



European Materials Research Society

2025 Spring Meeting

May 26 – 30 | Strasbourg Convention Centre

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SYMPOSIUM C

2D materials and beyond: tomorrow's printable low-dimensional nanostructures and hybrids

Oral sessions : SCHUMAN – FIRST FLOOR

Poster sessions : ETOILE – FIRST FLOOR

Symposium Organizers:

Claudia BACKES, University of Kassel, Physical Chemistry of Nanomaterials, Germany

Jonathan COLEMAN, Trinity College Dublin, School of Physics and AMBER Research Centre, Ireland

Paolo SAMORI (Main organizer), ISIS, University of Strasbourg, France

Thomas D. ANTHOPOULOS, The University of Manchester, Photon Science Institute, UK

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Monday May 26

C03 Oral session

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13:45	3174	The first decade of colloidal perovskite quantum dots: Quo Vadis? KOVALENKO Maksym (Invited)
14:15	2787	Engineering Mo-Based DTM MXenes for Advanced Printable Electronics SYEDAH Afsheen Zahra
14:30	2270	Langmuir films of interfacially-modified graphene oxide MCCANN Alexander
14:45	608	Eco-friendly production of 2D crystals for advanced technologies CAPASSO Andrea
15:00	1691	Bismuth Chalco-Halide solid solutions Bi(Sz,Se1-z)(Ix,Br1-x): Insightful characterization of tuneable materials for sustainable energy applications ROVIRA FERRER David
15:15	2440	Ultra-thin transistors and circuits for conformable electronics DIMAGGIO Elisabetta
15:30	2079	Tuning the dimensionality of van der Waals materials for nanophotonic applications TSELIKOV Gleb
15:45	626	A general electrochemical approach for high-throughput production of solution-processable van der Waals Heterostructures SHI Huanhuan

Monday May 26

C04 Oral session

[View session abstracts](#)

16:30	2515	Graphene-based sensors for diagnostics applications MERKOCI Arben (Invited)
17:00	2751	Transport properties through internal interfaces in MoS ₂ RUSSELL Emilia
17:15	3018	Unipolar and non-volatile RF switches for 6G with MoS ₂ by liquid-liquid interface assembly Deuermeier Jonas
17:30	288	Discovery of Hexagonal MBenes Driven by Materials Genome WANG Junjie
17:45	2216	Ultrathin and Stretchable Organic Photovoltaics for Emerging Applications FUKUDA Kenjiro
18:00	2376	Dynamical Nature of Exciton-Polariton Coupling in WS ₂ Nanoparticles YADGAROV Lena
18:15	102	Li+ intercalation chemistry in 2D materials: scalable preparation, mechanism study and applications ZENG Zhiyuan

Tuesday May 27

C05 Oral session

[View session abstracts](#)

08:30	872	Amorphous graphene-based materials LISCIO Andrea
08:45	2612	“Artificial Intelligence for realistic modelling of electronic, thermal, optical and transport properties in large scale models of complex forms of 2D Materials-based composites and amorphous compounds” ROCHE Stephan (Invited)
09:15	1590	Radiation Tolerance and Defects Activity Characterization in Metal Halide Perovskite CIAVATTI Andrea
09:30	1874	Reductive nanocarbon processing: chemistry, assembly, and application SHAFFER Milo (Invited)

Tuesday May 27

C06 Oral session

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10:30	877	Integrated Electronics and Sensors Based on MXenes ALSHAREEF Husam (Invited)
11:00	335	Defect-Engineering of Liquid-Phase Exfoliated 2D Semiconductors: Stepwise Covalent Growth of Electronic Lateral Hetero-Networks RICCIARDULLI Antonio Gaetano
11:15	2588	Two Dimensional 2γ-In2Se3 in Bilayer-like Coloring Triangle Lattice: Mechanical, Electronic, Transport, and Photocatalytic Properties DURGUN Engin
11:30	376	Creating Doped and Asymmetric 2D Materials using Liquid Metal Processes KALANTAR-ZADEH Kourosh (Invited)

Tuesday May 27

C07 Oral session

[View session abstracts](#)

13:45	2717	MoS ₂ -Based TFTs for High-Performance Flexible Displays and Sensors AHN Jong-Hyun (Invited)
14:15	2414	The origin and supply resilience of electronic nanomaterials in Europe KELLY Adam G.
14:30	107	Realizing neuromorphic computing with solution-processed low-dimensional materials Hu Guohua

14:45	2870	DNA templated OD -2D Heterostructures: a Strategy for Optoelectronic Tunability CHEN Kai
15:00	460	Scalable Production and Application of Printable 2D Nanoelectronic Inks HERSAM Mark (Invited)
15:30	1305	Contact Barrier Engineering of 2D TMDCs based FETs through the Copper Sulfide Electrode. SOFER Zdenek
15:45	2101	Laser-enabled printing of two-dimensional materials: computational studies on key atomic-scale mechanisms TSETSERIS Leonidas

Tuesday May 27
C08 Oral session

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16:30	2860	Colloidal Nanocrystal Materials and Optical Devices with Extraordinary Structures and Functions KAGAN Cherie (Invited)
17:00	2375	Morphological analysis of printed nanostructured networks using 3D FIB-SEM nanotomography GABBETT Cian
17:15	1250	InAs Colloidal Quantum Dot Light Emitting Diodes HOSSEIN Roshan

Tuesday May 27
CP02 Poster session

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17:30	01_101	Small Organic Molecule-Catalyzed Synthesis of a Van der Waals Flat-band Superconductor Song Xiaoyu
17:30	02_1011	Enhanced charge transfer in exfoliated MoS ₂ monolayers on plasmonic Ag nanogratings LIM Seoyoung
17:30	03_1021	Broken symmetry states and Quantum Hall Ferromagnetism in decoupled twisted bilayer graphene PANDEY Vineet

17:30	04_1032	3D printing of freestanding pure MXene microarchitectures SEOL Seung Kwon
17:30	05_1059	Machine Learning-Driven Ultrasensitive WSe ₂ /MWCNT Hybrid-Based E-Nose Sensor Array for Volatiles Amines Mixture GAUR Snehraj
17:30	06_1139	Solution-processable electronic-grade 2D WTe ₂ enabled by synergistic dual ammonium intercalation Yang Hyejung
17:30	07_116	Using Electrical Impedance Spectroscopy to Separately Quantify the Effect of Strain on Nanosheet and Junction Resistance in Printed Nanosheet Networks CAFFREY Eoin
17:30	09_1285	Flexible 2D Perovskite Thin Film Arrays for Real-time radiation beam monitoring during Radiation Therapy FRATELLI Ilaria
17:30	10_1317	Gold nanorods induced surface plasmon resonance effect on alloy MoxW1-xS2/p-Si heterojunction photodetector SAHU Deepak Kumar
17:30	11_1344	Enhanced cyclic wear reliability of defect-repaired monolayer MoS ₂ BARRI Nima
17:30	12_1412	Approaching intra-flake transport in inkjet-printed two-dimensional materials for high-performance transistors and logic electronics MONDAL Sandeep
17:30	13_1417	Controlled Chemistry of Ti ₃ C ₂ Tx MXenes in Halide Perovskite Environment Towards Improved Photovoltaics SOBOLEV Kirill
17:30	14_1447	Graphene and Copper Nanoparticles based electrochemical sensors for the determination of Glyphosate in Water YASIN Uswah
17:30	15_1485	Novel tablet-like particle morphology of 2D Ti ₃ C ₂ MXene material: synthesis and application in electrochemical actuators LARRAMONA Gerardo
17:30	16_1500	Come On, Let's Twist: Synthesis and Characterization of Twisted Bilayer Graphene via Wet Transfer & HRTEM/EELS BARRIONUEVO Santiago
17:30	17_1517	Highly sensitive and self-validating environmental and breath-level detection of ammonia gas by sensors array based on carbon nanotube and disulfide molybdenum heterojunction LA BARBERA Federico
17:30	18_1543	Electronic Structure Modulation of Semi-metallic Electrode for 2D Devices KIM Taehun

17:30	19_1549	Covalently functionalized 2H MoS ₂ cross-linking platform for PSA biosensing Wu Shuwei
17:30	20_1563	Preparation and performance study of fast curing HTPB binder at room temperature REN Liyuan
17:30	21_1565	Photorefractive Effects and Laser-Induced Nanopatterning of Crystalline As ₂ S ₃ Flakes MINNEKHANOV Anton
17:30	23_1587	The phonon dispersion and electron-phonon couplings in halide perovskite CsPbBr ₃ THÉBAUD Simon
17:30	24_1599	Morphology control in ink-deposited 2D nanomaterial thin films Kudryavtseva Yelizaveta
17:30	25_1604	Electrochemical exfoliation of MoS ₂ bulk material for the production of single or few-layered suspensions KNICKREHM Timm
17:30	26_1621	Exploring resonant acoustic mixing for the mechanical synthesis of two-dimensional materials RABANI Aadam
17:30	27_166	Competitive Adsorption Behavior of Gases on 2D Materials Revealed by Second Harmonic Generation and Simplified Bond Hyperpolarizability Model YEN Ting Yu
17:30	28_1693	Accelerating Silicene Synthesis: A Breakthrough Vacuum/Nitrogen Cycle Method (VANS) for Rapid, Scalable Production KOZMA Erika
17:30	29_1700	Ion beam analysis on novel thin film chalco-halides: In the search for the microscale elemental distribution ROVIRA FERRER David
17:30	30_1710	High magnetoresistance in 2D magnetic semiconductor Cr ₂ Si ₂ Te ₆ for field sensitive devices SANDEEP Sandeep
17:30	31_1712	Hierarchically Structured Weyl Semimetal WTe ₂ Nanowires for Efficient Electrochemical Hydrogen Evolution Reaction KIM Hyeonkyeong
17:30	32_1716	Unlocking Bulk Photovoltaic Effect in Spiral WS ₂ for High-Performance Self-Powered Photodetectors BASU Meghasree
17:30	33_1737	Silica shelling of Quantum Dots and gold film development GARBARINO Mauro
17:30	34_1748	High-Performance Quasi-Solid-State Supercapacitors based on Nickel-Doped MoS Pompom Nanostructures Panghal Abhishek
17:30	35_1753	Tailoring Optoelectronic Properties in 2D TMDs via Strategic Defect Engineering RAHMAN Atikur

17:30	36_1775	Cobalt, Nickel, and Manganese-Doped WSe ₂ as Efficient Electrocatalysts for Water Splitting and PEM Hydrogen Evolution, and as Anode Material for Lithium-Ion Batteries KAGKOURA Antonia
17:30	37_1785	Dopant driven modulations and magnetic artifacts in CVD grown Nb doped WSe ₂ M B Abhijith
17:30	38_200	Substrate-induced strain in molybdenum disulfide grown by aerosol-assisted chemical vapor deposition BALAKRISHNAN Nilanthy
17:30	39_254	Tunability of the Superconductivity of NbSe ₂ Films Grown by Two-Step Vapor Deposition Chang Meijuan
17:30	40_265	Logic Inverter by Junction Field-Effect Transistors with Mixed-Dimensional WSe ₂ /n+-Si and MoS ₂ /p+-Si Structures KIM Eun Kyu
17:30	41_290	Enhancing ALD Adsorption via Substrate-Tuned Adhesion Energy of TMDCs EOM Sukhyeon
17:30	42_319	Fabrication of Diamond-like Carbon Films by PE-CVD Method and Investigation of Piezoresistive Features HUMALI Eray
17:30	43_320	Optical Modelling of Thermally Oxidized Silicon Substrates and Investigation of Oxide Thickness-Resistance Behavior for Piezoresistive Sensor Applications HUMALI Eray
17:30	44_352	2D-Material based memristor for high throughput, low-cost ReRAMs MARRACCINI Gianluca
17:30	45_365	Unraveling the Augmented Field Emission Performance of Molybdenum Disulfide-Praseodymium Sulfide (MoS ₂ @PrS) Heterostructure: A Combined Experimental and First Principles-Based Study MAHAJAN Anima
17:30	46_380	Contribution of the substituent on aryl diazonium salts to the functionalisation of MoS ₂ nanosheets GRASSME Florian
17:30	47_381	Tuning intra-flake and inter-flake charge transport in 2D MoS ₂ networks ZHURAVLOVA Anna
17:30	48_392	Solution-processed heterojunctions using liquid-exfoliated WSe ₂ nanosheets for photodetectors Liu Shixin
17:30	49_400	Scalable Delamination of 2D MXenes: Advances in Synthesis and Future Applications RAMAKRISHNAN Anu Roshini

17:30	50_404	Ink-printed graphene-TiO ₂ -based gas sensor operating in pulsed and continuous light or heat modes DROZDOWSKA Katarzyna	17:30	66_652	Data-Driven Discovery of High-Performance Heterobilayer Transition Metal Dichalcogenide-Based Sliding Ferroelectrics WANG Xian
17:30	51_419	Molten Salt Shielded Synthesis (MS3) of High Temperature MAX Phase Ceramics like Nb ₂ AlC, Ta ₂ AlC, V ₄ AlC ₃ in Open Air ROY Chiranjit	17:30	67_660	MoS ₂ -Au Hybrid Systems: How Does the Topography of Au Nanostructures Affect the Optical Properties of MoS ₂ Monolayers? CHO Jungyoon
17:30	52_465	Investigating effects of disorders in few-layer ReS ₂ via electron transport PAUL Shreya	17:30	68_710	Strain and Charge Doping Modulated Optical Emission Signatures of Polycrystalline WSe ₂ PAUL Sourav
17:30	53_467	Direct Laser Writing of Superimposed Gratings for Structural Colour and Encryption SOMERS Jamie	17:30	69_711	Solution-Processed Low-Dimensional Cs-Based Perovskite Nanostructures for Scalable Interface Engineering in Solar Cells NG Annie
17:30	54_479	Boosting Zinc Hybrid Supercapacitor Performance via Thiol Functionalization of Graphene-Based Cathodes VALENTINI Cataldo	17:30	70_714	Towards sustainable liquid phase exfoliation processes using predictive models and feedstock re-use STAFFORD Jason
17:30	55_483	Large-Area, Highly Crystalline 2D Imine Covalent Organic Framework (COF) Films: Molecular Synthesis, Exfoliation, and Semiconductor Properties SRIVASTAVA Diksha	17:30	71_720	Multi-functional networks from two-dimensional materials PRIOLO Irene
17:30	56_493	Growth Study of Metal-catalyst-free Chemical Vapor Deposition of Single-Layer Graphene on Sapphire WANG Zhaodong	17:30	72_774	Fabrication and Characterization of Two Types of MoS ₂ /Au-Nanowire Hybrid Systems KIM Na-Hyun
17:30	59_518	Effect of graphene flake dimensions on the electrical percolation, gauge factor and peizoresistive properties in soft polyurethane composite YADAV Lokesh	17:30	73_779	Localized electric-field induced defects in hexagonal boron nitride for site-controlled quantum emitters WU Chung Lin
17:30	60_54	New Synthesis Approach of Conducting Polymer/MXene Nanocomposite with Improved Electrochemical Properties SALEM Aliaa	17:30	74_860	High Performance Transparent Flexible Electrode by Dressing AgNWs with MXene CHEN Yusheng
17:30	61_560	Microfabrication and characterisation of electrically stable Suspended Electrolyte-gated Graphene Field Effect Transistors MOURO João	17:30	75_895	Investigation of the impact of many-body interactions on exciton physics in monolayer WSe ₂ using steady-state optical excitations DAS Saranya
17:30	62_574	MoS ₂ /TiO ₂ Heterojunctions for Printable Photocatalyst Films for Nitrogen Oxides Air Remediation Li Shize	17:30	76_941	Thickness-controlled etching for wafer-scale van der Waals Fe ₄ GeTe ₂ thin film Hangtian Wang
17:30	63_606	Temperature and bias-dependent capture-emission time maps in electrolyte-gated graphene field-effect transistors MOURO João	17:30	77_945	Superconductivity and CDW phases in Ca intercalated bi-Layer silicen SAM Jisvin
17:30	64_613	High-performance flexible pressure sensors based on transfer-printed graphene layers LUO Feng	17:30	78_3223	Fractal-Inspired Inkjet-Printed Gas Sensor Arrays for Room Temperature Formaldehyde Detection Ogbeide Osarenkhoe
17:30	65_617	Sprayed Graphene Electrode for Wearable Textile-Triboelectric Nanogenerators and Biomechanical Sensors Dang Hongyang			

Wednesday May 28

C09 Oral session

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08:30	1542	Contact Barrier Engineering of 2D TMDCs based FETs through the Copper Sulfide Electrode. BYEON Junsung
08:45	2230	Supramolecular inks of 2D materials for fully printed humidity sensors CASIRAGHI Cinzia (Invited)
09:15	563	2D Materials meet cellulose Nanofibers (CNF): Pioneering Advanced Nanocomposites and Applications HAMEDI Max
09:30	2846	An Inexpensive and Rapid Route to Printable Phosphorene Quantum Dots from Red Phosphorus PAWLUS Michal
09:45	2918	3D Printed Graphene-Quantum Dot Aerogels for Artificially Intelligent Formaldehyde Sensing BHOWMICK Tynee

Wednesday May 28

C10 Oral session

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10:30	394	Phase Engineering of Nanomaterials (PEN): 2D Nanomaterials ZHANG Hua (Invited)
11:00	605	Low Temperature Sintering of Inkjet-Printed Silver Nanoparticle Ink using Damp Heat or Water Koker Liane
11:15	2855	A Decade of Printed 2D Electronics CAREY Tian
11:30	2877	Printable Three-dimensional hierarchically porous MoS ₂ foam TUNG Vincent (Invited)

Wednesday May 28

C11 Oral session

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13:45	691	Sorted and Functionalized Semiconducting Carbon Nanotubes for Thin Film Devices ZAUMSEIL Jana (Invited)
14:15	1616	Potential-Driven Intercalation for Tailored 2D Nanomaterials SYNNATSCHKE Kevin
14:30	1349	3D printed electronic devices based on 2D materials composite and machine learning CHOI Wonbong
14:45	3230	Innovative applications of thin-film transistors (TFTs) technology for novel display, active-matrix sensing and on-chip DNA synthesis FENG Linrun
15:00	1005	Conductive, Additive-free MXene Inks Can Replace Metals and Carbons in Printed Electronics GOGOTSI Yury (Invited)

Thursday May 29

C12 Oral session

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08:30	2500	Zeiss Crossbeam Focused Ion Beam (FIB) Microscope for Nanomaterials Research VERTSANOVA Olena
08:45	2736	Hexagonal and amorphous boron nitride thin films for next-generation 2D electronics and battery applications SHIN Hyeon Suk (Invited)
09:15	641	Thickness-Dependent Properties of BNNs and Their Applications CAI Qiran
09:30	2605	2D Materials towards Post-AI Era: Smart Fibers, Artificial Muscle & Single Atom Catalyst KIM Sang Ouk (Invited)

Thursday May 29

C13 Oral session

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10:30	2709	Hypotaxy of Wafer-scale Single Crystal Transition Metal Dichalcogenides LEE Gwan-Hyoung (Invited)
11:00	2965	Solution-processed Janus 2D layers VASSILYEVA Natalia
11:15	2901	Temperature and Pressure Dependence of the Optical Properties of Inkjet-Printed Lead-Free Perovskite TEA2SnI4 HERNÁNDEZ Sergi
11:30	2893	The role of vacancy defects and Au ion mobility in MoS2 2D memristor JAMALZADEH KHEIRABADI Sharieh
11:45	1577	Inert Liquid Phase Exfoliation of TaS2 AHMAD Muhammad

Thursday May 29

CP04 Poster session 2

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13:30	01_1790	Defect Induced Peizoactivity in CVD grown Tungsten Dioxide-WO ₂ M B Abhijith
13:30	02_1822	Defect Engineering for Enhanced Mobility in CVD grown MoS ₂ Monolayers Majumder Sudipta
13:30	04_1838	Tuning the Optoelectronic Properties of ALD-Grown MoS ₂ Monolayers via Focused Helium Ion Beam Irradiation GONZALEZ-ANGULO Marco Antonio
13:30	06_1886	Electrochemically Exfoliated 2D MoS ₂ for ppb-level NO ₂ Sensing Biswas Subhajit
13:30	07_1888	Enhanced ReRAM Performance via Strain-Engineered MoS ₂ Using Permanent Stressors Cheon Min Cheol
13:30	08_1914	Lateral and Vertical p-n Junction Heterostuctures of MoSe ₂ -WSe ₂ and Their Broadband Nonlinear Optical Response and Rectification Effect JOOHYEON Ahn
13:30	09_1941	Synthesis of Two-Dimensional MoS ₂ by Sulfurization of Mo Thin Films using Isolated Plasma Soft Deposition for Temperature Sensors JANG Jong-Hyun

13:30	10_1953	Gapless Dry Transfer and Conformal Contact Analysis through Effective Diffusion Current Lim Jong Tae
13:30	12_2004	Optoionic MoS2 Synaptic Memory Devices Powered by Biopolymer Hydrogels as a Dynamic Cations Reservoir TORDI Pietro
13:30	13_2014	Epitaxial High-K Dielectric Oxide Gd ₂ O ₃ Substrate for 2D TMDCs: Realizing and Controlling High-Quality Optical Emission GHOSH Kritika
13:30	14_2080	Wafer-scale direct growth of graphene on c-sapphire for remote epitaxial growth of freestanding semiconductor thin films and devices Abbas Muhammad Sabbtainn
13:30	15_2082	Graphene-inspired synthesis of two-dimensional gold ERMOLAEV Georgy
13:30	16_2084	Temperature-Controlled Phase Behavior and Structural Characteristics of GaS and Ga ₂ S ₃ via liquid metal process WU Che-Ming
13:30	17_2092	Synchronized Illumination Kelvin Probe Force Microscopy: A Novel Technique for High-Resolution Mapping of Light-Induced Charge Dynamics EFTEKHARI Zeinab
13:30	18_2123	Covalent stitching of WS ₂ grain boundaries to weld two-dimensional semiconductor crystals HAN Bin
13:30	19_2137	Next generation photodetectors enabled by the Laser Induced Forward Transfer of two-dimensional materials ZERGIOTI Ioanna
13:30	20_2138	Ultra-short laser-induced crystallization of MoS ₂ thin films FARID Nazar
13:30	22_2156	Enhanced Water Resistance of halide CsPbI ₃ Perovskite through Graphene Flake Encapsulation. ER-RIYAH I Oussama
13:30	23_2213	Laser-direct-printed 2D material-based heterostructures for the fabrication of electronic devices ZERGIOTI Ioanna
13:30	24_2222	Fully Inkjet-Printed Sn-Based 2D Metal Halide Perovskites for Next-Generation LEDs and Photodetectors LOBO Kenneth
13:30	26_2255	Investigating Strain-Dependent Phonon Behaviour in Few-Layer V2CTx MXene PRAMANIK Monidipa

13:30	28_2268	Synergistic Defect Passivation, Hole doping and Hysteresis Control in 2D transition metal dichalcogenide SOMAY Srest	13:30	46_2614	Synthesis and Characterization of WTe ₂ and V:WTe ₂ toward inducing magnetism DIMITROV Dimitre
13:30	29_2285	Aerosol-Jet Printed Natural Biopolymer Composite Ionic Conductors Sekkarapatti Ramasamy Madeshwaran	13:30	47_2625	Reduced Graphene Oxide Electrolytic Transistors Assisted by Machine Learning for the Detection of Small Analyte Molecules LELIS Gabrielle
13:30	30_2306	Unveiling the Potential of Defects in MXene Heterostructures for Energy Applications Through First-Principles Study ALI Muhammad	13:30	48_2646	Synthesis and Characterization of MoSe ₂ and MoS ₂ Thin Films for Sensing and Optoelectronic Applications NAPOLEONOV Blagovest
13:30	31_2335	Liquid phase exfoliation of 2D materials in Cyrene using low-power bath sonication MOREIRA Pedro	13:30	49_2652	Chemical Analysis of Commercial Functionalized Graphene along the Production Process MADBOULY Loay Akmal
13:30	32_2350	High Responsive Pyrophototronic Photodetection in 2D WS ₂ Phototransistors using Patterned 2D hBN Dielectric CHAKRABARTY Poulomi	13:30	50_2658	Integrated Optical and Nonlinear Microscopy for TMDC Analysis LOAN Tommy
13:30	33_2379	Production of High Crystallinity Graphene Oxide and its Properties Hatakeyama Kazuto	13:30	51_2660	Accurate Band Gap Predictions for 3D and 2D Halide Perovskites with a Parameter-Free Hybrid Functional Approach GARBA Ibrahim Buba
13:30	34_2408	Synthesis of 2D WSe ₂ Nanolayers via Ultraviolet/Ozone Pre-deposition Treatment VIDEVA Vladimira	13:30	53_2679	Alloyed transition metal dichalcogenide nanosheets via a solution-processable route WELLS Rebekah
13:30	35_2425	Growth mechanism and exciton dynamics in CVD grown MoS ₂ WS ₂ heterojunction CHAUDHARY Vivek	13:30	54_2689	Murray's law inspired metal oxide-reduced graphene oxide for gas sensing BHOWMICK Tynee
13:30	37_2439	Mechanical Strain Effects on Magnetism in Frustrated Two-Dimensional Materials: A Monte Carlo Perspective with Distance-dependent Ising Hamiltonian CELIK Aytac	13:30	55_2695	Ultrafast diffusion in monolayer films of 9-armchair graphene nanoribbons MOCZKO Loïc
13:30	38_2462	Scalable, Low-Cost Solution Processing of 2D Materials for High-Performance RRAM Applications Mingates Tomás	13:30	56_2716	Unveiling the Potential of MBenes: Pioneering 2D Nanomaterials in Early Transition Metal Borides CHANDEL Madhurya
13:30	39_2527	Engineering of solution processing in multi-component organic light-emitting transistor based on CsPbBr ₃ perovskite nanocrystals ZAHOALIAJ Kelment	13:30	57_2728	ZnS-Based Nanostructures: The Role of Dimensionality in Structural and Optical Properties MASRI Rimel
13:30	40_2533	Transfer-free wafer-scale graphene electronics on sapphire Fenwick Oliver	13:30	59_2765	The development of a solution processing method to form ordered films of insulating 2D nanosheets suitable for use as dielectric layers in capacitors BRENNAN Oran
13:30	41_2557	Multi-length scale characterization of two-dimensional hybrid perovskites UMMADISINGU Amita	13:30	60_2771	Determining the Temperature Dependence of Nanowire Resistivity and Junction Resistance in Nanomaterial Networks COLEMAN Emmet
13:30	42_1878	Printed-Lithography of Hybrid Graphene-Perovskite Photodetectors for Sustainable Electronics AKHAVAN Shahab	13:30	61_2775	Vibrational properties and thermal behavior of Ti ₃ C ₂ Cl ₂ MXenes under different environmental conditions RIABOV Maksim
13:30	43_2592	Wafer-scale Single and Multilayer Hexagonal Boron Nitride CUN Huanyao	13:30	63_2812	2D noble-metal dichalcogenides: synthesis, properties and applications MARINOVA Vera
13:30	44_2596	Highly Selective Membranes Based on Charged Nanosheets for the Urban Mining of Lost Critical Metals GABRIEL Jean-Christophe P.			

13:30	65_2856	In-situ Fabrication of Laser-Induced Graphene/Manganese Oxide Composite for Ion Selective Electrochemical Electrodes ANVARI KOHESTANI Abolfazl
13:30	66_2872	Flexible Non-Enzymatic Hydrogen Peroxide Sensor Based on Spray-Coated 2D-TiO ₂ and Silver Nanowire Layers on PET Substrates CEVIK Eda
13:30	67_2873	Tunable Nanosheets for Ambient Energy Storage SASITHARAN Kezia
13:30	68_2915	The effect of Graphene-based Lubricant in tribological tests and fuel consumption CHRISTINELLI Wania Aparecida
13:30	69_2919	Reduced Graphene Oxide Electrolyte-gated Transistors under Multi-type Voltage Stimuli Towards Memory and Neuromorphic Applications FURLAN DE OLIVEIRA Rafael
13:30	70_2967	Reliable analysis of the elemental analysis of graphene oxide flakes with SEM/EDS and XPS RADNIK Jörg
13:30	71_2972	On-skin paintable and stable MXene hydrogels for Electrocardiogram Monitoring with high signal-to-noise ratio IQBAL Aamir
13:30	72_2981	Printed aqueous Zn-ion batteries for wearable sensors Goli Nagaraju
13:30	73_2994	High Performance ZnSnP ₂ Anode for Lithium ion Batteries. FULHAM Seán
13:30	74_3012	Fabrication of Zinc-Ion Microcapacitors based on 2D 1T-Titanium Disulfide ÖZ Sena
13:30	75_3029	Covalent and Supramolecular approaches to tunable 2D hybrid heterostructures growing and properties LUCHERELLI Matteo Andrea
13:30	76_3031	Electrolyte-gated Transistor Platform for microRNA Biosensing Through the Functionalization of Reduced Graphene Oxide DELEIGO Ana Vitória Ferreira
13:30	77_3057	Chemical Approaches for Creating Materials Beyond van der Waals Architectures Vázquez Sulleiro Manuel
13:30	78_3098	Influence of Oxidation Levels on the Mechanical Properties of Graphene Derivatives: A Comprehensive Analysis PÉREZ-GARCÍA Sergio Alfonso
13:30	79_3187	Chemical blowing strategy to build micro/nano structured 3D graphene-based materials HAN Kun

Thursday May 29 C14 Oral session

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14:45	417	High volume requirements on low-dimensional nanostructures STREB Fabian (Invited)
15:15	96	Circular Flow Alignment of Polymeric Semiconductor Thin Films on Air-Liquid Interfaces FUJIOKA Shuta
15:30	573	Fibre-based MoS ₂ photodetector for wearable applications LIU Sihui
15:45	1381	Persistent Photoconductivity and Photo(electro)catalysis from Engineered Transition Metal Dichalcogenide Atomic Layers BIROJU Ravi Kumar

Thursday May 29 C15 Oral session

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16:30	2790	Carbon Nanostructures by Design MÜLLEN Klaus (Invited)
17:00	2732	Spin radical organic semiconductors FRIEND Richard (Invited)
17:30	2245	Tuneable optoelectronic response in flexible PtSe ₂ films GERLEI Martin
17:45	2501	Hysteresis sources prediction using generalized model in low dimensional Field effect transistors SRIVASTAVA Rupali
18:00	1450	2D versus 3D-Like Electrical Behavior of MXene Thin Films: Insights from Weak Localization in the Role of Thickness, Interflake Coupling and Defects HURAND Simon