POSTER SESSION PROGRAMME

16.06.2026

No.	TITLE	PARTICIPANT NAME	CONFERENCE SECTION	ROOM
1	One-pot intrapore encapsulation of copper species in mesoporous SiO2 nanocomposites for durable antimicrobial surface coatings	**Aadil Shafi Bhat**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
2	Na-SUBSTITUTED NdMnO3 PEROVSKITES: SYNTHESIS AND CHARACTERIZATION	**AIGUL DASTANKYZY**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
3	Eco-Friendly Terpineol-Based Silver Nanoparticle Ink with Exceptional Stability and High Conductivity for Inkjet Printing	**Aleksandrs Novikovs**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
4	Phase-Selective Synthesis of EuS2 and Eu3S4 via the Boron Chalcogen Mixture Method	**Aleksej Zarkov**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
5	Enhanced Dark Redox Activity of CuO/CeO_2 Composites	**Ance Skalže**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
6	Tannic Acid–Assisted Design of Ce-Modified CuO with Enhanced Redox Activity	**Anna Petrova**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
7	Surface Functionalization-Driven Control of Magnetic Characteristics in $CoFe_2O_4$ Nanoparticles	**Aswathi Raveendran**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
8	Dielectric Behavior and Triboelectric Output of TENGs Based on 0.80Na0.5Bi0.5TiO3-0.20BaTiO3/PDMS Composites	**Darya Meisak**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
9	Molten salt synthesis towards preparation of Ruddlesden-Popper, perovskite and pyrochlore-type materials	**Dovydas Karoblis**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
10	Hydrogen partial pressure as a key parameter in the reactive sputtering of photochromic YHO thin films	**Edvards Strods**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
11	Formation mechanism of core–shell structures in lead-free ferroelectric ceramics via the diffusion method.	**Gusts Agafonovs**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
12	Broad-band dielectric and Raman study of structural transformations in van der Waals ferrielectric CuInP2S6	**Juras Banys**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
13	Impact and characteristics of oxygen vacancies in ferroelectric HfO2 based materials	**Katrīna Laganovska**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
14	Electromechanically responsive materials based on electrospun polymer nanofibers	**Martynas Kinka**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
15	High-Frequency Magnetic Characterization of CERN Fast Kicker Magnet Materials	**Sergejus Balciunas**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
16	Synthesis, crystal structure and thermal behaviour of new high-entropy perovskite (Pr0.2Nd0.2Sm0.2Eu0.2Gd0.2)AlO3	**Sergii Ubizskii**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
17	Photothermally Activated Shape-Memory Polymer–Silver Nanoparticle Composites for Light-Triggered 3D-Printed Actuators	**Virginija Vitola**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
18	Preparation and characterisation of GaN-Al2O3-NbSe2 core-shell nanowires	**Luīze Dipāne**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
19	Atomic Layer Deposition of ZnO Nanostructures onto Glass Wool	**Margarita Volkova**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
20	PHOTO-ASSISTED ENERGY STORAGE IN AQUEOUS ZINC-ION BATTERIES USING BI2SE3–MWCNT CATHODES	**Gustavs Henrijs Zvaigzne**	Materials for Energy	**2nd Floor Atrium**
21	ELECTROCHEMICAL PERFORMANCE OF CARBON NANOTUBES IN AQUEOUS ZINC ION BATTERIES	**Andrei Felsharuk**	Materials for Energy	**2nd Floor Atrium**
23	Structure–Driven Electrochemical Behavior of NaOH-Activated Birch Carbons for Energy Storage	**Dāvis Kalniņš**	Materials for Energy	**2nd Floor Atrium**
24	Discovery of photochromism with fast bleaching in oxygen-containing lanthanum hydride thin films	**Emija Letko**	Materials for Energy	**2nd Floor Atrium**
25	Measurement of shallow dopants concentrations in polycrystalline silicon by low-temperature FTIR Spectroscopy	**George Chikvaidze**	Materials for Energy	**2nd Floor Atrium**
26	The role of radiation-induced defect centres on spectroscopic properties of lithium orthosilicate, lithium metatitanate and their composites	**Guna Krieke**	Materials for Energy	**2nd Floor Atrium**
27	Local Atomic Structure in Entropy-Engineered Thermoelectric Chalcogenides	**Inga Pudza**	Materials for Energy	**2nd Floor Atrium**
28	Enhanced thermovoltage generation in multilayer AAO membranes via interface effects and tunable surface charge	**Irina Oliseveca**	Materials for Energy	**2nd Floor Atrium**
29	Alder-based electrodes for supercapacitors	**Jūlija Hodakovska**	Materials for Energy	**2nd Floor Atrium**
30	Characterisation of paramagnetic radiation-induced defect centres in biphasic Li4SiO4-Li2TiO3 ceramics under exposure to various types of ionising radiation	**Laura Dace Pakalniete**	Materials for Energy	**2nd Floor Atrium**
31	Thermal properties for radiation-modified sheep wool fibers	**Liga Avotina**	Materials for Energy	**2nd Floor Atrium**
32	Hydrogen Generation from Heterogeneous Aluminium Waste by Alkaline Hydrolysis	**Līga Grīnberga**	Materials for Energy	**2nd Floor Atrium**
33	A comparative study of YAP:Bi and YAP:Mn phosphors: X-ray-, photo-luminescence and OSL response to irradiation	**Marina Koņuhova**	Materials for Energy	**2nd Floor Atrium**
34	Influence of Chamber Wall Thickness on the Thermal Performance of a Liquid Piston Hydrogen Compressor	**Marina Koņuhova**	Materials for Energy	**2nd Floor Atrium**
35	FLEXIBLE CNT-CHALCOGENIDE HYBRID STRUCTURES FOR SCALABLE THERMOELECTRIC ENERGY HARVESTING	**Parveen Sehrawat**	Materials for Energy	**2nd Floor Atrium**

36	Thermoelectric Properties of Silver-Doped Copper Iodide / PEDOT:PSS Composites	**Renate Celmodejeva**	Materials for Energy	**2nd Floor Atrium**
37	Ab initio calculations of the high voltage 5 Volt rechargeable Li ion battery cathode Li2CoMn3O8 and new battery anodes	**Roberts Eglitis**	Materials for Energy	**2nd Floor Atrium**
38	Functional carbon aerogels as electrode materials for sodium-Ion energy harvesting and storage devices	**Rouz Barjoud**	Materials for Energy	**2nd Floor Atrium**
39	The influence of the high energy (12,5 MeV) electron irradiation on optical materials with Mg-spinel structure	**Sergii Ubizskii**	Materials for Energy	**2nd Floor Atrium**
40	Transparent WO_3/TiO_2 Nanocomposite Coatings with Enhanced Photochromic Switching for Smart Window Applications	**Tamara Tsebriienko**	Materials for Energy	**2nd Floor Atrium**
41	Solvothermal Synthesis of Bismuth Selenide and Single-Walled Carbon Nanotube Heterostructures for Improved Charge Storage in Aqueous Zinc-Ion Batteries	**Viktorija Galaktionova**	Materials for Energy	**2nd Floor Atrium**
42	Sb2Te3-Based Organic-Inorganic Thermoelectric Composites	**Adriana Mauručaite**	Materials for Energy	**2nd Floor Atrium**
43	Paper production using green algae	**Jānis Poots**	Materials for Energy	**EXPO 103/104**
44	Short-range structural distortions in (MgCoNiCuZn)O high-entropy oxide revealed by EXAFS spectroscopy	**Julija Lukaševiča**	Materials for Energy	**2nd Floor Atrium**
45	X-ray absorption spectroscopy studies of protonation-induced electronic and structural changes in WO_3 nanoparticles	**Vitalijs Dimitrijevs**	Materials for Energy	**2nd Floor Atrium**
46	Characterization of neutron induced defects in Al_2O_3 ceramics using optical absorption, TSL, and Raman methods	**Edgars Elsts**	Materials for Energy	**2nd Floor Atrium**
47	Grains and crystallite size study of the optically transparent spinel ceramics	**Halyna Klym**	Materials for Energy	**2nd Floor Atrium**
48	Visible Photoluminescence in Piezoelectric Diphenylalanine Thin Films	**Suvankar Mondal**	Materials for Energy	**EXPO 103/104**
49	Characterization of Free Volume Transformations in MgAl2O4 Ceramics	**Halyna Klym**	Materials for Energy	**2nd Floor Atrium**
50	Simulation of conductive networks in nanotube-based composites	**Halyna Klym**	Materials for Energy	**2nd Floor Atrium**
51	Advanced flexible thermoelectric generator based on carbon nanotubes – inorganic semiconductor heterostructures	**Davis Gavars**	Materials for Energy	**2nd Floor Atrium**
52	Integrated micro-hydrolysis system of sodium borohydride for powering flexible electronic devices	**Marinoiu Adriana**	Materials for Energy	**2nd Floor Atrium**
53	Micro-Reactor Architecture with Capillary Separation and Multidirectional Phase Management	**Marinoiu Adriana**	Materials for Energy	**2nd Floor Atrium**
54	Probing the Local Structure and Lattice Dynamics of Rhenium-Substituted VO_2 with Universal Machine Learning Potentials	**Pjotrs Žguns**	Materials for Energy	**2nd Floor Atrium**
55	Comprehensive analysis regarding the development of flexible and ultra-light PEM fuel cells through the integration of advanced nanomaterials for wearable electronics	**Marinoiu Adriana**	Materials for Energy	**2nd Floor Atrium**
56	NEW FLUORENE DERIVATIVES AS EMITTERS AND HOLE-TRANSPORTING MATERIALS BLUE EMITTING OLEDs	**Akaki Kalatozishvili**	Materials for Photonics	**103/104**
57	Guided-Mode Resonance Enabled by Nanosecond Laser-Induced Metasurfaces on Silicon-on-Insulator	**Cristhian Cobas Montero**	Materials for Photonics	**103/104**
58	Formation of a self-trapped exciton and a non-bridging oxygen center in crystalline quartz grown from an NH4F solution under two-photon excitation.	**Anatolijs Truhins**	Materials for Photonics	**103/104**
59	Charge trapping and persistent luminescence in alkaline earth metal pyrophosphates	**Andris Antuzevics**	Materials for Photonics	**103/104**
60	Investigation of photochromic films containing Na8Al6Si6O24(Br,S)2	**Bettiina Muurinen**	Materials for Photonics	**103/104**
61	Novel Designs of Transparent Microscale Copper Electrodes and Their Impact on Electrochromic Device Performance	**Dainius Balkauskas**	Materials for Photonics	**103/104**
62	Radiometric evaluation of persistent phosphors: Towards reliable power density measurements	**Didzis Salnājs**	Materials for Photonics	**103/104**
63	Characterisation of Fabry-Pérot resonators fabricated via grayscale UV lithography and their application to the investigation of strongly coupled systems	**Elizaveta Dmitrijeva**	Materials for Photonics	**103/104**
64	Influence of Sapphire Substrate Orientation on Epitaxial Rutile GeO_2 Thin Film Solar-Blind Photodetector Properties	**Eriks Dipans**	Materials for Photonics	**103/104**
65	Atypical Near-Infrared Photochromism in Samarium-Doped Hackmanite	**Joshua John Baggott**	Materials for Photonics	**103/104**
66	Fabrication of strongly coupled cavity arrays using grayscale UV lithography	**Kaisa Katre Lepmets**	Materials for Photonics	**103/104**
67	Nanosecond Laser Processing of Gold Thin Films for Tunable Surface Plasmon Resonance Sensing	**Kaspars Ozols**	Materials for Photonics	**103/104**
68	Ni-DABT and Mo-DABT Coordination Polymers for Flexible X Ray Detectors	**Kaspars Pudzs**	Materials for Photonics	**103/104**
69	Comparison of Microwave-Assisted and Laser-Activated Solid-State Sintering for Eu,Dy,B-Doped Strontium Aluminate Phosphors	**Katrina Krizmane**	Materials for Photonics	**103/104**
70	Excitation and relaxation of bound excitons in Cu2O single crystal and thin film	**Laima Trinkler**	Materials for Photonics	**103/104**
71	Optical absorption of interstitial oxygen in silicon dioxide.	**Linards Skuja**	Materials for Photonics	**103/104**
72	Laser processing as an alternative route for obtaining electroluminescent ZnS:Cu	**Madara Kļave**	Materials for Photonics	**103/104**
73	Excitonic and defect-related luminescence in $BaMgF_4$ ceramics under VUV excitation	**Marina Koņuhova**	Materials for Photonics	**103/104**
74	Structural Disorder and Radiation Damage in $ZnGa_2O_4$ Spinel Ceramics under 231 MeV Xe Ion Irradiation	**Marina Koņuhova**	Materials for Photonics	**103/104**
75	VUV Luminescence Study of $MgGa_2O_4$-Based Spinel Ceramics	**Marina Koņuhova**	Materials for Photonics	**103/104**
76	Broadband near-infrared Cr3+ luminescence in Zn2+/Zr4+-modified Gd3Ga5O12 garnet	**Meldra Kemere**	Materials for Photonics	**103/104**

77	Microwave-assisted synthesis of doped zinc sulfide electroluminescent phosphors	**Milena Dile**	Materials for Photonics	**103/104**
78	Enhanced Mn2+ luminescence in Ti4+ co-doped calcium hexaaluminate	**Pavels Rodionovs**	Materials for Photonics	**103/104**
79	Tuning the Luminescence Properties of Hackmanite with Zinc	**Pinja Tamminen**	Materials for Photonics	**103/104**
80	Comparative study of nano-ceramic and single crystalline dosimetric phosphor YAlO3:Bi	**Sergii Ubizskii**	Materials for Photonics	**103/104**
81	Comparative Study of Optical Absorption Uniformity in YAG:Cr $^{4+}$ Epitaxial Film and Single Crystal	**Sergii Ubizskii**	Materials for Photonics	**103/104**
82	VUV Luminescence Excitation Spectroscopy of Transition-Metal-Doped YInO3 and Mg4TiO4	**Vladimir Pankratov**	Materials for Photonics	**103/104**
83	Effect of DLIP Surface Structuring on Friction Coefficient Under Dry Sliding Conditions	**Eva Helēna Petrova**	Materials for Photonics	**103/104**
84	Early-Stage Development of Eco-Friendly NIR Persistent Phosphors for Remote Forest Monitoring	**Guna Doke**	Materials for Photonics	**103/104**
85	LUMINESCENCE OF Tb/Eu3+-DOPED Y2.97-xNaxAl5O12 GARNETS UNDER SYNCHROTRON RADIATION	**Nataliya Krutyak**	Materials for Photonics	**103/104**
86	Effect of Eu^{3+} doping on free-volume defect structure of $BaGa_2O_4$ ceramics	**Halyna Klym**	Materials for Photonics	**103/104**
87	Electronic structure and luminescence properties of Rb2GeF6 for application in advanced scintillation technologies	**Henri Herm**	Materials for Photonics	**103/104**
88	Synthesis of Cu, Ag, and Au Nanoplates for In Situ SEM Studies of Thermal, Electrical, and Plasmonic Heating.	**Ligita Ostrovska**	Materials for Photonics	**103/104**
89	Ce3+-activated materials for optical temperature sensors in 0 °C – 400 °C range	**Linda Pujāte**	Materials for Photonics	**103/104**
90	Coupling between MoS2 and Plasmonic grating	**Chiao-Chih Lin**	Materials for Photonics	**EXPO 103/104**
91	First principles study of Mg2TiO4 inverse spinel: Critical comparison of pure and Mn4+ doped materials	**Leonid Rusevich**	Materials for Photonics	**103/104**
92	Engineering Scalable Aptamer-Gold Interfaces for Rapid Malaria Diagnostics	**Edmunds Zutis**	Microfluidics and Biomedical technologies	**EXPO 103/104**
93	Shear stress in viscoelastic cell media within villus-mimetic gut-on-chip	**Janis Cipa**	Microfluidics and Biomedical technologies	**103/104**
94	Specificity analysis of the GreenB1 aptamer in pancreatic ductal adenocarcinoma models: a comparative study of static and microfluidic environments	**Kristaps Sunteiks**	Microfluidics and Biomedical technologies	**103/104**
95	GENetic EXtraction device for next generation DNA extraction	**Maira Elksne**	Microfluidics and Biomedical technologies	**EXPO 103/104**
96	Influence of glucose oxidase immobilization technique on electrochemical glucose sensor performance	**Maira Elksne**	Microfluidics and Biomedical technologies	**103/104**
97	Scalable manufacturing of a high-shear microfluidic test section for Point-of-Care clotting assessment, CLOTcheck	**Marcus da Silva**	Microfluidics and Biomedical technologies	**103/104**
98	PANI–MXene Nanocomposite Modified Electrodes for Electrochemical Glucose Biosensing	**Marina Sapauskiene**	Microfluidics and Biomedical technologies	**103/104**
99	Studying magnetotactic bacteria dynamics in porous media by using microfluidic chips	**Timothey Koksharov**	Microfluidics and Biomedical technologies	**103/104**
101	RIANA – Research Infrastructure Access in NAnoscience & nanotechnology	**Toomas Plank**	Technologies and Devices	**103/104**
102	Frequency-Domain Optical Temperature Sensing Using Mn^{2+}/Mn^{4+} Luminescence Decay Kinetics in Aluminate Phosphors	**Anatolijs Sarakovskis**	Technologies and Devices	**EXPO 103/104**
103	Heteroepitaxial stabilization of α-phase Ga2O3 thin films with superior thermal conductivity compared to β-phase	**Edgars Butanovs**	Technologies and Devices	**103/104**
104	Dual-window photoluminescence gas sensing with ultrathin Eu-doped ZnO films on black aluminium absorbers	**Jaroslav Otta**	Technologies and Devices	**103/104**
105	Electroluminescent Performance of OLEDs with Ag Nanoparticle-Modified PEDOT:PSS Layer	**Khrystyna Ivaniuk**	Technologies and Devices	**103/104**
106	Deposition optimization and characterization of structural and anticorrosion properties of HEA thin films obtained via DC Magnetron Sputtering	**Laura Madalina Cursaru**	Technologies and Devices	**103/104**
107	Carrier transport in CVD graphene field-effect transistors	**Linas Ardaravičius**	Technologies and Devices	**103/104**
108	Preperation and Photochromic Properties of Hybrid Co-doped TiO2/amino-PDMS Gels	**Loreta Abricka**	Technologies and Devices	**103/104**
109	Lossy Mode Resonance Sensor Based on Indium Tin Oxide and Polyaniline Thin Films for Ammonia Detection	**Maira Elksne**	Technologies and Devices	**103/104**
110	Crystal structure and mechanical properties of ALD-grown and thermally treated hafnium oxide–silicon oxide composite films	**Oliver Vanker**	Technologies and Devices	**103/104**
111	Evaluation of Pseudomonas aeruginosa–induced corrosion on antimicrobial high-entropy alloys coatings	**Stefania Caramarin**	Technologies and Devices	**103/104**
112	AFM-Based Electrical Characterization of Doped Indium Oxide Thin Films for Accelerated Material Screening	**Yevhen Brych**	Technologies and Devices	**103/104**
113	Close-loop wavefront pre-compensated laser amplifier for structured light amplification	**Yuan-Yao Lin**	Technologies and Devices	**103/104**
114	Real-time Automated Identification and Quality Assessment of 2D Materials using Referring Expression Segmentation	**Wing-Sing Cheung**	Theoretical Modeling of Functional Materials and Devices	**103/104**
115	ML-Guided Screening of Heterojunction Photocatalysts for Green Hydrogen Production	**Abay Usseinov**	Theoretical Modeling of Functional Materials and Devices	**103/104**
116	Data-Driven Calibration of LED Illumination Angles in Fourier Ptychographic Microscopy	**Ajeem Samsudeen**	Theoretical Modeling of Functional Materials and Devices	**103/104**
117	EXAFS spectroscopy study of the temperature-dependent lattice dynamics of wurtzite ZnO	**Daria Zandberg**	Theoretical Modeling of Functional Materials and Devices	**103/104**
118	Advanced modeling methods to investigate oxygen defects in MgO	**Elina Kolesnikova**	Theoretical Modeling of Functional Materials and Devices	**103/104**
119	Bismuth modified SrTiO3 perovskites for green hydrogen production: DFT studies	**Guntars Zvejnieks**	Theoretical Modeling of Functional Materials and Devices	**103/104**

120	Computational study of the structural, electronic, vibrational and elastic properties of Na_2SiF_6 and Na_2SiF_6:Mn4+ phosphors	**Ilya Chevyakov**	Theoretical Modeling of Functional Materials and Devices	**103/104**
121	EPR and DFT investigation of neutron-radiation-induced defects in gallium gadolinium garnet	**Jekabs Cirulis**	Theoretical Modeling of Functional Materials and Devices	**103/104**
122	Modeling the Direct Current Sputtering Process for High-Entropy Alloys	**Laura Madalina Cursaru**	Theoretical Modeling of Functional Materials and Devices	**103/104**
123	Interpretation of EXAFS spectra of CeO2 using MACE, NequIP, and CHGNet Foundational Models	**Leons Stankevičs**	Theoretical Modeling of Functional Materials and Devices	**103/104**
124	MLIP Factory: An End-to-End, Ab-Initio-to-GPU Workflow for Radiation Damage in Complex Ionic Compounds	**Rostislavs Rostovskis**	Theoretical Modeling of Functional Materials and Devices	**103/104**
125	DFT-supported ML Design of Mn-Doped BiVO4 Photoanodes for Visible-Light-Driven Water Splitting	**Sergei Piskunov**	Theoretical Modeling of Functional Materials and Devices	**103/104**
126	The effective diffusion coefficient in inhomogeneous solids with inclusions. A comparison of 2D continous and discrete models	**Vladimir Kuzovkov**	Theoretical Modeling of Functional Materials and Devices	**103/104**
127	From DFT to ML for modeling of functional catalyst materials	**Vladislav Ivanistsev**	Theoretical Modeling of Functional Materials and Devices	**103/104**
129	Simultaneous in situ dielectric and crystallographic temperature dependent measurements	**Kaspars Jaundzems**	Ferroelectrics and Functional Materials	**2nd Floor Atrium**
130	Collagen–SPION Magnetic Nanocomposites for Small-Scale Oil Spill Remediation in Water Basins	**Anna Marta Zeberga**	Technologies and Devices	**EXPO 103/104**
131	PLASMONIC RESONANCE TUNING IN HYBRID Ag–POLYMER NANOPARTICLES	**Iryna Yaremchuk**	Theoretical Modeling of Functional Materials and Devices	**103/104**