficient Er/O Doped Silicon Light-Emitting Diodes at Communication Wavelength by Deep Cooling A/Prof Yaping Dan	375: Exploring Large Scale ToF-SIMS Data Matrices using Artificial Neural Networks A/Prof Paul Pigram	302: Growth and characterization of p-type oxide semiconductor thin films by using mist CVD method. Dr Takumi Ikenoue	564: Mesoscopic Graphene Assemblies: Synthesis, Characterization, and Applications Mario Hofmann	293: Strain partitioning during low cycle fatigue of multi-phase steels with a hard phase matrix A/Prof Nicole Stanford	127: High performance lead free dielectrics for energy storage applications Prof Shujun Zhang	11:05
11:10								11:10
11:15								11:15
11:20	144: Heavy-metal free colloidal semiconductor nanocrystals as photocatalysts for clean fuel production Dr Guohua Jia	576: 2D Gas Sensors with High Sensitivity and Selectivity: Insight from Theoretical Simulations Liangzhi Kou	531: Data-driven approach to computational materials design A/Prof Kenta Hongo	155: Development of Advanced Oxide Thin Film Prepared by Excimer Laser Assisted Metal Organic Deposition Dr Tetsuo Tsuchiya	561: Scalable synthesis of high quality 2D materials Ya-Ping Hsieh	496: Calculating Steel Making and Steel Refining Processes using Thermo-Calc's New Process Metallurgy Module and the CALPHAD Database TCOX9 Dr Johan Bratberg	481: Oxide Electronics Prof Rodrigo Martins	11:20
11:25								11:25
11:30								11:30
11:35	23: Temperature Effects in Lattice Dynamics of Tin Selenide Dr Sergey Danilkin	329: GaAsSb nanowire photodetectors Dr Ziyuan Li	408: Accelerating Materials Discovery and Design using AI and Machine Learning Dr Troy Loeffler	412: Structural property of ZnO film effects on the growth of vertical-aligned ZnO nanorods Prof Chaoyang Li	392: Capture of CO2 by ZIFs and its composites with CNTs: A solution to reduce CO2 emissions Prof Saratchandra Babu Mukkamala	77: Additive Manufacturing of Duplex Stainless Steels using Selective Laser Melting Mr Derui Jiang	15: Ion Interaction in Vapour Deposited Conducting Polymers for Real-Time Sensing Applications Mr Vithyasaahar Sethumadhavan	11:35
11:40								11:40
11:45								11:45
11:50	30: Developing Modified Layered Oxides for Sodium Battery Application Miss Jenny Stansby	414: Two-Photon Absorbing Photochromic Complexes Dr Adam Woodward	194: Relation extraction with weakly supervised learning based on process-structure-property-performance reciprocity Mr Takeshi Onishi	426: Oxide semiconductor plasmonics for infrared applications A/Prof Hiroaki Matsui	598: Chemical and Biomolecule Sensing using Graphene Field Effect Transistors Jiri Cervenka	93: The effect of individual layer thickness on the strengthening mechanisms of Ni/Al nanolaminates Mr Mohammad Nur E Alam Al Nasim	50: Diverse morphologies of zinc oxide nanoparticles and their electrocatalytic performance in hydrogen production Dr Veronica Sofianos	11:50
11:55								11:55
12:00								12:00
12:05	49: Repurposing used primary and secondary battery electrodes - a worthwhile value add? Mr Jimmy Wu	361: High-quality narrow-band gap III-V semiconductor/superconductor nano-heterostructures grown by MBE Prof Jianhua Zhao	58: Machine Learning Assisted Material Evaluation for Organic Photovoltaics Mr Wenbo Sun	200: Towards predictive simulations of functional materials using Quantum Monte Carlo; application to transition metal oxides. Dr Anouar Benali		169: 3D printing of WC/Co cermet coatings Mr Chun Kit Sit	275: Barrier Performance of Spray Coated Cellulose Nanofiber Montmorillonite (MMT) Composites Mr Kirubanandan Shanmugam	12:05
12:10								12:10
12:15								12:15
12:20	385: Spectrophotometric and Electrochemical Characterization of Phosphoric Acid - Doped Polyaniline Thin Film on ITO as Supercapacitor Electrode Mr Bryan Montalban	123: The PZT/Ni unimorph magnetoelectric energy harvester for wireless sensing application Mr Yun Lu	245: Classification and prediction of defective structures in graphene-oxide nanoflakes Dr Benyamin Motevalli	489: Heusler alloys: Promising Functional Materials - a theoretical study Prof Rita John		182: Microstructure and mechanical properties of Ni-Cu alloys fabricated by wire arc additive manufacturing Dr Andrii Kostyzyev	506: The role surface modification in ZnO thin films from room temperature strong green emission A/Prof Yudi Darma	12:20
12:25								12:25
12:30								12:30
12:35	583: Advanced material architecture design for rechargeable alkali metal-based batteries Baohua Li	588: Multiferroic materials and multi-fields coupling Mr Zhenxiang Cheng				549: Application of APT in understanding high entropy alloys with exceptional properties Gang Sha	120: Engineered Magnetic Transition Metal Selenides for Spintronics Dr Pierre Ferdinand Poudeu Poudeu	12:35
12:40								12:40
12:45								12:45
12:50								12:50
12:55	509: Semiconductor Nanomaterials for Solar Fuel Generation Prof Lianzhou Wang					12: Solidification microstructures of pure aluminum under electric current Dr DongEung Kim		12:55
13:00								13:00
13:05								13:05
13:00 - 14:00	Lunch break							13:00 - 14:00
					Meeting Room 7			

13:00 - 14:00						<b>Lunch session: EMCR Early-Career Researcher Panel Discussion: Academic Career Pathways</b> (Catering supplied outside the room)	13:00 - 14:00
---------------	--	--	--	--	--	---	---------------

**TUESDAY 24 SEPTEMBER 2019**

	Riverside Theatre <i>Chairperson: Dmitri Golberg</i>	River View Room 4 <i>Chairperson: Yaping Dan</i>	River View Room 5 <i>Chairperson: Peter Kingshott</i>	Meeting Room 6 <i>Chairperson: Rodrigo Martins &amp; Francesca Iacopi</i>	Meeting Room 7 <i>Chairperson: Toshiyuki MORI</i>	Meeting Room 8 <i>Chairperson: Yanting Yin</i>	Meeting Room 9 <i>Chairperson: David Lewis</i>	
	B. Energy & Environment Materials	A. Electronic and Optical Materials	C. Bio-Materials	D8. Australia-Japan joint forum on Oxide thin films and Nano-composites (Surface-related Science and Engineering)	B6. Australia-Japan joint forum on Advance Energy Materials	G. Advanced Fabrication, Characterisation & Devices	D. Advanced Functional Materials	
14:00		495: III-V Semiconductor Nanostructures for Optoelectronic and Energy Applications <b>Prof Hoe Tan</b>	542: Additive Manufacturing Research for Biomedical Applications in CSIRO <b>Dr Shirley Shen</b>	312: Nanoscale investigation of ferroelectricity in ultra-thin BaTiO3 films integrated on silicon <b>Dr Sebastian Schmitt</b>	337: In-situ characterisation using transmission electron microscopy <b>Ms Ruth Knibbe</b>	240: Micropatterning cellulose-based materials for the creation of high performance products <b>Dr Christine Browne</b>	504: Surface texture enhanced superhydrophilic and superhydrophobic polymer surfaces: stable and robust? <b>Prof Hong Yee Low</b>	14:00
14:05	373: Thermally conductive polymer/BNNS nanocomposites for thermal management applications <b>Prof Xingyi Huang</b>							14:05
14:10			145: In vitro cytotoxicity of magnesium alloy WE43 to tumour cells <b>Prof Yuri Estrin</b>	497: Novel ferroelectric oxide based on HfO2: fabrication and remaining issues for applications <b>Prof Bertrand Vilquin</b>	346: A strongly coupled single perovskite/Ruddlesden-Popper layered perovskite composite enables exceptional electrocatalytic oxygen evolution <b>Prof Zongping Shao</b>	297: Magnetostrictive material characterisation for ultrasensitive optomechanical magnetometry <b>Mr Varun Prakash</b>	90: Electrical Conductivity and EMI Shielding of Fibrous Structures <b>Prof Jiri Militky</b>	14:10
14:15								14:15
14:20	56: Dopant-dependent high conductivity and decoupling of thermoelectric parameters in blended polymers <b>A/Prof Hui Li</b>							14:20
14:25		485: Diketopyrrolopyrrole Based Functional Semiconductors for High Performance Electronic Devices <b>A/Prof Prashant Sonar</b>	196: Thermoreversible magnetic nanochains via magnetic field assisted chemistry <b>A/Prof Jana Kalbacova Vejpravova</b>	168: Design of active interfaces in the anode of IT-SOFC through multi-disciplinary collaboration <b>Dr Toshiyuki Mori</b>	388: Novel Synthesis for 2-Dimensional Zinc Telluride Layer on Insulators by Electrochemical Deposition and its Applications <b>Mr Jinmyeong Seo</b>	137: Thermal Behavior of PEG/Aerogel Mixture <b>Dr Mohanapriya Venkataraman</b>	14:25	
14:30	72: Flexible crystalline silicon radial junction photovoltaics with vertically aligned tapered microwires <b>Mr Inchan Hwang</b>						14:30	
14:35		311: Nanocomposite light-extraction film for organic-lighting device <b>Prof Mao-Kuo Wei</b>	478: Improving in vitro and in vivo antibacterial functionality of Mg alloys through micro-alloying with Sr and Ga <b>Dr Xiaobo Chen</b>	451: Recent progresses in fabrication of non-c-axis oriented thin films of Bi-based superconductors and their applications to terahertz devices <b>Dr Shunichi Arisawa</b>	447: The Role of Phase Transformation Mechanism on the Intervariant Boundary Network Characteristics of a Commercially Pure Titanium Alloy <b>Mr Ehsan Farabi</b>	172: Control of size and fluorescent properties of aggregation-induced emission luminogens for biomedical application <b>Dr Javad Tavakoli</b>	14:35	
14:40	108: Super-exchange Interaction Induced Overall Optimization in Ferromagnetic Perovskite Oxides Enables Ultrafast Water Oxidation <b>Mr Jie Dai</b>						14:40	
14:45							14:45	
14:50							14:50	
14:55							14:55	
15:00							15:00	
15:05							15:05	
15:10							15:10	

15:10 - 15:40	Afternoon tea							15:10 - 15:40
---------------	---------------	--	--	--	--	--	--	---------------

	Riverside Theatre <i>Chairperson: Colin Raston</i>	River View Room 4 <i>Chairperson: Ankur Sharma</i>	River View Room 5 <i>Chairperson: Yufeng Zheng</i>	Meeting Room 6 <i>Chairperson: Pierre-Ferdinand Poudeu &amp; Satish Vitta</i>	Meeting Room 7 <i>Chairperson: Toshiyuki MORI</i>	Meeting Room 8 <i>Chairperson: Emily Chueng</i>	Meeting Room 9 <i>Chairperson: Hong Yee Low</i>		
	B. Energy & Environment Materials	A. Electronic and Optical Materials	C. Bio-Materials	A7. Australia-Japan joint forum on thermoelectric materials for sustainable development	B6. Australia-Japan joint forum on Advance Energy Materials	G. Advanced Fabrication, Characterisation & Devices	D. Advanced Functional Materials		
15:40		235: Wafer -scale graphene for integrated electronics and photonics <b>Prof Francesca Iacopi</b>	546: Smart, Multifunctional Biomaterial Surfaces based on Colloidal Crystals <b>Prof Peter Kingshott</b>	207: Improving the thermoelectric figure of merit of La3-xTe4 via f-orbital chemistry <b>Dr Thierry Caillat</b>	379: Electronic transport in topological insulators for low-energy electronics <b>Dr Zengji Yue</b>	372: Microstructure Control in Metal Additive Manufacturing <b>Dr Sophie Primig</b>	384: Dynamic Mechanical and Dielectric Approaches to the Characterisation of Conducting Polymers <b>Prof David Lewis</b>	15:40	
15:45	490: Harvesting waste heat using ionic liquid-based thermoelectrochemical cells. <b>A/Prof Jenny Pringle</b>							15:45	
15:50			349: Building nanophotonic structures by laser processing <b>Prof Rosalia Serna</b>	410: Development of Advanced Upconversion Nanomaterials for Bioimaging and Biosensing <b>Ms Helen Xu</b>	371: Tellurium-free metal chalcogenide thermoelectric materials <b>Prof In Chung</b>	484: Low Cost Organic Hole Transporting Materials for Highly Efficient and Stable Perovskite Solar Cells <b>A/Prof Prashant Sonar</b>	214: Tracing solute atoms in Mg alloys by scanning transmission electron microscopy <b>Dr Yuman Zhu</b>	184: Synthesis of Fe3O4-Au-CdS trimers as magnetically separable photocatalysts for hydrogen production <b>Miss Shaghrif Javaid</b>	15:50
15:55									15:55
16:00	79: The roles of metal-organic frameworks in modulating water permeability of graphene oxide-based carbon membranes <b>Prof Yuan Chen</b>								16:00
16:05		55: Ferroelectric and magnetic properties of BiFeO3-based thin films <b>A/Prof Tingting Jia</b>	112: Novel porous Ti3S2r28Nb alloy fabricated by powder metallurgy for bone-tissue applications: Structure characterization, mechanical properties, in vitro cytotoxicity and in vivo osteointegration <b>Prof Xin Lu</b>	101: Potential of Ag2Se as the next generation room temperature thermoelectric material. <b>Dr Priyanka Jood</b>	217: Novel solid polymer electrolyte including ionic liquids for high voltage energy storage devices <b>Prof Takaya Sato</b>	13: Elucidation Of Structures And Lithium Environments For An Organo-sulfur Cathode <b>Ms Lisa Djuandhi</b>	230: Effect of Curing Conditions on the Joint Strength of Two-Part Epoxy Adhesive for Multi-Material Car Body Assembly <b>Ms Dain Lim</b>	16:05	
16:10	74: Controlling the light trapping capability of microwire solar cells via nanosphere lithography <b>Mr Namwoo Kim</b>							16:10	
16:15		126: High piezoelectricity in relaxor-PT based materials with local structural heterogeneity <b>Prof Shujun Zhang</b>	248: Simulatio of vaterite - aspartic acid interaction: model development and results <b>Dr Raffaella Demichelis</b>	530: Gradual and significant improvement of thermoelectric properties in PbTe compounds <b>Prof Min-Wook Oh</b>	148: Electron-beam-induced formation of Pt nanoparticles on oxide films <b>Dr Shunya Yamamoto</b>	158: Towards Single-Molecule Diodes via diazonium salts on Silicon <b>Miss Chandramalika Peiris</b>	232: Hydrogen gas sensor with reversible color change reaction of MoO3 thin film based on Pt-Ni multi-layer catalyst <b>Mr Seung-Ik Han</b>	16:15	
16:20	78: Solvent-Coordination Effect on Pbl2 Precursor and High-Performance Perovskite Solar Cells <b>Mr Hyungwoo Kim</b>							16:20	
16:25								16:25	
16:30		57: Resonant Silicon Nanoparticles as Efficient Optical Nanoantennas <b>Dr Hiroshi Sugimoto</b>	558: Porous Silicon Biomaterials for Bioimaging and Drug Delivery <b>Dr Tushar Kumeria</b>	99: Power generation from nanostructured PbTe and colusites: Bridging the gap between materials development and module fabrication <b>Dr Michihiro Ohta</b>	338: Si Anodes in Sulfide Solid Electrolytes <b>Dr Narumi Ohta</b>	35: Conducting polymers for electrochromic devices <b>Dr Kamil Zuber</b>	271: Thermally-drive crystallization of titania amorphous nanotubes by in situ transmission electron microscopy <b>Dr Alberto Casu</b>	16:30	
16:35	45: What a battery can do for negative thermal expansion materials? New phases and modification the thermal expansion properties <b>Mr Junnan LIU</b>							16:35	
16:40		419: Realizing Optical Functions in-efficiency based on the Dielectric Metasurface <b>Prof Zhongyi Guo</b>				415: Device engineering for efficient optical performance in organic field effect transistors <b>Prof Achintya Dhar</b>	287: Amorphous Iron Nanoparticles for Hyperthermia <b>Dr Danilo Loche</b>	16:40	
16:45	438: Electrochemical and structural properties of iron-substituted sodium ruthenate cathodes for sodium ion batteries <b>Mr Dumindu Pasan Siriwardena Thanaweera Achchige</b>		16:45						
16:50			16:50						
16:55						122: Metal-Air Transistors: Semiconductor-Free, Field-Emission Air-Channel Nanoelectronics <b>Ms Shruti Nirantar</b>	318: The optoelectronic devices and colloidal and interfacial properties of carbon nitride <b>Dr Jingsan Xu</b>	16:55	
17:00	455: Advanced imaging and analysis of Lithium-ion Batteries <b>Dr Hanfang Hao</b>	17:00							
17:05								17:05	
17:10								17:10	
17:15								17:15	
17:20								17:20	
17:25								17:25	
17:30								17:30	
17:35								17:35	
	Riverside Theatre Foyer & Southern Foyer								
17:30 - 19:00	Dedicated poster viewing session & Drinks							17:30 - 19:00	





20th International Union of Materials Research Societies International Conference in Asia

22 – 26 September 2019

Perth Convention & Exhibition Centre

WEDNESDAY 25 SEPTEMBER 2019

Riverside Theatre

Chairperson: Nikki Stanford

Session Sponsored by Microscopy Australia

557: Interplay of Chemistry and Structure at Lattice Defects in Crystalline Materials studied at the Atomic Scale
Prof Dierk Raabe

Chairperson: Yun Liu

571: Fabrication and Multifunctional Regulations of Magnetic Nanomaterials
Prof Yanglong Hou

Morning Tea

10:00 - 10:30

Table with 7 columns (Riverside Theatre, River View Room 4, River View Room 5, Meeting Room 6, Meeting Room 7, Meeting Room 8, Meeting Room 9) and 18 rows of session details including topics, speakers, and times.

Lunch break

13:00 - 14:00

Meeting Room 7

Scientific Writing Workshop

ONLY OPEN TO ECR & PhDs
(Catering supplied outside the room)

13:00 - 14:00



WEDNESDAY 25 SEPTEMBER 2019

	Riverside Theatre <i>Chairperson: Luhua Li</i>	River View Room 4 <i>Chairperson: Zhenxiang Cheng</i>	River View Room 5 <i>Chairperson: Kate Fox</i>	Meeting Room 6 <i>Chairperson: Paolo Mele &amp; Hussein Al Assadi</i>	Meeting Room 7 <i>Chairperson: Toshiyuki MORI</i>	Meeting Room 8 <i>Chairperson: Christian Nijhuis &amp; Chandramalika Peiris</i>	Meeting Room 9 <i>Chairperson: Daniel Grimwood</i>
	B. Energy & Environment Materials	A. Electronic and Optical Materials	C. Bio-Materials	A7. Australia-Japan joint forum on thermoelectric materials for sustainable development	B6. Australia-Japan joint forum on Advance Energy Materials	G. Advanced Fabrication, Characterisation & Devices	F. Computational Materials
14:00							
14:05	487: Bulk Hexagonal Boron Nitride with a Quasi-isotropic Thermal Conductivity <b>Dr Srikanth Mateti</b>	517: Developing multi-quantum parametric oxides as a new catalysts <b>Prof Yalin Lu</b>	362: Advances in zinc and its alloys as biodegradable metals for medical applications <b>Prof Yufeng Zheng</b>	343: Improvement of both thermoelectric and mechanical properties for n-type Mg2Si applicable to practical power generation device fabrication <b>Prof Tsutomu Iida</b>	358: Relationship between segregation, interface and polarization of La0.6Sr0.4Co0.2Fe0.8O3 cathode of solid oxide fuel cells <b>Prof San Ping Jiang</b>	350: Atomic Layer Deposition from Conventional Design to Forced-Flow Design - Uniform Coating and Large-Scale Production for Porous Nanostructures <b>Prof Tsong-Pyng Perng</b>	
14:10							
14:15							
14:20							
14:25	418: Nanosponges of High Surface Area Amorphous Zeolites as Heterogeneous Catalysts <b>Mr Ayan Maity</b>			146: Thermoelectric properties of As-based 122 Zintl compounds <b>Prof Chul-Ho Lee</b>		319: Characterisation of Energy Storage Materials using Synchrotron Radiation <b>Dr Mark Paskevicius</b>	
14:30		225: In situ nanostructural analysis of volatile threshold switching and non-volatile bipolar resistive switching in a mixed-phase a-VOx asymmetric crossbars <b>Ms Shruti Nirantar</b>	386: Two-dimensional Nanoclay Particles for Tumour-selective Nanomedicine <b>Dr Zi Gu</b>	366: Development of the Performance Measurement System for the Thermoelectric Generation System <b>Mr Seong Joon Heo</b>	365: Perovskite Catalysts for Oxygen Reduction Reaction in Solid Oxide Fuel Cells and Oxygen Evolution Reactions in Water Splitting <b>Prof John Zhu</b>		F. Pawsey Supercomputing Workshop on Big Data and High Performance Computing
14:35							
14:40	31: Plastic Heliostat Mirrors <b>Dr Marta Llusca</b>					218: Operando in a transmission electron microscope characterization of two terminal devices <b>A/Prof Martial Duchamp</b>	
14:45		124: The structure evolution of enhanced piezoelectric properties in KNN-based ceramics <b>Mr Xiaoyi Gao</b>					
14:50							
14:55	322: Development of prototype metal hydride reactors for solar thermal energy storage applications <b>Dr Terry Humphries</b>		563: Investigating the lubrication mechanisms of articular cartilage <b>Dr Saeed Miramini</b>	67: Enhancing the thermoelectric performance of Li(CoNi)O2 by Ni replacement with earth abundant Mg <b>Prof Satish Vitta</b>		294: In situ heating STEM investigation of solid state cation-exchange reactions <b>Prof Andrea Falqui</b>	
15:00		185: Fast Reaction of Cu-Sn TLP Joints Bonded using Pre-annealed Sn/Cu/Sn Composite Preform for High-temperature Applications <b>Miss Soeun Jeong</b>			461: Lithium Diffusion Coefficient in Solid State Battery Materials: SIMS and NMR analysis <b>Dr Naoaki Kuwata</b>		
15:05							
15:10	439: Synergistic Engineering of Hierarchical Nanocomposite for Boosting Their Supercapacitive Performance and Beyond <b>Prof Yucheng Wu</b>		173: Aggregation-induced emission bio-probes: Lighting up hydrogels and revealing their properties in situ <b>A/Prof Youhong Tang</b>	66: Effect of double doping, Li and Se, on the thermoelectric properties of Cu2Te to improve figure-of-merit <b>Prof Satish Vitta</b>		325: Decorative electro-magnetic transparent metal-semiconductor thin-films for consumer electronics <b>Dr Bastian Stoehr</b>	
15:15		62: Large-area synthesis of two-dimensional MoO3-x for enhanced optoelectronic applications <b>Mr Aram Arash</b>					
15:20							
15:25							
15:30	Afternoon tea						

	Riverside Theatre <i>Chairperson: Yuan Chen</i>	River View Room 4 <i>Chairperson: Ruth Knibbe</i>	River View Room 5 <i>Chairperson: Xiaobo Chen</i>	Meeting Room 6 <i>Chairperson: Matthias Wuttig &amp; Kirill Kovnir</i>	Meeting Room 7 <i>Chairperson: Andrew Nattestad</i>	Meeting Room 8 <i>Chairperson: Neeraj Sharma &amp; Jihong Bian</i>	Meeting Room 9 <i>Chairperson: Ziyuan Li</i>
	B. Energy & Environment Materials	D. Advanced Functional Materials	C. Bio-Materials	A7. Australia-Japan joint forum on thermoelectric materials for sustainable development	B3. Energy Generation and Conversion	G. Advanced Fabrication, Characterisation & Devices	A. Electronic and Optical Materials
16:00							
16:05	340: High thermal conductivity of high-quality atomically thin boron nitride <b>Dr Luhua Li</b>	234: Graphenic carbon for on-silicon, miniaturised energy storage <b>Prof Francesca Iacopi</b>	501: Sintering and Biocompatibility of Blended Elemental Ti-Nb alloys <b>Dr Damon Kent</b>	95: An overview of key skutterudite materials and technology development over the last 30 years <b>Dr Thierry Caillat</b>	525: Efficiency enhancement of semiconductor photovoltaic structures from power generation to solar-fuel production <b>Prof Masakazu Sugiyama</b>	479: Oxidant or Catalyst for Oxidation? Reductant or Catalyst for Reduction? A Discussion of how we Observe Structural Disorder and its Effects on Reactivity <b>Dr Rosalie Hocking</b>	593: Stacking of 2D materials into vdW heterostructures <b>Prof Guangyu Zhang</b>
16:10							
16:15							
16:20							
16:25	324: Inkjet printing of in-situ prepared solution-based inorganic inks for solar photovoltaics <b>Dr Anjana Kothari</b>	391: Synthesis of black phosphorus single crystal through vapor phase transport method <b>Prof Woo Gwang Jung</b>		129: Tuning the thermoelectric properties of skutterudites using multiple strategies - substitution, filling and composites <b>Prof Satish Vitta</b>		471: Deciphering the electrochemical redox mechanism of battery insertion materials by in-situ X-ray diffraction <b>Dr Prabeer Barpanda</b>	231: Super-transport of Excitons in Atomically Thin Organic Semiconductors at the 2D quantum limit <b>Mr Ankur Sharma</b>
16:30							
16:35							
16:40	440: Low-dimensional electrochromic nanostructures for energy-saving applications <b>Prof Yong Zhang</b>	466: Dispersion improvement of halloysite nanotubes for developing advanced dental composites <b>Mr Kiho Cho</b>	474: Can we control the biointerface of metallic implants during the additive manufacturing process? <b>A/Prof Kate Fox</b>	119: Nanointerface Engineering of Electronic Transport in Bulk Nanostructured half-Heusler Alloys <b>Dr Pierre Ferdinand Poudeu Poudeu</b>	11: Characterization of nano carbon at material interfaces for applications in energy storage systems <b>Prof Cheng Yan</b>	348: The Measurement of Electronic Structure and Bonding Around Nano-Voids in Aluminium <b>A/Prof Philip Nakashima</b>	590: Ferroelectric-Driven Exciton and Trion Modulation in Monolayer Molybdenum and Tungsten Diselenides <b>Yi Zhu</b>
16:45							
16:50	107: Boosting the oxygen evolution reaction activity of a perovskite through introducing multi-element synergy and building an ordered structure <b>Mr Hainan Sun</b>	472: Non-ferroelectric, nonlinear polarization in doped rutile TiO2 ceramics <b>Ms Yun Liu</b>	494: Developing in vitro models of human neurogenesis <b>A/Prof Larisa Haupt</b>		377: Vortex fluidic mediated fabrication of functional nano carbon materials <b>Prof Colin Raston</b>	409: Rapid Neutron Powder Diffraction with Wombat: A Review <b>Dr Andrew Studer</b>	
16:55							
17:00				309: Thermoelectric properties of Ba1-xKxZn2As2 crystallized in the ThCr2Si2-type structure <b>Ms Haruno Kunioka</b>			
17:05							
17:10							
	Riverside Theatre <i>Chairperson: Neeraj Sharma</i>						
17:15 - 18:00	582: Ionic Liquid and Plastic Crystal Based Electrolytes for Advanced Batteries - From Fundamentals to Applications <b>Prof Maria Forsyth</b>						
19:30 - 23:00	Symposia dinner - Optus Stadium *Buses boarding from Plaza Level 1 of PCEC at 6:30 PM						





20th International Union of Materials Research Societies International Conference in Asia  
22 – 26 September 2019  
Perth Convention & Exhibition Centre



THURSDAY 26 SEPTEMBER 2019

Riverside Theatre				
Chairperson: Debbie Silvester-Dean				
9:13 - 9:15	Session Sponsored by Microscopy Australia			9:13 - 9:15
9:15 - 10:00	585: The new microrecycling science and microfactories™ for transformation of waste into value-added materials Presented by Dr Rumana Hossain on behalf of Prof Veena Sahajwalla			9:15 - 10:00
10:00 - 10:30	Morning Tea			10:00 - 10:30
Riverside Theatre	River View Room 4	River View Room 5	Meeting Room 6	
Chairperson: Alexey Glushenkov	Chairperson: Achitya Dhar	Chairperson: Larisa Haupt	Chairperson: Michihiro Ohta & Kedar Hippalgaonkar	
B. Energy & Environment Materials	G. Advanced Fabrication, Characterisation & Devices	C. Bio-Materials	A7. Australia-Japan joint forum on thermoelectric materials for sustainable development	
10:30		227: Time-resolved observations of liquid-liquid phase separation at the nanoscale using in situ transmission electron microscopy <b>A/Prof Martial Duchamp</b>	80: Correlation between Seebeck coefficients of organic thermoelectric materials and their oxidation levels <b>A/Prof Ichiro Imae</b>	10:30
10:35	535: "White graphene" and it's nanocomposites for thermal management applications <b>Dr Weiwei Lei</b>	499: In operando energy-resolved polarized neutron imaging of the charging cycles of a Li-ion battery - how to image the lithiation and de-lithiation and current distribution in 3D <b>Dr Luise Theil Kuhn</b>	188: Localized hyperthermia as a tool for cell membrane hyperfluidization <b>Dr Raluca Maria Fratila</b>	10:35
10:40			41: Thermoelectric properties of Al-doped ZnO composite films with polymer nanoparticles fabricated by pulsed laser deposition <b>Prof Paolo Mele</b>	10:40
10:45	432: Photovoltaic-Photoelectrochemical Tandem Devices for Stand-Alone Solar Hydrogen Generation <b>Dr Siva Karuturi</b>			10:45
10:50		281: Three dimensional in vitro models for the study of tumour angiogenesis <b>Dr Laura Bray</b>	157: preparation and performane optimization of conducting polymer/inorganic nanocomposite thermoelectric materials <b>A/Prof Qin Yao</b>	10:50
10:55	443: 3D carbon-coated NiCo2S4 nanowires doped with nitrogen for electrochemical energy storage and conversion <b>Prof Yan Wang</b>	544: Design and Optimization of the Lithium Ion Battery Module for the Solar Street Light <b>Evyv Kartini</b>		10:55
11:00		448: Nano and Microstructure Investigation of Silk Fibroin-Based Hydrogels for Biomedical Applications: A Small Angle Scattering Study <b>Dr Jitendra Mata</b>	243: Printable thermoelectric materials prepared by a wet process <b>Prof Koji Miyazaki</b>	11:00
11:05	512: Molecular design and commercialization of high-performance, environmental and functional polymer nanocomposites <b>Haihua Wang</b>	273: Luminescent Lead Halide Based Perovskite Nanoparticles as A New and Effective Element for Detection of Methyl Iodide <b>Dr Wenping Yin</b>	191: Growth of coated hybrid-perovskite thin film for thermoelectric applications <b>Mr Shrikant Saini</b>	11:05
11:10		5: 2D Materials Photonics and Optoelectronic Device Applications <b>Prof Qiaoliang Bao</b>	493: High Thermoelectric Performance and Diverse Crystal Structures in Cu <sub>2</sub> (S, Se, Te) Solid Solutions <b>Dr Kunpeng Zhao</b>	11:10
11:15	239: Designing materials for the light enhanced methanation of carbon dioxide <b>Dr Emma Lovell</b>	7: Pursuit the Interface and Dipole for Organic-based Photovoltaics <b>Mr Yanting Yin</b>		11:15
11:20		96: Improved hemostatis by bionanomaterials <b>A/Prof Takuya Tsuzuki</b>		11:20
11:25	459: Study on the adsorption principle of conducting polymer/oxide composites for wastewater treatment <b>Prof Wei Yan</b>	91: Crystallinities and Superconducting Properties of thickened Artificial Pinning Center doped YBa <sub>2</sub> Cu <sub>3</sub> O <sub>y</sub> Coated Conductors by using Vapor-Liquid-Solid growth technique. <b>Mr Tomohiro Ito</b>		11:25
11:30		360: Finding the right substrates to correctly model biomolecular functions for brain disease drug development. <b>A/Prof Anthony White</b>		11:30
11:35				11:35
11:40		272: Site specific depth profiling of layered structures by FIB-ToF-SIMS <b>Dr William Rickard</b>		11:40
11:45				11:45
11:50				11:50
11:55				11:55
12:00				12:00
12:05				12:05
12:10				12:10
12:15				12:15
12:20				12:20
12:25				12:25
12:30				12:30
12:35				12:35
12:40				12:40
12:45 - 13:45	Lunch break			12:45 - 13:45
Riverside Theatre				
Chairperson: Ian Chen				
13:45 - 14:30	562: Graphene-Based Soft Materials <b>Prof Dan Li</b>			13:45 - 14:30
Riverside Theatre				
14:30 - 15:00	Closing Ceremony & Awards			14:30 - 15:00