European Materials Research Society

2024 Spring Meeting

May 27 - 31 / Strasbourg Convention Centre

SYMPOSIUM A

Advanced thin films for energy and sustainable applications

Symposium Organizers:

Anjana DEVI, Ruhr University Bochum, Inorganic Materials Chemistry- Bochum, Germany

David MUÑOZ-ROJAS (Main organizer),
Laboratoire des Matériaux et du Génie Physique (Grenoble INP-UGA/CNRS)

Maarit KARPPINEN, Aalto University,
Department of Chemistry and Materials Science - School of Chemical Engineering - Finland

Thomas FIX, ICube Laboratory, CNRS and University of Strasbourg

Selected contributions will be published in a special issue on ACS AEM.

Monday May 27

A01_Thin films for Batteries, Fuell Cells and Hydrogen

CASSIN - GROUND FLOOR

Chairperson(s) : MORALES-MASIS Monica

08:45	2869	INV	Thin film ionic and mixed ionic-electronic conductors for energy and information applications	**TARANCON Albert**
09:15	2505		Conformality Study Using Lateral High Aspect Ratio Substrates of ALD-grown LiPON Thin Films for Li-Ion Batteries	**HEIKKINEN Mari**
09:30	362		2D all-solid symmetric supercapacitor based on highly ordered graphene composite	**DEBIEMME-CHOUVY Catherine**
09:45	421		Nickel sulfide on porous titania for photocatalytic hydrogen evolution	**EGGER Melissa**

Monday May 27

A02_Thin films for Batteries, Fuell Cells and Hydrogen

CASSIN - GROUND FLOOR

10:30	2287		Towards rapid thermal processed all-phosphate solid-state thin film batteries	**MONTEIRO FREITAS Fernanda**
10:45	1972		3C-SiC Films Coupled with Ni-based Co-catalysts for Efficient and Stable Solar Water Splitting	**SUN Jianwu**
11:30	1830		Operando Ellipsometry and Tip-enhanced Raman Spectroscopy (TERS) for the Investigation of Li-ion Battery Materials.	**MORATA Alex**
11:45	255		Enhanced Efficiency and Stability in Semiconductor Photocatalyst-based CO2 Reduction via Continuous-Flow Reactor	**JUNG Hyunju**

Monday May 27

A03_Transparent conductive films and smart coatings

CASSIN - GROUND FLOOR

13:45	2691	Investigation of Oxygen Vacancies in sputtered GDC thin films probed via operando XAS and Raman Spectroscopy	**COPPOLA Nunzia**
14:00	2707	A Highly-intermixed Nanocomposite as a Thin Film Air Electrode in a Solid Oxide Cell	**BUZI Fjorelo**
14:15	2896	Prediction of oxygen electrode performance of high-entropy perovskites La0.8Sr0.2(Co,Fe,Mn)O3 with machine learning based on spectroscopic characterization data	**BOZAL-GINESTA Carlota**
14:30	2381	Combining High-Throughput Analysis and Data-Driven Electrochemistry for Advanced Characterization of Si-Ge-Sn Thin Films as Li-Ion Anodes	**SANIN Aleksei**
14:45	1604	A multi-technique thin-film deposition platform for combinatorial development of mixed-anion semiconductors	**CROVETTO Andrea**
15:00	1120	Designing electrocatalysts for energy conversion reactions using high-throughput materials science	**BARAD Hannah-Noa**
15:15	2317	High throughput screening of (La,Sr)(Mn,Co,Fe)O_3 oxygen electrode materials for application in solid oxide fuel cells	**SIRVENT Juande**
15:30	1557	Machine learning approach of surface elastic chemical potential for morphological evolution of strained films	**MARTÍN ENCINAR Luis**
15:45	2912	Epsilon-near-zero metal oxide-based spectrally selective reflectors	**DEY Sraboni**

Monday May 27

A04_Transparent conductive films and smart coatings

CASSIN - GROUND FLOOR

16:30	2374	INV	Development of New Optoelectronic Thin Film Materials for Solar Cells	**MORALES-MASIS Monica**
17:00	1293		Optimizing the catalytic activity of the ternary metal chalcogenide $ZnIn_2S_4$ with hierarchical porosity	**SIGL Marco**
17:15	2835		[Ni(ipki)2] as a novel ALD precursor for the synthesis of Nickel oxide films	**PORCAR GARCÍA Samuel**
17:30	1091		Near-Infrared emissivity tuning of VO-based thermochromic stacks with silver nanowire networks	**BARET Amaury**
17:45	2194		Carrier collision processes in TiO2 thin films for photocatalysis applications	**GILLIOT Pierre**
18:00	998		Thin films of photoswitchable metal-organic frameworks: From light-induced chirality and molecular motors to photoactuation	**HEINKE Lars**
18:15	1953		Self cleaning solar mirrors coatings: from laboratory to prototype tests on field	**CASTALDO Anna**

Tuesday May 28

A05_Functional Oxide Thin films

CASSIN - GROUND FLOOR

09:00	1161		Thermochromism of magnetron sputtered VO2 thin film for smart windows applications	**LLORENS BALADA Eduard**
09:15	951	INV	Silicon epitaxy assisted by solution chemistry: A platform for integrated oxide devices	**CARRETERO Adrien**
09:45	2480		High-Throughput and Machine Learning Strategies for the Optimization of Optoelectronic Thin-Film Devices	**WOLF Maximilian**

Tuesday May 28

A06_Functional Oxide Thin films

CASSIN - GROUND FLOOR

10:30	203		Chemical synthesis of CoFe2O4-BiFeO3 multiferroic nanocomposites for energy harvesting	**MENA AGUILAR Karla**
10:45	265		Advanced ZnO-based Thin Films Exhibiting High Photoelectrochemical Activity	**KAVAN Ladislav**
11:00	1519		Lead-free perovskite oxides: towards an opto-electronic based on abundant elements and low temperature synthesis	**ELGARGOURI Ilhem**
11:15	1104		Understanding the morphology of molecular self-assembled monolayers on iron oxide nanoparticles to clean water from hormones	**MÜLLER Lukas**
11:30	171	INV	Chemical Vapour Deposition of Bismuth Oxyiodide Thin Films for Energy Conversion Applications	**HOYE Robert**

Tuesday May 28

A07_Functional Oxide Thin films

CASSIN - GROUND FLOOR

13:45	1274	INV	Translating The Huge Promise of Functional Oxides Into High Performance Electronic and Energy Devices	**MacManus-Driscoll Judith**
14:15	743		Evaluation of $Zn(DMP)_2$ as an Alternative Non-Pyrophoric ZnO Precursor for Open-Air SALD for Silver Nanowire Stability Enhancement	**JOHNSTON Liam**
14:30	1474		High-quality epitaxial thin films of lead-free Aurivillius phases for clean and efficient electrocaloric cooling	**LAFUERZA BIELSA Sara**
14:45	1034		Advancing Electrochromic Technology: Deposition of Flexible Niobium Oxide Thin Films for Cutting-Edge Applications	**MARIA DA COSTA MARCIEL TRABULO Alice**
15:00	1096		Modelling the atomic layer deposition process of ferroelectric oxide perovskites	**LIU Ji**
15:15	1762		Sustainable low-temperature solution deposition methods for the integration of ferroelectric oxide thin films into flexible devices	**CALZADA Maria Lourdes**
15:45	551		Cost- and resource-efficient deposition of Gadolinium doped Ceria films by ultrasonic spray pyrolysis for high-temperature electrolysis	**MAYR Niklas**

Tuesday May 28

AP01_Poster Session

ETOILE - FIRST FLOOR

16:30	01_1060	120	01_1060 Electrodeposition of metallic bismuth catalyst from aqueous media on Mxene support: Morphology and electrochemical study	**HARILAL Sherina**
16:30	02_1204	120	02_1204 Harnessing the Potential of PEDOT:PSS-Infused Graphene for Enhanced Front Electrodes Performance	**RODRIGUEZ Maria Isabel**
16:30	03_1212	120	03_1212 Overview of the Use of Advanced Materials especially Thin Films for Energy Transition	**KNIGGE Xenia**

16:30	04_1255	120	04_1255 Control of Side Reactions at the Cathode/Electrolyte Interface in Sulfide-Based All-Solid-State Batteries via Dry Process coating	**JANG Dae Ik**
16:30	05_1277	120	05_1277 Effect of modulating the valence band maximum grading around the surface of Cu(In,Ga)Se2 for hydrogen generation	**UEDA Kana**
16:30	06_1442	120	06_1442 Biomimetic Super-Foldable Composite Film Electrodes Enabled by Responsive Stress Dispersion	**ZAN Guangtao**
16:30	07_1700	120	07_1700 Efficient Intercalation of Al Ions in Electrochemically Activated Mn3O4 for Rechargeable Aqueous Aluminium Ion Batteries	**BHARTI Lalit**
16:30	08_1720	120	08_1720 Combinatorial thin film deposition of iron alloyed SnWO4 with pulsed laser deposition	**BERGSBAK Ingvild**
16:30	09_1803	120	09_1803 Characteristics of the absorption layer according to the length controlled SAMs molecular arrangement state and the characteristics of 2-terminal CIGS/Perovskite solar cells	**JO Hyo Jeong**
16:30	10_1882	120	10_1882 Dendrite-free Zinc Anodes: Exploring Polar-Face-Rich 2D ZnO Interfacial Layers for Rechargeable Zn-Ion Batteries	**XUEQING Hu**
16:30	11_1910	120	11_1910 Hydrogen permeation barrier coatings: preliminary results on the development of oxide coatings through chemical vapor deposition	**VISENTIN Francesca**
16:30	12_1922	120	12_1922 Graphene metamaterials for advanced Si nanophotonic applications	**YANG Yunyi**
16:30	13_1955	120	13_1955 Synthesis of thin-film multilayers by magnetron sputtering at room temperature.	**BENAIT Hassan**
16:30	14_2353	120	14_2353 GeS Crystalline Thin Films for High-Performance Visible Range Photodetectors	**DRABAVICIUS Audrius**
16:30	15_2383	120	15_2383 Fully printed energy storage devices on cellulose-based substrates: An eco-friendly approach for low-cost and disposable Smart electronics system	**PALMIERI Elena**
16:30	16_2448	120	16_2448 Exploring the Dynamics of Formation of Pulsed Laser Deposited Halide Perovskite through In-situ Photoluminescence at High Deposition Rates	**KLINER Vojtech**
16:30	17_245	120	17_245 Magnetoelectric BiFeO3-PbiTO3 thin films on Ni substrates for flexible energy harvesting devices	**BARRETO Adriana**

16:30	18_2547	120	18_2547 Interfacial DMI Characterization in Sputtered Terbium Iron Garnets Thin Films	**FEDEL Stefano**
16:30	19_2663	120	19_2663 Study of optical and electrical properties of non-fullerenes Langmuir-Schaeffer and drop-casting films	**OLIVARI Clarissa A**
16:30	20_2687	120	20_2687 ALD-Free Monolithic Perovskite/ Perovskite/Silicon Triple-Junction Solar Cells with Efficiencies over 22%	**CHOI Yeo Jin**
16:30	21_2870	120	21_2870 Slowed-down phase separation in thin films drying under microgravity and sounding rocket conditions for the application of organic photovoltaics.	**JALAN Ishita**
16:30	22_2878	120	22_2878 High-Current Middle-Bandgap Solar Cells for Si/Perovskite/Perovskite Triple-Junction Tandem Solar Cells.	**SUNG YEON Lim**
16:30	23_2887	120	23_2887 All inorganic perovskite quantum dots and paper-based graphene photodetectors	**ZHAO Yining**
16:30	24_3012	120	24_3012 In-situ solution-based doping of CdS for CdS/CdTe solar cell applications	**FLORES-MARQUEZ Jose-Manuel**
16:30	25_3014	120	25_3014 New methodology to allows reduce the toxic waste generated in CdS thin films process by CBD technique	**RUIZ ORTEGA Roberto Carlos**
16:30	26_3018	120	26_3018 Solid lubricant coatings based on chromium nitride and metal sulfide layers deposited by reactive magnetron sputtering	**MAREUS Rubenson**
16:30	27_426	120	27_426 Towards large area growth of superconducting REBCO coated conductors by Transient Liquid Assisted Growth	**BERTINI Vittorio**
16:30	28_690	120	28_690 Functionalized Interfacial Cover Design toward Pure Silicon Anode for High Power Density Lithium-Ion Capacitor	**OH Min Ju**
16:30	29_695	120	29_695 Advanced Ceramic Separators Enabling High-Performance Lithium Metal Batteries	**EOM Jun Sun**
16:30	30_766	120	30_766 Sonochemistry for the low-temperature solution processing of metal oxide thin films with applications in flexible electronics	**ECHANIZ-CINTORA Maria**
16:30	31_773	120	31_773 Quantitative in-depth characterization of thin film stacks with sub-monolayer sensitivity using reference-free X-ray spectrometry	**HÖNICKE Philipp**
16:30	32_830	120	32_830 Integration and testing of synthesized materials based on sulfur in Li sulfur batteries	**MANDOC Luisa Roxana**

16:30	33_831	120	33_831 Imaging Spectroscopic Ellipsometry (ISE): Optical Properties and Thin Film Metrology of ALD printed Microstructures	**THIESEN Peter H.**
16:30	34_938	120	34_938 Solution deposition of mixed copper halides thin films for photovoltaic application	**SPASOVA Stanka**
16:30	35_952	120	35_952 Chemical bath deposition of Ternary Cu2SnS3 thin films for solar cells application	**BENKOVSKI Alexander**
16:30	36_958	120	36_958 VO2-Based Multilayered Structure for the Temperature-Adaptive Control of Both Solar and Infrared Radiation	**LEE Myeongkyu**

Wednesday May 29

A08_Chemical Vapor Deposition and Atomic Layer Deposition

CASSIN - GROUND FLOOR

08:45	1101		Graphene assisted III-V epitaxy towards substrate recycling	**MESSUDOM Naomie**
09:00	2725		Advancing Material Performance: ZnO Thin Films for Dual-Action UV Protection and Mechanical Resilience in Cork and Rubber	**TISS Belgacem**
09:15	1683		Transition Metal Oxide Catalysts for Zinc-Air Batteries	**IVEY Douglas**
09:30	285		High Surface Area Photocatalytic ZnO Films via Molecular Layer Deposition	**AKYILDIZ Halil**
09:45	350		Assessing the environmental impact of ALD	**WEBER Matthieu**

Wednesday May 29

A09_Chemical Vapor Deposition and Atomic Layer Deposition

CASSIN - GROUND FLOOR

10:30	2173	INV	Atomic layer deposition of silver nanoparticles and thin films for light harvesting and heat management	**LETURCQ Renaud**
11:00	1416		Improvement of silicon/graphite anode performance by atomic layer deposited ZnO films	**FROHLICH Karol**
11:15	586		Passivation of ‘5 V’ porous composite electrodes by atomic layer deposition	**AUDREN-PAUL Matthias**
11:30	928		Atomic layer deposition assisted graphite/ ZnO composite anodes in Li-ion batteries	**GÜNEREN Alper**
11:45	966		Molecular Layer Deposition of Hybrid Materials: Insights from Simulations	**NOLAN Michael**

Wednesday May 29

AP02_Poster Session

ETOILE - FIRST FLOOR

13:45	01_137	105	01_137 Growth Facet Control of Metallic Anodes for High-Energy Metal Batteries	**GUO Yanpeng**
13:45	02_1423	105	02_1423 Chitosan-based resist formulations for DUV lithography for sub-micron resolution at pilot scale	**MESQUITA CABRINI Flávia**
13:45	03_1501	105	03_1501 Importance of MgO Interlayer in CsPbI2Br Perovskite Solar Cells	**YELZHANOVA Zhuldyz**
13:45	04_1521	105	04_1521 Morphological Control of Cs2PbX4 Nanostructures for Interfacial Engineering of CsPbI2Br Perovskite Solar Cells	**NIGMETOVA Gaukhar**
13:45	05_1523	105	05_1523 Boron doped Zinc Oxide thin film as ETL alternative candidate in perovskite single-junction solar cell	**TRINGALI Fiorella**
13:45	06_1594	105	06_1594 Cu Nanoparticle by Laser Ablation in Liquid in film arrangement film for green hydrogen production	**LO PÒ Cristiano**
13:45	07_1661	105	07_1661 Application of vanadate glasses containing different metal oxides to rechargeable batteries	**OKA Nobuto**
13:45	08_1682	105	08_1682 Calcium Niobium Oxide Nanosheet for Application in Proton Exchange Membrane Fuel Cell	**RAHMAN Mohammad Atiqur**
13:45	09_1709	105	09_1709 Vanadium carbide Mxene-reduced graphene oxide composite for high-performing supercapacitor with redox modified electrolyte	**RAVINDRAN Rahul**
13:45	10_1714	105	10_1714 Carbon Decorated Zif-67 Composite for Next Generation Energy Storage Device	**SHEGOKAR Shyamal**
13:45	11_1754	105	11_1754 Doped phosphite compound for enhanced electrochemical characteristics as active electrode material for Li-ion battery	**BELHAJ Hassna**
13:45	12_1975	105	12_1975 Nonfunctionalized Mo2C: The game changer for better supercapacitors	**IBRAHIM Wonge Lisheshar**
13:45	14_2118	105	14_2118 Enabling Mg metal powder anode via ex-situ deposition of a stable intermetallic interphase	**ROMIO Martina**

13:45	15_2128	105	15_2128 2D Transition Metal Disulphide Alloys on Silicon Heterojunction Photodetectors	**AVERCHENKO Aleksandr**
13:45	16_2142	105	16_2142 Systematic effect of chalcogen atom in the piezoelectric performance of PVDF/ MoS2xSe2(1-x) based piezoelectric nanogenerator	**SINGH Vishal**
13:45	18_2301	105	18_2301 Structural control of semiconductor polymer D18 used in organic photovoltaics	**ASATRYAN Jesika**
13:45	19_2368	105	19_2368 Electro-dehydrogenation of amines into nitriles used as Liquid Organic Hydrogen Carriers	**FABREGAT-SANTIAGO Francisco**
13:45	20_2455	105	20_2455 Optimizing Li/electrolyte interface stability in solid-state batteries: The effects of solid electrolyte composition and particle size, anode surface, and interphases by spatial atomic layer deposition	**KUDU Omer Ulas**
13:45	21_262	105	21_262 Dielectric and phase engineering of van der Waals Sb2O3 films via PLD	**YU Jing**
13:45	22_2769	105	22_2769 NiMo/CoMoO4 Heterostructure with Confined Oxygen Vacancy for Active and Durable Alkaline Hydrogen Evolution Reaction	**SADEGHI Ebrahim**
13:45	23_277	105	23_277 In-situ monitoring and electrocatalytic hydrogen evolution enhancement mechanism study of Pd alloy thin film-based micro/ nanodevices	**LUO Wen**
13:45	24_2820	105	24_2820 Free-standing WO3 electrode for efficient photo-rechargeable Li-ion batteries	**SAJJAD Tariq**
13:45	25_2826	105	25_2826 Transfer-free wafer-scale graphene electronics on sapphire	**FENWICK Oliver**
13:45	26_2840	105	26_2840 Tuning Electrochemical Hydrogen-Evolution Activity of CoMoO4 through Zn Incorporation	**CHAMANI Sanaz**
13:45	27_3003	105	27_3003 Enhancement of Optical Parameters in Nanostructured CuSbS2 Material using Glancing Angle Deposition (GLAD) Technique: Investigationof the Substrate Temperature Effect.	**IDOUDI Mouna**
13:45	28_44	105	28_44 Additive Engineering Mechanisms in Antimony Chalcogenide Solar Cells	**SUTTON Matthew**
13:45	29_470	105	29_470 Investigating the impact of AlInN/Si interface engineering on III-nitride solar cell efficiency	**NARANJO Fernando**

13:45	30_614	105	30_614 Scalable Solution-Processed Hole Transport Layer for Efficient Inverted methylammonium-free Wide Band Gap Perovskite Solar Cells	**RAOUI Yassine**
13:45	31_684	105	31_684 ZnMn2O4 and LiMn2O4 thin films as electrodes in transparent supercapacitors for integration into photosupercapacitors	**MARTIN JIMENEZ Francisco De Paula**
13:45	32_73	105	32_73 Bi2S3/Cu2S@carbon nanotubes photocatalytic coatings for wastewater treatment	**ENESCA Alexandru**

Thursday May 30

A10_Chemical Vapor Deposition and Atomic Layer Deposition

CASSIN - GROUND FLOOR

08:45	1094	INV	Interface modifications for thermoelectric materials by a variety of ALD techniques	**NIELSCH Kornelius**
09:15	1513		Precursor reactivity and film stability in ALD/MLD: Co-organic thin films as model system	**JUSSILA Topias**
09:30	2886		Nitrogenated-Carbon heterostructures for electrocatalytic hydrogenation reactions	**SCHRÖDER Christian**
09:45	862		Electrochemical Performance of Oxidative Chemical Vapor Deposition of Polypyrrole on Carbon Fiber for Flexible Supercapacitor	**FAUZI Fika**

Thursday May 30

A11_Photovoltaics

CASSIN - GROUND FLOOR

10:30	49		Free-standing Pd-based nanostructures by Atomic layer deposition for cogeneration hydrogen electrolyzers	**HAGHEH KAVOUSI Zahra**
10:45	24		Plasma Assisted Atomic Layer Deposition of III-Nitride	**ADJEROUD Noureddine**
11:00	1477		Tuning optoelectronic properties in type II Silicon Clathrate films for photovoltaic applications	**BHARWAL Anil Kumar**
11:15	2741		Advancing Energy Harvesting: Strategies for Stability and Efficiency in CsPbI3 Perovskite Thin Films	**RUSSO Francesca**
11:30	2021	INV	ALD-metal oxide materials and surface modification for perovskite solar cells	**SCHNEIDER Nathanaelle**

Thursday May 30

A12_Photovoltaics

CASSIN - GROUND FLOOR

13:45	1908	Photosupercapacitors consisting of dye-sensitised solar cells and thin-film supercapacitors	**LÓPEZ-ESCALANTE María Cruz**
14:00	2974	Low-thermal budget grown SiO2 passivation layers for silicon solar cells	**PATHI Prathap**
14:15	2799	Surface functionalization of inorganic hole transporting materials at the recombination junction of two-terminal silicon / perovskite tandem solar cells	**VASQUEZ Pia**
14:30	949	Thermal and Photo-Degradation Study of □-FAPbI3-Based Perovskite Probed by In Situ characterization techniques	**RUELLOU Julie**
14:45	1967	High Crystal Quality Cu2O Obtained by High Temperature Thermal Oxidation of Cu using H2 and O2	**ZERVOS Matthew**
15:00	679	Lattice Volume Anchoring Attenuates Natural Performance Loss in Perovskite Solar Cells During Day/Night Cycling	**ZHANG Tiankai**
15:15	605	Zinc sulfide interface layer for stable and high performance ultrasonically sprayed Sb_2S_3 solar cells	**SALEH Hadeer**
15:30	989	In situ and ex situ stability studies of solar-selective coatings for concentrated solar power	**KRAUSE Matthias**
15:45	260	Lead-Reduced Halide Perovskite Solar Cells - Predicting the Quality of Photovoltaic Materials with Photo-Assisted Kelvin Probe Force System	**WU Ming-Chung**

Thursday May 30

AP03_Poster Session

ETOILE - FIRST FLOOR

16:30	01_1030	120	01_1030 Enhanced efficiency in large-area CIGS solar cells through controlled structure of Ag network electrode	**HYESUN Yoo**
16:30	02_1106	120	02_1106 Stereo lithographically assisted printed technology for energy conversion and storage application	**SUBHADARSHINI Suvani**
16:30	03_1162	120	03_1162 Investigation of p-GaN/AlN/AlGaN/GaN MOS-HEMT on GaN Substrate	**LEE Jyun-Yi**
16:30	04_1193	120	04_1193 Understanding the Li Ion Storage Mechanism in Ruddlesden-Popper Structured Li2La2Ti3O10	**JANG Mi**
16:30	05_1269	120	05_1269 Unraveling Morphological Instability in Polyol-Grown Silver Nanowires: A Path to Enhanced Stability for Transparent Conducting Materials Applications	**BALTY François**
16:30	07_1368	120	07_1368 High-Throughput Screening of REBCO Superconductors via Combinatorial Inkjet Printing	**GHIARA Emma**
16:30	08_1381	120	08_1381 Plasma-processed Ni-based catalytic film for urea oxidation reaction	**LI Dan**
16:30	09_1413	120	09_1413 Electrochemical Performance Analysis of High-Voltage 3D Printed Supercapacitors: Aqueous Electrolytes versus Sustainable 3D printed Deep Eutectic Solvent	**MEVADA Chirag**
16:30	10_147	120	10_147 The Prospects of Magnetron Sputtering for Developing Advanced Catalysts for (photo)electrochemical water splitting	**ATTAR Farid**
16:30	11_1656	120	11_1656 Low-temperature plasma constructed Ni-doped W18O49 nanorod arrays to boosted electrocatalytic oxygen evolution and urea oxidation	**RUAN Qingdong**
16:30	12_1681	120	12_1681 Improved performance of LiFePO4 cathodes with ultrathin atomic layer deposited films	**SAHOO Prangya Parimita**
16:30	13_1843	120	13_1843 Evaluation the Impact of Fe Catalyst Dimension on the Graphitization to Anode Materials for Lithium Ion Batteries Applications	**TUNG Jui-Yu**

16:30	14_223	120	14_223 P3-Na0.45Ni0.2Mn0.8O2/Na2SeO4 Heterostructure Enabling Long-Life and High-Rate Sodium-Ion Batteries	**SONG Tianyi**
16:30	15_2239	120	15_2239 Growth of epitaxial superconducting REBa2Cu3O7-X layers at ultrafast growth rates	**TORRES Carla**
16:30	16_2290	120	16_2290 Impact of molecular weight on the solid state structure in semiconducting polymers for photovoltaics	**SANVITI Matteo**
16:30	17_2400	120	17_2400 Pulsed Laser-Deposited NiCoCuFeMoMn High Entropy Alloys: Tailored Synthesis and Electrochemical Proficiency for Hydrogen and Oxygen Evolution Reactions	**MAHDAVI Hossein**
16:30	18_2414	120	18_2414 Substrate Temperature Effect on the Optical Properties of CuSbS2 Thin Films Deposited at Oblique Incidence.	**IDOUDI Mouna**
16:30	19_2450	120	19_2450 Electrocatalytic activity of FePS3 and NiPS3 for the hydrogen evolution reaction (HER) in basic electrolytes.	**LEARDINI Fabrice**
16:30	20_259	120	20_259 Fe2O3 Photocathodes for Stable and Efficient Photorechargeable Li-Ion Batteries	**CHAMOLA Shubham**
16:30	21_275	120	21_275 Photonic Curing of Electron Transport Layers for Antimony Selenide Solar Cells	**WIJESINGHE Udari**
16:30	22_2766	120	22_2766 Electrodeposition of n-Type Cu2O Thin Films: Towards Phase-Pure Layers and Composite Structures	**KAVAIPATTI Balasubramaniam**
16:30	23_306	120	23_306 Fabrication of Conductive TiO2 Thin Films by Mist Chemical Vapor Deposition and Its Application for Surface Coating of Polymer Electrolyte Membrane Fuel Cell Separators	**SUDARE Tomohito**
16:30	24_363	120	24_363 Metal porphyrin-based functionalized electrocatalysts for the artificial fixation of nitrogen to Ammonia	**SALERNO Giorgia**
16:30	25_40	120	25_40 Advances in Graphene-based Multifunctional Hybrid Electrodes for Alternative Energy and the Sustainable Environment	**GUPTA Sanju**
16:30	26_419	120	26_419 Investigating the Degradation Mechanisms and Enhancing Stability of Tin-Lead Perovskite Materials for Advanced Thin Films in Energy and Sustainable Applications	**ALSULAMI Asayil**
16:30	27_496	120	27_496 AgxSiO0.7N thin film anode with high rate performance and transparency for transparent thin film battery	**CHOI Ji-Won**

16:30	28_511	120	28_511 Control of microstructure and composition of reactively sputtered vanadium nitride thin films and application to micro-supercapacitors	**BARBÉ Jérémy**
16:30	29_559	120	29_559 On-Water Surface Synthesis of Two-Dimensional Polymer Thin Films Toward Sustainable Energy Devices	**WANG Zhiyong**
16:30	30_595	120	30_595 Improving the investigation of defect properties through temperature dependent modulated photoluminescence	**HADDARA Hiba**
16:30	31_638	120	31_638 Pseudocapacitive Storage in Molybdenum Oxynitride Nanostructures Reactively Sputtered on Stainless-Steel Mesh towards All-Solid-State Flexible Supercapacitors	**RANJAN Bhanu**
16:30	32_644	120	32_644 Higher power density NVPF-MWCNT@Ni//CNF@Ni Configuration via hydrothermal route for flexible Na-ion Capattery	**SHARMA Gagan Kumar**
16:30	33_80	120	33_80 Energy transfer examination of Er3+/ Nd3+ to produce a high-performance light conversion layer for enhancing the solar cells' efficiency	**ALMULHEM Najla**
16:30	34_84	120	34_84 Optimizing Catalyst Design for Selective Seawater Oxygen Evolution Reaction	**MOUSAVI Seyedmahdi**
16:30	35_86	120	35_86 Electrochemical behavior of nickel oxide nanoelectrocatalyst in diverse electrolytic environments and its application as an effective electrode for supercapacitors	**CHAUHAN Manisha**
16:30	36_884	120	36_884 Carbonate electrolyte enriched with fluorine-based co-solvent for dendrite-free lithium metal batteries	**HA Chaeyeon**
16:30	37_907	120	37_907 Dendrite suppression by anode HCl treatment in zinc-ion batteries	**LYU Huanlin**

Friday May 31

A13_Photovoltaics

CASSIN - GROUND FLOOR

08:45	1587	INV	Molecular inks synthesis route shows the pathway for kesterite solar cells with efficiency over 15%	**ROVIRA FERRER David**
09:15	2510		Synthesis and Characterization of Lead Halide Perovskites	**NISTAL Diego**
09:30	2457		Earth-abundant nitride alloys with tuneable functional properties as candidates for top-cell material in tandem solar cells	**OLSEN Vegard Standeren**
09:45	2391		Rear Surface Passivation for Molecular Ink-Based, Submicron CuIn(S,Se)2 Solar Cells	**SURESH Sunil**

Friday May 31

A14_Photovoltaics

CASSIN - GROUND FLOOR

10:30	1893		Role of the Defects in the i-ZnO Layer on the Performance and Homogeneity of Kesterite Based Thin Film Solar Cells.	**ROTARU Victoria**
10:45	2702		Could agricultural aerosols impact reliability of CIGS thin film photovoltaic cells?	**DEBONO Adèle**
11:00	1064		Dipole thin films for advanced charge mediation	**ROS Eloi**
11:15	1496		Unweilling the Growth Mechanism of Quasi-2D Halide Perovskite Thin Films for Solar Cells	**PAUPORTÉ Thierry**
11:30	1132		Low-temperature-processed SnO2 quantum dots as charge transport layer for efficient perovskite solar cells	**GIDEY Abraha**
11:45	249		Low-Temperature Solution Phase Synthesis of Inorganic Chalcogenide Perovskites Nanoparticles and Thin Films and Their Characterization	**AGRAWAL Rakesh**