

## Poster session I

P1_1	Olga Demidenko	Corrosion resistance of V4A stainless steel in different seawaters conditions
P1_2	Ligita Valeikiene	Study of Alkaline earth metal substitution effects in sol-gel derived mixed-metal oxides and Mg <sub>2-x</sub> Mx/Al <sub>1</sub> (M = Ca, Sr, Ba) layered double hydroxides
P1_3	Sholpan Giniyatova	Synthesis and characteristic of ZnSe <sub>2</sub> O <sub>5</sub> nanocrystals
P1_4	Alexander Vetcher	Magnetic properties of materials based on FeNi-50, FeSi and ASC100.29 iron powders with nanomodified coatings
P1_5	Kaspars Kaprans	Nanostructured porous hybrid network of nitrogen-doped carbon as an anode for Li-ion batteries
P1_6	Gintarė Plečkaitytė	Hydro(solvo)thermal synthesis of NASICON-type materials for Na-ion batteries
P1_7	Gintarė Rimkutė	Research toward development of reiterated third generation biosensors using thermally reduced graphene oxide fractions
P1_8	Guntars Vaivars	CO <sub>2</sub> Adsorption on Copper Catalyst as Enhanced by Ion Liquid
P1_9	Deimante Vaitukaityte	Cross-linkable fluorene-based enamines as hole transporting materials for perovskite solar cells
P1_10	Povilas Luizys	Synthesis and characteristics of organic semiconductors with one, two, three and four carbazolyl chromophores
P1_11	Sarune Daskeviciute	Carbazole-terminated isomeric hole transporting materials for perovskite solar cells
P1_12	Aistė Ilčiukaitė	NEW FLUORENE DERIVATIVES AS HOLE TRANSPORTING MATERIALS FOR EFFICIENT PEROVSKITE SOLAR CELLS
P1_13	Gleb Gorokhov	Method of laser structuring of multiwall nanotube arrays for terahertz applications
P1_14	Roberts Oliņš	Electrochemical exfoliation – streamline method for synthesis of nitrogen doped graphene
P1_15	Žygimantas Vosylius	Scalable Solar Simulators Based on Arrays of Light-Emitting Diodes
P1_16	Guntars Vaivars	Swelling of composite sulfonated polyetheretherketone (SPEEK)/ZrO <sub>2</sub> membranes in electrolytes
P1_17	Juris Prikulis	Colloidal noble metal nanoparticles deposited on ZnO nanowires
P1_18	Alexander Molnar	Ferroelectric based multi-type energy-harvesting device to power a mobile medical telemetry system
P1_19	Marco Kirm	Challenges in the development of Commercial Analytical Research Organisations in the Baltic Sea region
P1_20	Peteris Lesnicenoks	Electrochemical CO <sub>2</sub> conversion: a method of electrode formation and its composition impact on products
P1_21	Vasili Rubanik	Preparation of Titanium Nickelide Coatings by Hypersonic Metallization
P1_22	Gints Kucinskis	Na <sub>2</sub> FeP <sub>2</sub> O <sub>7</sub> /C cathode for sodium-ion batteries: preparation and electrochemical properties
P1_23	Liva Germane	Prediction of triboelectric series based on polymer physico-chemical properties
P1_24	Monica Susana Campos Covarrubias	Microstructure properties of formed doped barium cerate thin film formed on different alloy substrates
P1_25	Dalius Gudeika	1,8-Naphthalimide-based derivatives for potential optoelectronic devices
P1_26	Leonid Fetisov	Magnetoelectric effect in a planar composite ferromagnet-piezoelectric-meander structure
P1_27	Vytautas Kavaliauskas	Novel Hydrophobic Deep Eutectic Solvents Based on Fluorinated Hydrogen Bond Donors

P1_28	Mantas Norkus	One-Step Phosphor in Glass Synthesis and Characterization
P1_29	Madara Leimane	Low temperature sol-gel synthesis of transparent nanoporous silicon dioxide glass
P1_30	Artis Linarts	Increase in Polymer Triboelectrification by Transition from a Glassy to Rubbery State
P1_31	Maksims Jurinovs	Nanocellulose filled acrylated epoxidized soybean oil inks for UV-assisted 3D printing
P1_32	Sergejs Beluns	Biobased low density and high porosity lignocellulose composite materials from wood and hemp waste
P1_33	Aleksander Prudnik	Electromagnetic shielding material based on porous alumina membranes filled with nickel and carbon-containing needle-punched textile

### Poster session II

P2_1	Andrius Pakalniskis	Preparation and investigation of bulk Bi <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub>
P2_2	Oleg Kiprijanovič	Barkhausen type Pulses during Generation the High Voltage Pulse by PZT Igniters
P2_3	Ekaterina Mikhaleva	Large barocaloric effect at ferroelectric phase transitions in ammonium hydrogen sulfate
P2_4	Fedor Fedulov	Influence of the Ni-PZT composite structure dimensions on characteristics of the magnetoelectric effect
P2_5	Alexander Molnar	The effect of changes in chemical composition and uniaxial compression on the phase transition of CuInP <sub>2</sub> S <sub>6</sub> crystals
P2_6	Lyubov Kharkhalis	Structural instability and electron-phonon interaction in the CuInS(Se) <sub>2</sub> semiconductor-ferroelectrics
P2_7	Alexander A. Grabar	Photorefractive parameters of Sn <sub>2</sub> P <sub>2</sub> S <sub>6</sub> crystals modified by doping, co-doping, and indiffusion
P2_8	Andrew Horvat	Stability and nanocrystalline structure investigation of Se-based chalcogenide glasses
P2_9	Arnoldas Solovjovas	DIELECTRIC PROPERTIES OF THE RELAXOR FERROELECTRIC (1-x)Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> - xPbTiO <sub>3</sub>
P2_10	Miks Jurjans	Electromechanical properties in (0.8Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> -0.2BaTiO <sub>3</sub> )-CaTiO <sub>3</sub> Solid solutions
P2_11	Edita Palaimiene	Dielectric Investigations of Ba <sub>0.7</sub> Ca <sub>0.3</sub> TiO <sub>3</sub> Ceramic
P2_12	Tomas Kudrevičius	Tape casting and dielectric characteristics of NBYT thick films
P2_13	Liga Bikse	ROLE OF THERMAL TREATMENT IN SURFACE MORPHOLOGY OF NBT-BASED CERAMICS
P2_14	Halyna Klym	Microstructure and free-volume defects in the doped BaTiO <sub>3</sub> ceramics
P2_15	Yulian Vysochanskii	Dielectric and pyroelectric properties of Sn <sub>2</sub> P <sub>2</sub> S <sub>6</sub> ferroelectrics with double – loop switching
P2_16	Yulian Vysochanskii	Layered GeP <sub>2</sub> S <sub>6</sub> , GeP <sub>2</sub> Se <sub>6</sub> , GeP <sub>2</sub> Te <sub>6</sub> , SnP <sub>2</sub> S <sub>6</sub> , SnP <sub>2</sub> Se <sub>6</sub> polar crystals with by pressure or chemical composition induced semiconductor – metal transition
P2_17	Aleksey Pashchenko	Influence of Compacting Pressure on the Dielectric Properties of Bismuth Iron Oxide Multiferroic
P2_18	Ramūnas Diliautas	Preparation of BiFe <sub>1-x</sub> Mn <sub>x</sub> O <sub>3</sub> solid solutions via low temperature sol-gel synthesis route
P2_19	Dovydas Karoblis	Synthesis and characterization of YMnO <sub>3</sub> -GdMnO <sub>3</sub> solid solutions via sol-gel method
P2_20	Anatoli I. Popov	In-plane lattice parameters and structural transitions on SrTiO <sub>3</sub> (001) surface at low temperatures

P2_21	Andrei Karabanov	Synthesis, structure, and dielectric properties of $\text{XPbBr}_3$ (X=MA, FA, Cs) and $\text{Cs}_2\text{AgBiBr}_6$ perovskite single crystals
P2_22	Marija Dunce	Influence of sintering temperature on NBT ceramics
P2_23	Yuri Mastrikov	First principles modelling of water adsorption and dissociation on flat and faceted $\text{SrTiO}_3$ surfaces
P2_24	Yuri Mastrikov	Band gap engineering of $\text{SrTiO}_3$ photocatalyst for sunlight-driven water splitting: ab initio simulations
P2_25	Zafer Ozer	Second Harmonic Generation in Generalized Ferroelectric Superlattices
P2_26	Zafer Ozer	Phononic Crystals with Archimedean-like Tiling: Band Structure and Transformation of Sound
P2_27	Husnu Koc	Influence of the Phase Transition on the Mechanical, Electronic and Optical Properties of $\text{Sn}_2\text{P}_2\text{X}_6$ Compounds
P2_28	Igor Djerdj	Rational Sol-Gel-Based Synthesis Design and Magnetic and Dielectric Properties Study of Selected Nanocrystalline Double and Triple Perovskites
P2_29	Andrius Aukštuolis	Charge carriers transport properties in PCPDTBT thin film transistor structures
P2_30	Marina Tretjak	Low frequency noise and resistivity characteristics of epoxy composites with variety of onion-like carbon
P2_31	Tomas Šalkus	Electrical conductivity of superionic $(\text{Ag}_x\text{Cu}_{1-x})_7\text{GeS}_5\text{I}$ and $(\text{Ag}_x\text{Cu}_{1-x})_7\text{GeSe}_5\text{I}$ mixed crystals
P2_32	Darya Meisak	The manganese ferrite effect on dielectric properties of MWCNT-based epoxy resin composites
P2_33	R. Merijs-Meri	DEVELOPMENT, CHARACTERISATION AND MODELING OF MECHANICAL PROPERTIES OF THE POLYPROPYLENE COMPOSITES WITH RENEWABLE FILLERS
P2_34	Edita Palaimiene	Dielectric/electric properties of the silver-PDMS nanocomposite
P2_35	Halyna Klym	Adsorption and desorption processes in the modified $\text{MgAl}_2\text{O}_4$ ceramics
P2_36	Sintija Eglite	Electro-thermal properties of cross-linked carbon black (CB) and ethylene-vinyl acetate (EVA) composite
P2_37	Povilas Bertasius	Fine Tuning of Electrical Transport and Dielectric Properties of Epoxy/Carbon Nanotubes Composites via Magnesium Oxide Additives
P2_38	Vilma Kavaliukė	Impedance spectroscopy study of some Argyrodite crystals
P2_39	Saulius Daugėla	Temperature dependent structural changes of $\text{Na}_2\text{Mn}_3(\text{P}_2\text{O}_7)_2$ phase in $\text{NaLiMnP}_2\text{O}_7$ mixed phase compound
P2_40	Erik Cizmar	Multiferroic perovskite $\text{BiFeO}_3$ - $\text{BiZn}_{0.5}\text{Ti}_{0.5}\text{O}_3$ system with the morphotropic phase boundary

### Poster session III

P3_1	Greta Inkrataitė	Coats of Cerium, Boron and/or Magnesium Doped Garnets on Different Pallets and Their Luminescence Properties for Scintillators Application
P3_2	Janis Cipa	Improving dosimetric properties of AlN by doping with rare earth metals.
P3_3	Aida Maratova	Effect of a low-temperature deformation on Ex luminescence of KI single crystals
P3_4	Aleksandrs Dutovs	Templated synthesis and optical properties of multilayer porous anodized aluminium oxide – zinc oxide nanostructures for biosensing applications

P3_5	Zhakyp Karipbayev	Structure and luminescent properties of YAG: Ce synthesized ceramic phosphors in radiation fields
P3_6	Rihards Ruska	Luminescence of doped AlN powders
P3_7	Aleksejs Zolotarjovs	Luminescence of undoped ZnO and ZnO:In nanopowders
P3_8	Saulius Miasojedovas	Luminescence properties of ZnMgO with different magnesium composition
P3_9	Julija Grigorjevaite	Luminescence and upconversion luminescence properties of $K_2Yb_{0.2}Bi_{0.8-x}(PO_4)(MoO_4)_x$ Er <sup>3+</sup>
P3_10	Ernests Einbergs	Chromium doped alumina usability in dosimetry
P3_11	Laurits Puust	Phase Stability and Luminescence Properties of ZrO <sub>2</sub> :Pr <sup>3+</sup> and ZrO <sub>2</sub> :Pr <sup>3+</sup> ,Nb <sup>5+</sup> Nanophosphors
P3_12	Artūrs Zariņš	In-situ luminescence measurements for advanced ceramic breeder pebbles under the influence of X-rays and $\hat{I}^2$ -rays
P3_13	Faina Muktepavela	Nanoindentation and fracture characteristics of doped ZnO:In and ZnO: Ga luminescent ceramics
P3_14	Nina Mironova-Ulmane	Fine structure of luminescence spectra of RE <sup>3+</sup> ions in single crystals Gd <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub>
P3_15	Ruta Aukstakojyte	Structural Characterization of Thermally Reduced Graphene Oxide in the Presence of Malonic Acid and Phosphorus Pentoxide
P3_16	Vidmantas Kalendra	EPR SPECTROSCOPY OF MANGANESE DOPED FERROELECTRIC [NH <sub>4</sub> ][Zn(HCOO) <sub>3</sub> ] FORMATE FRAMEWORK
P3_17	Andris Antuzevics	X-ray defect formation in rare-earth ion doped oxyfluoride glasses
P3_18	Haralds Ozols	Cr <sup>3+</sup> Paramagnetic probe in LaOCl
P3_19	Jekabs Cirulis	Gadolinium ion incorporation in calcium fluoride oxyfluoride glass ceramics.
P3_20	Gatis Priedītis	Thermal annealing of oxygen-related structural defects in fast-neutron-irradiated aluminium oxide crystals
P3_21	Andris Antuzevics	Paramagnetic defects in neutron irradiated Al <sub>2</sub> O <sub>3</sub>
P3_22	George Chikvaidze	FTIR spectra of neutron irradiated CVD diamonds
P3_23	Anatoli I.Popov	Case analysis of self-trapped hole V <sub>k</sub> center mobility in metal fluorides and fluoroperovskites
P3_24	Natalia Porotnikova	LAMOX functional materials as promising oxygen-ion electrolytes
P3_25	Jevgenijs Gabrusenoks	LATTICE DYNAMICS CALCULATIONS FOR MgO AND Mg <sub>1-x</sub> Zn <sub>x</sub> O SOLID SOLUTIONS
P3_26	Ainars Knoks	Theoretical calculation and spectroscopic measurements of electrocatalytic Cu and Cu/C thin films for CO <sub>2</sub> reduction
P3_27	Sergei Piskunov	First-principles calculations and spectral characterization of Zn <sub>(1-x)</sub> Mg <sub>(x)</sub> O epilayers
P3_28	Anna Bystrova	Engineering of surface electrical charge of HAP due to its structural imperfections
P3_29	Kirils Surovovs	Modelling of the pedestal growth of silicon crystals
P3_30	Valerii Karpov	First-principles calculations on stability, electronic and phonon properties of monolayers and nanotubes based on gallium monochalcogenides
P3_31	Anuar Aldongarov	Effect of the dipole moment on the formation of trap states in CdS and CdSe quantum dots
P3_32	Konstantin Glukhov	Magnetic ordering in multilayered compounds of M <sub>1</sub> M <sub>2</sub> P <sub>2</sub> X <sub>6</sub> (M <sub>1</sub> , M <sub>2</sub> – Mn, Fe, Cr, Cu; X – S, Se) type
P3_33	Davis Zavickis	CHARACTERIZATION OF Co ION OXIDATION STATE AND LOCAL STRUCTURAL DISTORTIONS IN BaCoO <sub>3-x</sub>

P3_34	Lyubov Kharkhalis	Theoretical simulation of electron-phonon interaction in the indium selenides from the first principles
P3_35	Tetiana Babuka	Electronic and vibrational properties of $\text{TlIn}(\text{S}_{0.75}\text{Se}_{0.25})_2$ crystal: theoretical and experimental study
P3_36	Artyom Plyushch	Conductivity and percolation in carbon nanotubes filled materials: numerical simulations
P3_37	Amirullah M.mamedov	$\text{KNbO}_3$ Based Space-Time Crystal and Dispersion Near Dirac Point
P3_38	Dmitry Bocharov	Ab initio molecular dynamics simulations of transition metal dichalcogenides
P3_39	Iryna Doroshenko	Spectroscopic study of water clusters in nanostructured materials