



**35th International Conference on the Physics of Semiconductors 2022**  
**27 - 30 June 2022**  
**ICC Sydney**



**Monday 27 June 2022**

Pyrmont Theatre				
AEST				
Opening Ceremony				
Acknowledgement of Country <b>KARI Singers</b>				
11:45 - 12:00	NSW Minister Science Innovation and Technology Address <b>Alister Henskens</b>			
12:00 - 12:10	Australia's Chief Scientist Address <b>Dr Cathy Foley</b>			
12:10 - 12:20	ICPS Symposium			
12:25 - 13:00	1068: Quantum metrology: A revolution for a more stable future <b>Dr Klaus Von Klitzing</b>			
13:00 - 13:35	505: Topological materials science <b>Prof Claudia Felser</b> <i>Remote Presentation</i>			
13:35 - 13:50	Break			
13:50 - 14:25	627: From materials to quantum devices and back again <b>Prof Giulia Galli</b>			
14:25 - 15:00	1074: Twist-controlled van der Waals heterostructures <b>Prof Kostya Novoselov</b>			
15:00 - 15:45	Afternoon Tea			
Pyrmont Theatre	Meeting Room C2.1	Meeting Room C2.2	Meeting Room C2.3	
Low dimensional systems (Quantum Hall, transport theory, 1D, 2D)	Quantum optics, nanophotonics	Material growth, structural properties, characterization, phonons	2D materials beyond graphene	
15:45 - 16:00	821: Optical interaction of the NV- centre in diamond with a plasmonic metal nanoparticle <b>Dr Harini Hapuarachchi</b>	196: Regaining a Lost Dimension – From 1D InAs Nanowires to 2D Nanofins by Templated Epitaxy <b>Prof Adam Micolich</b>	1057: Polarized Exciton Emission Reveals Local Spin Chains in a van der Waals antiferromagnet <b>Xiaoqin (Elaine) Li</b>	
16:00 - 16:15	1070: Probing the unique spin properties of semiconductor holes with one-dimensional quantum point contacts <b>Alex Hamilton</b>	572: Reducing the quantum noise of photoluminescence with a spectral filter and a weak Kerr nonlinearity <b>Dr Lorenzo Scarpelli</b>	795: (111) NiO epitaxial layers embedded with crystallographically oriented magnetic Ni-clusters <b>Dr Santosh Kumar Yadav</b>	
16:15 - 16:30	47: Terahertz-induced oscillations in encapsulated monolayer graphene. <b>Prof Jesus Inarrea</b>	969: Deterministic source of indistinguishable photons in a cluster state <b>Dr Dan Cogan</b>	29: New semiconductor/superconductor hybrids: increasing material choice, electrical stability, critical temperatures and critical fields. <b>Dr Damon Carrad</b>	270: Resonant Raman Spectroscopy Of Few Layer Molybdenum Telluride (mote2) <b>Prof Adam Babinski</b>
16:30 - 16:45	904: Observation of artificial Fermi surfaces in a patterned semiconductor two dimensional electron gas <b>Dr Oleh Klochan</b>	1013: Hexagonal boron nitride for integrated quantum photonics <b>Mr Sejeong Kim</b>	500: Influence of local substrate temperature on Mn incorporation and magnetic properties in MBE growth of (Ga,Mn)N layers <b>Dr Katarzyna Gas</b>	981: Reaction mechanisms of molecules with point defects in TMD films <b>Miss Daria Kleczka</b>
16:45 - 17:00	847: Gate tuning of fractional quantum Hall effects in InAs/AlGaSb quantum wells <b>Dr Hiroshi Irie</b>	255: Low-Noise GaAs Quantum Dots for Quantum Photonics <b>Mr Giang N. Nguyen</b>	335: Substrate effects on the growth modes of van der Waals/graphene heterostructures <b>Mrs Negar Zebardastan</b>	106: Single-defect-induced random telegraph signals in a molybdenum disulfide vertical transistor <b>Prof Gil-Ho Kim</b>
17:00 - 17:15	977: Observation of Photonic Zitterbewegung Effect in a Hexagonal Lattice Microcavity <b>Mr Seth Lovett</b>	214: Analysis Of Thin Germanium-rich SiGe Layers On Si(111) substrates <b>Ms Hannah Genath</b>	128: Black phosphorus phase retarder based on anisotropic refractive index dispersion <b>Mr Seong-Yeon Lee</b>	
17:15 - 17:30		96: High-resolution spectroscopy of a quantum dot driven bichromatically by two strong coherent fields <b>Ms Katarina Boos</b>	699: The first empirical formula for the bandgap of wurtzite AlGaAs <b>Prof Nika Akopian</b>	856: Rydberg series of excitons split by exchange interaction in highly anisotropic rhenium disulfide <b>Dr Piotr Kapuscinski</b>
17:30 - 19:00	Welcome Reception and Poster Session			



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**Tuesday 28 June 2022**

Pyrmont Theatre				
Plenary Address				
8:45 - 9:20	1064: Semiconductor quantum dots for optical quantum technologies <b>Prof Pascale Senellart</b>			
9:20 - 9:55	621: Magic-Angle Twisted Bilayer Graphene <b>Prof Allan Macdonald</b>			
9:55 - 10:30	608: Topological Physics in HgTe-based Quantum Devices <b>Prof Laurens Molenkamp</b>			
10:30 - 11:00	Morning Tea			
Pyrmont Theatre	Meeting Room C2.1	Meeting Room C2.2	Meeting Room C2.3	
Carbon/nanotubes/graphene	Optical properties, optoelectronics, solar cells	Electron devices and applications, MIR and THz Devices	Material growth, structural properties, characterization, phonons	
11:00 - 11:30	619: Super-moiré lattices <b>Prof Francois Peeters</b>	451: AlGaIn/GaN Heterostructures for THz Optopair <b>Dr Maciej Sakowicz</b>	763: High-Quality Large-Area Growth of MoS <sub>2</sub> Monolayers using Combinational Phase Precursor based Chemical Vapor Deposition <b>Mr Ary Wibowo</b>	
11:15 - 11:30		549: Nonlocality Driven Electroluminescence in Polar Nanosystems <b>Dr Christopher Gubbins</b>	888: Selective Area Grown PbTe Nanowire Networks <b>Mr Jason Jung</b>	
11:30 - 11:45	907: Carbon Quantum Dots under High Pressures <b>Dr Qingbo Sun</b>	731: Reconstructing hot-carrier dynamics in GaAs nanowires at the few-femtosecond timescale using high-throughput spectroscopy under ultra-low excitation conditions <b>Dr Patrick Parkinson</b>	909: Thermoradiative Power Conversion from HgCdTe Photodiodes <b>Dr Michael Nielsen</b>	1075: Unravelling the electronic transport properties of Narrow Bandgap InAs/InGaSb Superlattices <b>Dr Gilberto A. Umana-Membreno</b>
11:45 - 12:00	890: Suppressing remote optical phonon scattering in graphene below room temperature with touch-printed oxide <b>Mr Matt Gebert</b>	782: Voltage Imaging in Solution using Fluorescent p-n Junctions in Diamond <b>Dr Daniel McCloskey</b>	547: Semiconductor Nanomaterials For Terahertz Photonics: Towards Ultrafast Devices <b>Prof Hannah Joyce</b>	675: Possible Excitonic Insulating Phase in Quantum-Confined Sb Nanoflakes <b>Dr Zhi Li</b>
12:00 - 12:15		187: Laser Writing Of Quantum Dots By Photonic Nanojets <b>Prof Francesco Biccari</b>		Next Generation Science Chairperson: <b>Prof Michelle Simmons</b> 12:00 - 12:40
12:15 - 12:45	IUPAP Awardee Session Low-Power Electronics and Strong Light-Matter Coupling with 2D Semiconductors <b>Prof. Deep Jarwala</b>	Lunch		
12:45 - 13:15	IUPAP Awardee Session <b>Prof. Dmitri Efetov</b>			
Pyrmont Theatre	Meeting Room C2.1	Meeting Room C2.2	Meeting Room C2.3	
Low dimensional systems (Quantum Hall, transport theory, 1D, 2D)	Charge, valley and spin qubits	Wide-bandgap semiconductors (GaN, SiC, Ga <sub>2</sub> O <sub>3</sub> , BN)	Topological states of matter, topological insulators and Weyl semimetals, Majorana fermions in solid state	
13:15 - 13:30	962: Work fluctuations in an information engine based on a semiconductor quantum dot <b>Mr David Barker</b>	612: Telecom spin-photon interfaces in silicon <b>A/Prof Stephanie Simmons</b>	642: The role of metal vacancies in thermal degradation of InGaN <b>Dr Julita Smalc-Koziorowska</b>	1055: Majorana bound states in topological insulators without a vortex <b>Jelena Klinovaja</b>
13:30 - 13:45	994: High-quality two-dimensional electron and hole gases in undoped InSb quantum wells <b>Dr Rüdiger Schott</b>			
13:45 - 14:00	591: Measurement of a hierarchy of modes in an interacting 1D system beyond the linear Luttinger regime <b>Prof Christopher Ford</b>	271: 3-Dimensional Tuning of an Atomically Defined Silicon Tunnel Junction <b>Matthew Donnelly</b>	648: Enabling Diamond Nanoelectronics by Solid-State Surface Transfer Doping <b>A/Prof Dongchen Qi</b>	24: Resonant photovoltaic effect in doped magnetic semiconductors <b>Dr Pankaj Bhalla</b>
14:00 - 14:15		577: Readout and coherent control of precision atom qubits in isotopically pure silicon* <b>Dr Pascal Macha</b>	525: Magnetization Steps in Dilute Bulk GaN:Mn <b>Dr Katarzyna Gas</b>	928: Tunable 4 $\pi$ -periodic supercurrent in HgTe-based topological nanowires <b>Mr Wolfgang Himmeler</b>
14:15 - 14:30	842: Hall potential profiles and current distributions in fractional quantum Hall regimes scanned by single-electron transistor microscope at 40 mK <b>Mr Lukas Freund</b>	828: Combining n-MOS Charge Sensing with p-MOS Silicon Hole Double Quantum Dots in a CMOS platform <b>Mr Ikkyeong Jin</b>	1050: Understanding and tailoring unique electronic and phononic hBN properties <b>Giorgia Fugallo</b>	853: Large magnetic gap in a designer ferromagnet-topological insulator-ferromagnet heterostructure <b>Mr Qile Li</b>
14:30 - 14:45	894: Universal hydrodynamic flow in a two dimensional electron fluid in a GaAs/AlGaAs heterostructure <b>Dr Qingwen Wang</b>	501: Graphene quantum dots: spin and valley degrees of freedom <b>Ms Rebekka Garreis</b>		Tuning the Edge States of Topological Crystalline Insulators via Substrate Effects <b>A/Prof Nikhil Medhakar</b>
14:45 - 15:00		211: Engineering Long Spin Coherence Times Of Spin-orbit Systems <b>Dr Takashi Kobayashi</b>	778: Quantum microscopy with a van der Waals quantum sensor <b>Mr Sam Scholten</b>	
15:00 - 15:15		942: Electric field tunable transition dipole moments and selective optical charging of a single QD molecule <b>Mr Frederik Bopp</b>	630: Point defects in wide-band-gap semiconductors for quantum information applications <b>Dr Mark Turiansky</b>	
15:15 - 15:30		569: Coherent spin control of s-, p-, d- and f-electrons in a silicon quantum dot <b>Dr Andre Saraiva</b>		
15:30 - 16:00	Afternoon Tea			
Pyrmont Theatre	Meeting Room C2.1	Meeting Room C2.2	Meeting Room C2.3	
2D materials beyond graphene	Quantum optics, nanophotonics	Charge, valley and spin qubits	Spintronics and spin phenomena	
16:00 - 16:15	1060: 2D-materials-based mixed-dimensional structures and optoelectronic device applications <b>Suk-Ho Choi</b>	967: Nanoscale, tunnelling electroluminescence mapping of single photon emission on an engineered SiC surface <b>Dr Alistair Rowe</b>	461: Time-resolved photoionization detection of a single Er <sup>3+</sup> ion in silicon <b>Dr Gabriele de Boo</b>	553: Spin-orbit Torques Using Van Der Waals Materials <b>Dr Marcos Guimarães</b>
16:15 - 16:30		952: Chiral light-matter interaction using a quantum dot in a microcavity <b>Ms Nadia Olympia Antoniadis</b>	843: Magnetic fields for protecting silicon T centre nuclear spin qubits <b>Mr Joshua Kananayagam</b>	
16:30 - 16:45	184: Strongly Correlated States of Charged Interlayer Excitons in van der Waals Heterostructures <b>Prof Igor Bondarev</b>	940: A quantum dot in a microcavity as a bright source of coherent single photons <b>Dr Natasha Tamm</b>	574: Engineering hyperfine Stark shifts for high-speed gates in donor molecules in silicon <b>Mr Michael Jones</b>	861: New details of spin-dependent recombination in dilute nitrides <b>Ms Agatha Ulibarri</b>
16:45 - 17:00	259: The resonant Raman scattering in monolayer WS <sub>2</sub> - the effect of the excitonic charge state <b>Prof Adam Babinski</b>	840: Single photon emission from sulfur vacancies in monolayer MoS <sub>2</sub> : insight from high-field magneto-spectroscopy <b>Dr Andreas Stier</b>	931: Spin-valley-based quantum gates and decoherence in a silicon quantum dot adjacent to micromagnets <b>Dr Xuedong Hu</b>	149: Carrier-induced Magnetism in a van der Waals Semiconductor <b>Dr Ivan Verzhbitskiy</b>
17:00 - 17:15	868: Phase modulation of self-gating in ionic liquid-functionalized InSe field-effect transistors <b>Dr Shao-Yu Chen</b>	865: Quantum Control of the Tin-Vacancy Spin Qubit in Diamond <b>Miss Cathryn Michaels</b>	905: Effect of ionization shock in multi-donor qubits <b>Mr Md Serajum Monir</b>	867: Magnetic ion relaxation time distribution within quantum well <b>Miss Aleksandra Lopion</b>
17:15 - 17:40	366: Fast Adiabatic Switching Of Floquet-bloch States In Monolayer WS <sub>2</sub> Reveals Coherent Dynamics <b>Dr Stuart Earl</b>	770: Metallic nano-rings for broadband extraction of quantum light <b>Dr Luca Sapiezka</b>	1016: Spin lifetime in bilayer graphene quantum dots <b>Ms Rebekka Garreis</b>	336: Long-lived spin dynamics in light-induced confinement potential generated in GaAs quantum wells <b>Dr Haruki Sanada</b>
17:30 - 19:00	Poster Session			



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**Wednesday 29 June 2022**

Meeting Room C2.2				
AEST	Women in Science and Technology Breakfast			
7:30 - 8:45	Women in Science and Technology Breakfast			
Pyrmont Theatre				
AEST	Plenary Address			
8:45 - 9:20	Liquid-activated quantum emission from native hBN defects for nanofluidic sensing <b>Aleksandra Radenovic</b>			
9:20 - 9:55	646: Gallium Oxide: Traditional but Emerging Semiconductor <b>Dr Masataka Higashiwaki</b>			
9:55 - 10:30	127: Exciton Dynamics In Van Der Waals Layered Materials <b>Prof Young Hee Lee</b>			
10:30 - 11:00	Morning Tea			
Pyrmont Theatre	Meeting Room C2.1	Meeting Room C2.2	Meeting Room C2.3	
Equity, Diversity and Inclusion in Semiconductor Physics	Quantum optics, nanophotonics	Material growth, characterisation/2D Materials	Charge, valley and spin qubits Chairperson: Prof Sue Coppersmith	
11:00 - 11:15	626: Quantum Wells in Nanowires: Materials and Devices <b>Prof Lan Fu</b>	1073: Superconductor/Semiconductor Heterostructures for Quantum Computing Applications <b>Chris Palmstrom</b>	Valley and Qubit States in a Si/SiGe Quantum Dot with a Spatially-Modulated Ge concentration <b>Prof Mark Eriksson</b>	
11:15 - 11:30	Equity, Diversity and Inclusion in Semiconductor Physics <b>Misha Schubert, Cathy Foley, Christen Banks, Michael Fuhrer, Chennupati Jagadish</b>	963: Spectral broadening of a single Er ion in a Si nano-transistor <b>Prof Chunming Yin</b>	961: Resonant tunneling between quantized subbands of few-layer WSe <sub>2</sub> in van der Waals double quantum well structures <b>Mr Kei Kinoshita</b>	
11:30 - 11:45		760: Stimulated generation of indistinguishable single photons from a quantum ladder system <b>Prof Kai Müller</b>	966: Ultrafast dynamics of Rydberg excitons in monolayer WSe <sub>2</sub> <b>Dr Armando Genco</b>	
11:45 - 12:00		424: Optical properties of ripening-assisted grown InAs/InP quantum dots as triggered single-photon sources around telecom C-band <b>Mr Pawel Holewa</b>	1018: Robust spin coherence with fast optical access for the zinc-vacancy in ZnSe <b>Mr Vitalie Nedelea</b>	
12:00 - 12:15			163: Roughness of Si/SiO <sub>2</sub> interface. How it impacts CMOS spin qubits? <b>Mr Jesus David Cifuentes Pardo</b>	
12:15 - 12:45	IUPAP Awardee Session <b>Prof. Cheng Gong</b>	Lunch		
12:45 - 13:15	IUPAP Awardee Session <b>Dr. Michael Saliba</b>			
Pyrmont Theatre	Pyrmont Theatre	Meeting Room C2.2	Meeting Room C2.3	
2D materials beyond graphene	Optical properties, optoelectronics, solar cells	Topological states of matter/electron devices	Electron devices and applications, MIR and THz Devices	
13:15 - 13:30	841: Hybrid dark excitons in monolayer MoS <sub>2</sub> <b>Dr Dmitry Efimkin</b>	848: Micro-LED with transition metal dichalcogenide hybrid device as an ultrafast pseudo-electroluminescence single-photon emitter <b>Mr Kasper Oreszczuk</b>	669: Understanding Magnetic and Topological Coupling in Ultra-thin MnBi <sub>2</sub> Te <sub>4</sub> <b>Mr Qile Li</b>	
13:30 - 13:45		800: Analysis of the microwave dissipative parametric gain in biased GaAs/AlGaAs superlattice <b>Mr Vladislav Čížas</b>	1062: Topological transistors - overcoming Boltzmann's tyranny and mobility limitations <b>A/Prof Dimi Culcer</b>	
13:45 - 14:00	837: Ferroelectricity and scaling of domain wall network in twisted bilayers of transition metal dichalcogenides <b>Dr Vladimir Enaldiev</b>	269: Hexagonal Boron Nitride: An Emerging Platform For Nanophotonics <b>Dr Trong Toan Tran</b>	908: New signatures of spin-orbit and topological spin gap in 1D quantum wires <b>Dr Karina Hudson</b>	
14:00 - 14:15	943: Exciton-polaron interactions in monolayer WS <sub>2</sub> <b>Mr Jack Muir</b>		819: Majorana modes with side features in magnet-superconductor hybrid systems <b>Mr Dan Crawford</b>	
14:15 - 14:30	937: Magneto-modulated reflectance study of exciton Landé-g factor in 2H-MoS <sub>2</sub> <b>Mr Dibya Sankar Das</b>	260: Magnetic-field-induced second harmonic generation of excitons in cuprous oxide <b>Mr Andreas Farenbruch</b>	910: Engineering topological states in atom-based semiconductor quantum dots <b>Mr Mitchell Kiczynski</b>	
14:30 - 14:45	785: P-type Ohmic contact to monolayer WSe <sub>2</sub> field-effect transistors using high electron affinity amorphous MoO <sub>3</sub> <b>Mr Yi-Hsun Chen</b>	157: Intra-band absorptivity in two-step photon up-conversion solar cells <b>Dr Yukihiko Harada</b>	155: Spectroscopic Visualization Of A Robust Electronic Response Of Semiconducting Nanowires To Deposition Of Superconducting Islands <b>Dr Jonathan Reiner</b>	
14:45 - 15:00	898: Strong Light-Matter Interactions in 2D Excitonic and Magnetic Semiconductors <b>Prof Deep Jariwala</b>	899: Measurement of Optical Dispersion Relations of Tungsten Disulfide Membranes <b>Mr Dong-Jin Shin</b>	972: Contactless characterization of SiO <sub>x</sub> /c-Si interface applied to pMOS devices for the development of fabrication processes <b>Dr Mickael Lozac'h</b>	
15:00 - 15:15	707: Interlayer coupling in artificially stacked MoS <sub>2</sub> bilayers <b>Miss Magdalena Grzeszczyk</b>	1061: Light-harvesting, self-powered and ultrasensitive physical sensing based on SiC/Si heterostructures <b>Dr Toan Dinh</b>	410: Effects of Hydrogen Radical Treatment on Piezoresistance Coefficients of Germanium <b>Prof Kazunori Matsuda</b>	
15:15 - 15:30	862: Controlled coherent coupling and dynamics of excitons in a monolayer semiconductor <b>Mr Aleksander Rodek</b>	979: Tuning G-centres emission with strain <b>Mr Andrea Ristori</b>	Semiconductor Device Fabrication at the Australian National Fabrication Facility <b>Dr Nadia Court</b>	
15:30 - 15:45	906: Direct measurement of biexcitons in monolayer WS <sub>2</sub> <b>Mr Mitchell Conway</b>	995: Spatially and time-resolved optical luminescence in core-shell InGaN/GaN nanowires excited with a X-ray nanobeam <b>Dr Valentina Bonino</b>	3D Silicon On Insulator (SOI) radiation detector technology and its application in particle therapy <b>Dr Linh Tran</b>	
15:45 - 16:15	Afternoon Tea			
Pyrmont Theatre	Meeting Room C2.1	Meeting Room C2.2	Meeting Room C2.3	
Wide-bandgap semiconductors (GaN, SiC, Ga <sub>2</sub> O <sub>3</sub> , BN)	Carbon: nanotubes and graphene	Perovskites/Organic Semiconductors	Spintronics and spin phenomena	
16:15 - 16:30	1059: The intricate physics of luminescence in GaN LEDs <b>Aurelien David</b>	199: Property Analysis And Nanoengineering Of Carbon Nanotubes And Graphenes Via In Situ Tem Techniques <b>Prof Dmitri Golberg</b>	502: Excitons and Polarons in Hybrid Perovskite <b>Dr Paulina Plochocka</b>	
16:30 - 16:45			640: Quantum Magnonics in Molecular Materials <b>Seth Kurfman</b>	
16:45 - 17:00	809: Growth of scalable single-photon emitter array from hexagonal Boron Nitride <b>Dr Chi Li</b>	606: Mg-intercalated Graphene On Silicon Carbide: Highly Electron-doped Air-stable Bilayer Graphene At Extreme Electric Fields <b>Prof Michael Fuhrer</b>	39: Carrier Spin Dynamics in Perovskite Crystals <b>Mr Erik Kirstein</b>	
17:00 - 17:15	774: GaN-based edge polariton laser <b>Prof Jesus Zuniga-Perez</b>	Graphene/SiC nanostructures for enhanced absorption in the MIR <b>Prof Francesca Iacopi</b>	1065: Address Stability of Metal Halide Perovskite Materials for Optoelectronic Devices through Doping Engineering <b>Ms Hongxia Wang</b>	
17:15 - 17:30	305: Electron-Phonon Scattering and Hole Self-Localisation in β-Ga <sub>2</sub> O <sub>3</sub> <b>Prof Saulius Marcinkevicius</b>		182: Spin-orbit Enabled Quantum Transport Channels In A Two-hole Lateral Gaas Double Quantum Dot Revealed By The Absence Of Pauli Spin Blockade <b>Dr Marek Korkusinski</b>	
17:30 - 17:45	584: Negative Differential Conductance and Electron Interference Effects in GaN / AlN Resonant Tunneling Diodes with Metallic Collector <b>Mr Jimmy Encomendero</b>		225: Exciton-phonon coupling in 2D perovskites – role of organic spacer and quantum well thickness <b>Dr Michal Baranowski</b>	
19:00 - 22:00	Conference Dinner - Luna Park			



Thursday 30 June 2022

Pyrmont Theatre				
Plenary Address				
8:45 - 9:20	Scalable semiconductor classical and quantum photonics <b>Jelena Vuckovic</b> <i>Remote Presentation</i>			
9:20 - 9:55	1056: Majorana zero modes and topological quantum computation: What, why, how, when? <b>Sankar Das Sarma</b>			
9:55 - 10:30	632: Fault Tolerant Si Based Quantum Computing <b>Dr Seigo Tarucha</b>			
10:30 - 11:00	Morning Tea			
Pyrmont Theatre	Meeting Room C2.1	Meeting Room C2.2	Meeting Room C2.3	
Wide-bandgap semiconductors (GaN, SiC, Ga <sub>2</sub> O <sub>3</sub> , BN)	Optical properties, optoelectronics, solar cells	Complex oxide and chalcogenide semiconductors	Spintronics and spin phenomena	
11:00 - 11:15	194: Monoisotopic Hexagonal Boron Nitride Crystal Growth From Molten Metal Fluxes <b>James Edgar</b>	158: Semiconductor Nanowires For Optoelectronics Applications <b>Prof Chennupati Jagadish</b>	713: Origin and properties of the 2DEGs at complex oxide heterostructures <b>Prof Anderson Janotti</b>	Probing Quantum Materials with Quantum Coherent Spins <b>Prof Brian Zhou</b>
11:15 - 11:30	976: Probing localization induced by intrinsic compositional disorder in InGaN/GaN quantum wells by scanning tunneling luminescence microscopy <b>Dr Alistair Rowe</b>	162: First-principles study of the band tail states and optical properties of gallium phosphide nitride alloys <b>Prof Hiroyuki Yaguchi</b>	534: Magnetic Properties of Phase-Separated Thermoelectric PbTe:Cr <b>Prof Maciej Sawicki</b>	392: Electron spin dynamics induced by spin-orbit effective magnetic field in GaAsBi <b>Dr Yoji Kunihashi</b>
11:30 - 11:45	588: Single Ion Implantation In Diamond For The Creation Of Colour Centres <b>Mr Nicholas Collins</b>	Laurie Faraone	494: Defects engineering of quaternary compound semiconductor photovoltaic materials & devices <b>A/Prof Xiaojing Hao</b>	436: Voltage Assisted Magnetization Switching In Ferromagnetic (Ga,Mn)N <b>Dr Dariusz Sztankiel</b>
12:00 - 12:15	657: Quantum emitters formed in silicon carbide <b>Dr Brett Johnson</b>			1084: A bound for a Rotating Wave Approximation <b>A/Prof Daniel Burgarth</b>
12:15 - 13:15	Lunch		Lunch	
Meet the Editor's Session Chairperson: A/Prof Dane McCamey				
Pyrmont Theatre	Pyrmont Theatre	Meeting Room C2.2	Meeting Room C2.3	
Low dimensional systems (Quantum Hall, transport theory, 1D, 2D)	Quantum optics, nanophotonics	Perovskites/Organic Semiconductors	Charge, valley and spin qubits	
13:15 - 13:30	535: Gallium-Arsenide quantum dots as sources of quantum light <b>Prof Armando Rastelli</b>	143: Single polariton nonlinear Faraday rotation <b>Dr Paul Walker</b>	Jinsong Huang	834: In-situ single-photon detection of Er sites in Si with long spin lifetimes and low homogeneous broadening <b>Dr Alexey Lyasota</b>
13:30 - 13:45	97: Quantitative Measurements of Quantized Microwave Faraday Rotation <b>Mr Vishnurayanan Suresh</b>	527: Synthetic Hamiltonians and spin-orbit engineering in tunable birefringent microcavities <b>Prof Jacek Szczytko</b>		827: Universal control of a six-qubit quantum processor in silicon <b>Mr Stephan Philips</b>
13:45 - 14:00	999: Observation of microwave-induced resistance oscillations in a contactless geometry <b>Dr Alina Khisameeva</b>	653: Interplay between polarization and quantum correlations of confined polaritons <b>Dr Olivier Bleu</b>	343: Optimal large-scale production by flow chemistry of new materials for organic photovoltaics <b>Mrs Kamilla Sivunova</b>	504: Silicon quantum processor unit cell operation above one Kelvin <b>Dr Henry Yang</b>
14:00 - 14:15	540: MIRO-like Oscillations Of Transmission <b>Dr Maxim Savchenko</b>	704: Rare earth materials for microwave to optical frequency conversion <b>Dr Rose Ahlefeldt</b>	287: Ab-initio Study Of The Interface Between Crystalline Tetracene And Silicon For Photovoltaic Applications <b>Dr Mykhailo Klymenko</b>	380: Fast single-spin qubit operation and its coherence time enhanced by quantum feedback <b>Mr Yuta Matsumoto</b>
14:15 - 14:30	824: Non-Magnetic Fractional Quantization in In <sub>0.75</sub> Ga <sub>0.25</sub> As Heterostructures <b>Miss Lei Liu</b>	934: Quantum Interference of Identical Photons from Remote GaAs Quantum Dots <b>Mr Giang Nam Nguyen</b>	2D or not 2D - that is the perovskite question <b>Paul Burn</b>	257: Transmitting And Teleporting Quantum-dot Spin States <b>Prof John Nichol</b>
14:30 - 14:45	954: Observation of the 3/2 state in conventional triple-gated quantum point contact <b>Prof Yoshiro Hirayama</b>			537: A silicon quantum-dot-coupled nuclear spin qubit <b>A/Prof Arne Laucht</b>
14:45 - 15:00				
15:00 - 15:30	Afternoon Tea			
Pyrmont Theatre				
Plenary Presentation and Closing Ceremony Chairperson: Prof Sven Rogge				
15:30 - 16:05	Yuanbo Zhang <i>Remote Presentation</i>			
16:05 - 16:30	Awards & Closing Address			