

Programme of the 21<sup>st</sup> International Conference-School  
“Advanced Materials and Technologies 2019”

**Date:** 19-23 August, 2019

**Venue:** Hotel “Gabija” (<http://www.gabija.lt/en/>)  
Vytauto Str. 40, LT-00160  
Palanga, Lithuania

**Poster Session. August 22, Thursday, 15:30 – 17:25**

**Poster Session I (P1 – P61) 15:30 – 16:20**  
**Poster Session II (P62 – P122) 16:35 – 17:25**

**METHODS OF SURFACE ANALYSIS**

<b>P1</b>	<b>Atomic Force Microscopy and Scanning Electron Microscopy for Imaging Modified Saccharomyces Cerevisiae Cells with Polypyrrole and Carbon Nanotubes</b> Aura Kisieliute, Vilius Aukscionis, Antanas Zinovicius, Arunas Ramanavicius
<b>P2</b>	<b>Surface Plasmon Resonance Immunosensors for Detection of Human Growth Hormone in Real-Time</b> Elena Dauksaite, Almira Ramanaviciene, Asta Kausaite-Minkstimiene
<b>P3</b>	<b>Spectroscopic Thickness Determination of PE-CVD Graphene, Wet-Transferred on Silicon Substrate</b> Šarūnas Jankauskas, Rimantas Gudaitis, Erika Rajackaitė, Šarūnas Meškinis
<b>P4</b>	<b>Scanning Electrochemical Impedance Microscopy for the Comparison of Healthy and Pathological Human Myocardium-Derived Mesenchymal Stem Cell</b> Jurate Petroniene, Daiva Bironaite, Rokas Miksiunas, Kestutis Rucinskas, Vilius Janusauskas, Arunas Ramanavicius
<b>P5</b>	<b>Application of MMXD and MGIXD Methods for Stress Measurements in the Mechanically Treated Surface Layer of Tungsten</b> Adrian Oponowicz, Marianna Marciszko, Andrzej Baczmański, Sebastian Wroński, Mirosław Wrobel, Christoph Genzel, Manuela Klaus, Chedly Braham, Habib Sidhom

**SURFACE ENGINEERING AND NANOSTRUCTURES**

<b>P6</b>	<b>Selective Elimination of Atoms or Ions in Crystals and Molecules Produced with X-Rays</b> Arvydas Juozapas Janavičius, Romaldas Purlys, Ringaudas Rinkūnas, Mindaugas Viliūnas, Saulius Daugėla
<b>P7</b>	<b>Electroless Deposition of Pt Using Co(II)/Co(III) Redox System</b> Aldona Jagminienė, Loreta Tamašauskaitė-Tamašiūnaitė, Ina Stankevičienė, Eugenijus Norkus
<b>P8</b>	<b>Formation of Micro Channels in PDMS via Femtosecond Laser Irradiation</b> Mindaugas Juodėnas, Tomas Jurkšas, Tomas Tamulevičius, Artūras Vailionis, Sigitas Tamulevičius
<b>P9</b>	<b>Formation of Porous Silicon in the Cooled Electrolytes</b> Aliaksandra Hurbo, Vitaly Bondarenko
<b>P10</b>	<b>High Yield CuO Nanowire Growth Via Thermal Oxidation Method for Application in Nanoelectromechanical Switches</b> Raitis Sondors, Matiss M. Ramma, Edijs Kauranens, Jelena Kosmaca, Raimonds Meija, Mikk Antsov, Donats Erts
<b>P11</b>	<b>Cold Plasma Deposited FeO<sub>x</sub> – Application for the Catalytic Conversion of CO<sub>2</sub> to CO</b> Jacek Balcerzak, Ryszard Kapica, Hanna Kierzkowska-Pawlak, Jacek Tyczkowski
<b>P12</b>	<b>Laser Induced Changes in Nanostructure of Plasma-Deposited CoO<sub>x</sub> Films</b> Ryszard Kapica, Marcin Kozanecki, Jan Sielski, Jacek Tyczkowski
<b>P13</b>	<b>AIII-BV QW Structures with Bi for IR Range Optoelectronic Devices</b> Simona Pūkienė, Mindaugas Karaliūnas, Algirdas Jasinskas, Evelina Dudutienė, Bronislovas Čechavičius, Andres Udál, Gintaras Valušis, Renata Butkutė
<b>P14</b>	<b>Comparison of SERS-Activity of Silicon Nanowires Coated with Silver Using Wet and Dry Processes</b> Arseni Klimenka, Sergey Zavatski, Nikita Grevtsov, Hurbo Aliaksandra, Viktor Khaliava, Hannah Bandarenka, Vitaly Bondarenko
<b>P15</b>	<b>Application of Variable Thickness Anodic Alumina as Evaporation Masks for Production of Nanostructured Plasmonic Films and Nanoparticle Arrays</b> Daniels Jevdokimovs, Raimonds Poplausks, Juris Prikulis, Uldis Malinovskis, Mindaugas Juodėnas, Donats Erts
<b>P16</b>	<b>Decoration of ZnO Nanorod Arrays with Gold Nanoparticles Using Dip-Coating Method</b> Margarita Baitimirova, Uldis Malinovskis, Asta Tamulevičienė, Juris Prikulis, Donats Erts
<b>P17</b>	<b>The Influence of Strong Magnetic Field to Ice-Iron Sliding Properties</b> Ivars Driķis
<b>P18</b>	<b>Investigation of Structured Thin Film Growth by Optical Monitoring</b> Gabija Petrauskaitė, Lina Grinevičiūtė, Lukas Ramalis, Tomas Tolenis
<b>P19</b>	<b>Analysis of Silver Nanoparticle Size Distribution in DLC Matrix Before and After fs-Laser Irradiation</b>

Gerda Klimaitė, Aušrinė Jurkevičiūtė, Tomas Tamulevičius, Sigita Tamulevičiūtė

**Photoluminescence and Plasmonic Scattering Studies of Zinc Oxide Nanorods with Noble Metal Nanoparticles**

P20 Dilafruz Kulmatova, Margarita Baitimirova, Uldis Malinovskis, Tomas Tamulevičius, Yuliya Harmaza, Donats Erts, Juris Prikulis

**Electrical Properties of Single and Multilayer Silicon Nitride Dielectric for Applications in Nanocapacitors**

P21 Liga Avotina, Marina Romanova, Elina Pajuste, Gennady Enichek, Aleksandrs Zaslavskis, Jurijs Dehtjars, Gunta Kizane

**Fabrication of Bimetallic Fe/Cu Catalyst for Heterogenous Fenton Process Catalysis**

Aliona Nicolenco, Modestas Vainoris, Francisco Alcaide, Natalia Tsyntsaru, Henrikas Cesiulis

**New Approach to Fabrication of SERS-Active Substrates Based on Colloidal Nanoparticles**

Nadzeya Khinevich, Sigita Tamulevičiūtė, Asta Tamulevičienė, Hanna Bandarenka, Sergey Zavatski

**Production of High-Density Au Nanoparticle Arrays on Nanoporous Anodic Alumina from Colloidal Solutions**

Uldis Malinovskis, Raimonds Poplausks, Aušrinė Jurkevičiūtė, Juris Prikulis, Donats Erts

**Investigation of Directionality of Chitosan/Polyethylene Oxide Nanofibers**

P25 Sandra Varnaitė-Žuravliova, Natalja Savest, Julija Baltušnikaitė-Guzaitienė, Aušra Abraitienė, Andres Krumme

**Modeling of Diffusion Process in Oxygen Mobility Experiment in  $Ce_xZr_{1-x}O_2$  Catalysts: Kinetic Model**

Muhammad Usman, Arvidas Galdikas

**Optically Transparent Fluorine Doped Tin Oxide Application for Phospholipid Membrane Formation**

Inga Gabriunaite, Margarita Poderyte, Aušra Valiūnienė

**Luminescence of Rare Earth Ions in Magnesium Coatings Prepared by Plasma Electrolytic Oxidation**

Krisjanis Auzins, Krisjanis Smits, Aleksejs Zolotarjovs, Ivita Bite, Carsten Blawert

**NEM Switch Operating Voltage Reduction and a Combined Lithography-Dielectrophoresis Method for NEM Switch Production**

P29 Raimonds Meijs, Liga Jasulaneca, Jelena Kosmaca, Jana Andzane, Matiss M. Ramma, Edijs Kauranens, Donats Erts

**UV Sensing with ZnO Nanotetrapods**

Rasa Mardosaitė, Agnė Šulčiūtė, Mindaugas Illickas, Paulius Laurikėnas, Simas Račkauskas

**High Diffraction Efficiency Periodic Micro Structures**

Andrius Žutautas, Tomas Tamulevičius, Sigita Tamulevičiūtė

**Synthesis of Silver Nanostructures and Their Modification with Ultrashort Laser Pulses**

Mantas Mikalkevičius, Mindaugas Juodėnas, Tomas Tamulevičius, Till Leißner, Asta Tamulevičienė

**Single Particle Self-Assembly proved by Surface Lattice Resonance**

Mindaugas Juodėnas, Tomas Tamulevičius, Joel Henzie, Donats Erts, Sigita Tamulevičiūtė

**Electroless Deposition of Cu-Zn Alloys Using Co(III)/Co(II) Redox Couple as a Reducing Agent**

Ina Stankevičienė, Aldona Jagminienė, Jūratė Vaičiūnienė, Eugenijus Norkus

**Mechanically Polished Titanium Surface For Tethered Bilayer Lipid Formation**

Tomas Sabirovas, Aušra Valiūnienė

**Electroless Deposition of Cobalt-Nickel-Boron Coatings**

Jūratė Vaičiūnienė, Zita Sukackienė, Ugnė Narkevičiūtė, Loreta Tamašauskaitė-Tamašiūnaitė, Eugenijus Norkus

**Evaluation of Electrospun Nanofiber Structure**

Virginija Kleivaitė, Rimvydas Milašius

**Refractive Index Optical Fiber Sensors Applying Doped Diamond Films**

Monika Kosowska, Daria Majchrowicz, Małgorzata Szczerska

**ELECTRONIC AND OPTICAL MATERIALS**

**P39 Effect of the Film Morphology on Charge Trapping and Opto-Electronic Device Performance of Hybrid Perovskite Films**

Andrey Kadashchuk, Alexander Vakhnin, Weiming Qiu

**P40 Spectral Characterization of Native Defects in AlN Bulk and Nanopowder**

Rihards Ruska, Janis Cipa, Baiba Berzina, Laima Trinkler

**P41 GeSn Characterization by Nondestructive Optical Techniques**

Tomas Jurgutis, Saulius Nargelas, Patrik Ščajev, Pavels Onufrijevs, Arturs Medvids, Hung Hsiang Cheng

**P42 Anisotropic Thin Film Based Polarizing Coatings for High Power Lasers**

Lukas Ramalis, Lina Grinevičiūtė, Rytis Buzelis, Tomas Tolenis

**P43 Two-Dimensional Electron Gas Properties of GaN-Based High Electron Mobility Transistor Structures**

Nerijus Armakavicius, Philipp Kühne, Jr-Tai Chen, Vallery Stanishev, Plamen P. Paskov, Sean Knight, Tino Hofmann, Olle Kordina, Vanya Darakchieva

**P44 Effect of Molecular Beam Epitaxy Growth Conditions for Terahertz Sensing InGaAs Diodes**

Domas Jokubauskis, Renata Butkutė, Linas Minkevičius

**P45 Tunneling Luminescence Process Contribution in Afterglow of Strontium Aluminate Phosphors**

Agnese Spustaka, Virgīnija Vītola, Donats Millers, Ivita Bite

- P46 Investigation of Cerium Doped LSO and LYSO Crystals by Optical Pump and Probe Technique**  
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- P47 Investigation of Chrome Doped Lead Ferrite Thin Films Synthesized by Reactive Magnetron Sputtering**  
Benas Beklešovas, Vytautas Stankus
- P48 Preparation of Titanium Nitride Nanoparticles Via Gas Aggregation Source (GAS)**  
Syeda Fatima Bukhari, Oleksandr Polonskyi, Jonas Drewes, Thomas Strunskus, Franz Faupel
- P49 Plasmonic Activity of Platforms Including Carbon Nanostructures**  
Domantas Žitkauskas, Justina Gaidukevič, Jurgis Barkauskas, Gediminas Niaura
- P50 Fabrication of Electrochromic Urea Biosensor Based on Prussian Blue**  
Giedrė Medvikytė, Aušra Valiūnienė, Povilas Virbickas
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Janis Cipa, Laima Trinkler, Rihards Ruska, Baiba Berzina
- P52 Enhancing Photocatalytic Performance of TiO<sub>2</sub> Thin Films by Metallic Nanoparticles and Hybrid Oxide Nanostructures**  
Salih Veziroglu, Josiah N. Shondo, Alexander Vahl, Oleksandr Polonskyi, Thomas Strunskus, Franz Faupel, Oral Cenk Aktas
- P53 MOCVD Epitaxy of GaN via Graphene**  
Kazimieras Badokas, Arūnas Kadys, Ilja Ignatjev, Giedrius Juška, Jūras Mickevičius, Patrik Ščajev, Tadas Malinauskas
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Mindaugas Andrulevičius, Linas Puodžiukynas, Asta Guobienė
- P55 Influence of Alkali Metals on the Optical Properties of Glassy Silicon Dioxide**  
Madara Leimane, Linards Skuja, Krisjanis Smits, Ivita Bite, Katrina Laganovska, Krisjanis Roze
- P56 Investigation of Reactive Magnetron Sputtering of Aluminium Oxynitride Films and Their Applications for Optical Coatings**  
Naglis Kyžas, Alexandr Belosludtsev
- P57 Modelling Semiconductors Alloys Using Special Quasi-Random Structures**  
Rokas Silkinis, Audrius Alkauskas
- P58 Graphite Based Diffractive Optical Elements for Terahertz Frequency Range**  
Rusnė Ivaškevičiūtė, Linas Minkevičius, Andžėj Urbanovič, Lukas Laurinavičius, Rasa Pauliukaitė, Gintaras Valušis
- P59 An Algorithm for Designing True Color Dot-Matrix Holograms**  
Tomas Klinavičius, Tomas Tamulevičius
- P60 Modelling the Interactions between Point and Dislocation Defects in Hexagonal Boron Nitride Using Force Fields**  
Vytautas Žalandauskas, Audrius Alkauskas
- P61 The Effect of MBE Growth Parameters on Properties of GaAsBi Quantum Well Structures**  
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- P62 THz Pulse Emission from Germanium Crystals**  
Ričardas Norkus, Ignas Nevinskas, Arūnas Krotkus
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Domantas Peckus, Joel Henzie, Tomas Tamulevičius, Mindaugas Andrulevičius, Algirdas Lazauskas, Erika Rajackaitė, Šarūnas Meškiniš, Sigitas Tamulevičius
- P64 Usability of Chrome Doped Alumina in Dosimetry**  
Ernests Einbergs, Aleksejs Zolotarjovs, Ivita Bite, Krisjanis Smits
- P65 Transfer of Optical Vortices in Coherently Prepared Media**  
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- P66 Influence of Indium Concentration on Morphology and Physical Properties of In-Doped ZnO Nanostructures**  
Juliana Kepente, Ivita Bite, Larisa Grigorjeva, Agnese Spustaka, Krisjanis Smits, Anzelms Zukuls
- P67 Microwave-Assisted Synthesis and Properties of Non-Doped and Ga-Doped ZnO Nanoparticles**  
Mareks Senko, Ivita Bite, Agnese Spustaka, Anzelms Zukuls, Larisa Grigorjeva, Krišjānis Šmits
- P68 New Substituted Triphenylamine Derivatives as Hole Transporting Materials for Red PHOLEDs**  
Dovydas Blazevičius, Gintare Krucaite, Marius Eidimtas, Dmytro Volyniuk, Jurate Simokaitiene, Saulius Grigalevicius
- P69 Investigation of Properties of Triphenylamine Derivatives Containing Quaternary Ammonium Groups**  
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## CERAMICS

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P70	<b>Effect of Spherical Al<sub>2</sub>O<sub>3</sub> Microceramics on Hardness and Wear Resistance of Composite Ni-based Coatings</b> Aleksandr Lebedev, Jelena Škamat, Olegas Černašėjus
P71	<b>Influence of Ba<sup>2+</sup>-Doping on the Structural and Thermal Properties of La<sub>2</sub>Mo<sub>2</sub>O<sub>9</sub> Ceramic</b> Giedrė Gaidamavičienė, Artūras Žalga
P72	<b>Sol-Gel Synthesis of Yttrium, Terbium Iron Perovskites and Yttrium Iron Garnet</b> Justinas Januškevičius, Živilė Stankevičiūtė, Inga Grigoravičiūtė-Puronienė, Aivaras Kareiva
P73	<b>Bioactivity Research of the Bioglass-Calcium Phosphates Composites in SBF</b> Laurynas Alinauskas, Zivile Stankeviciute, Gabija Zarembaite, Aleksej Zarkov, Lauryna Sinusaite, Aivaras Kareiva, Edita Garskaite
P74	<b>Study of Transition Metal Substitution Effects in Sol-Gel Derived Mg<sub>3-x</sub>M<sub>x</sub>/Al<sub>1</sub> (M = Mn, Co, Ni, Cu, Zn) Layered Double Hydroxides</b> Ligita Valeikiene, Inga Grigoraviciute-Puroniene, Aivaras Kareiva
P75	<b>The Porous Mullite Ceramics Observed by Slip Casting Method</b> Ludmila Mahnicka-Goremikina, Ruta Svinka, Visvaldis Svinka, Vadims Goremikins
P76	<b>Characterisation of Ceria Based Electrolytes Prepared by Glycine-nitrate Combustion and Co-precipitation Synthesis Routes</b> Fariza Kalyk, Brigita Abakevičienė

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## POLYMERS AND COMPOSITES

P77	<b>Investigation of Pyrrole Adsorption and Electrochemical Polymerization on Gold Surface</b> Linas Sinkevičius, Deivis Plaušinitis
P78	<b>Optical Properties of Cu<sub>x</sub>S Thin Films Deposited on Polypropylene by Sorption-Diffusion Method</b> Kamilė Vonžodaitė, Eglė Balčiūnaitė, Rasa Alaburdaitė, Edita Paluckienė
P79	<b>Optical Properties of Cu-Doped Tin Selenide Films</b> Aistė Kunciūtė, Remigijus Ivanauskas, Algimantas Ivanauskas
P80	<b>4D Printing for Programmable Materials</b> Donatas Valiulis, Eugenijus Jurkonis
P81	<b>Modification of Polyamide Films by Copper Selenide Layers</b> Gediminas Jakubauskas, Neringa Petrašauskienė
P82	<b>Study of Morphological Properties of MWCNTs/PDMS Polymer Nanocomposites</b> Iryna Sulym, Katarzyna Jankowska, Jakub Zdarta, Dariusz Sternik, Yuriy Sementsov, Anna Derylo-Marczewska, Filip Ciesielczyk, Teofil Jesionowski
P83	<b>Enhancement of Polypropylene–Epoxy Bond Adhesion by Gliding Arc Discharge with Cross Flow Gas Inlets</b> Kateřina Polášková, Petr Jelínek, Filip Jeník, Lukáš Dostál, Lenka Zajíčková
P84	<b>Cathodic Electrodeposition and Optical Properties of Ni-Doped ZnO Films</b> Konstantin Yanushkevich, Eugene Chubenko
P85	<b>Polymer Based Nanocomposites Modified with CNT/Bi<sub>2</sub>Se<sub>3</sub> and CNT/Sb<sub>2</sub>Te<sub>3</sub> Heterostructures for Thermoelectric Applications</b> Krisjanis Buks, Jana Andzane, Juris Bitenieks, Janis Zicans, Donats Erts
P86	<b>Porous Hybrid Polyvinyl Alcohol Acetals Nanocomposites with Magnetic Laponite for Efficient Dyes Adsorption</b> Olena Goncharuk, Yuriy Samchenko, Natalia Pasmurtseva, Lyudmila Kernosenko, Tetyana Poltorats'ka
P87	<b>Cholesterol Adsorption on Partially Hydrophobic Silica Nanoparticles from Solutions of Bile Salts</b> Olga Kazakova, Nataliya Vlasova, Lyudmila Golovkova
P88	<b>Manufacturing of Continuous Carbon Fiber Reinforced Thermoplastic Composites Using FDM Technology</b> Tomas Kuncius, Marius Rimašauskas
P89	<b>Study of Sensitivity to Glyphosate. Comparison of Differently Coated Gold Surfaces by Using ESPR Method</b> Domas Balčiūnas, Deivis Plaušinitis
P90	<b>Influence of Melting Temperature on Mechanical Properties of Melt Spun Polypropylene and Polyethylene Terephthalate Fibers</b> Evaldas Bolskis, Erika Adomavičiūtė
P91	<b>Sulfonated Poly(Ether Ether Ketone) Membranes and its Composite with Activated Carbon for Potential Application in CO<sub>2</sub> Electrochemical Reduction Cells</b> Deniss Fedorenko, Guntars Vaivars
P92	<b>Influence of Betulin Doped on Bacteriostatic and Antiinflammatory Properties of Polycarbonates</b> Mateusz Przybyła, Tomasz Flak, Jadwiga Gabor, Klaudia Kubik, Andrzej S. Swinarew

**P9 Formation and Optical Properties of Zinc Oxide/Copper Composites**  
Nikita Tkachenok, Eugene Chubenko

### ADVANCED ENGINEERING MATERIALS

- P94 The Control of Quality of Graphene Layers Based on Their Ultrafast Relaxation Properties**  
Erika Rajackaitė, Domantas Peckus, Rimantas Gudaitis, Tomas Tamulevičius, Mindaugas Andrulevičius, Šarūnas Meškiniš, Sigita Tamulevičiūtė
- P95 Influence of Parameters of Gridirons on the Cotton Fibres Cleaning and Yarns Quality**  
Sharof Shukhratov, Rimvydas Milašius
- P96 Alternative Sources of Plant Nutrients**  
Austėja Mikolaitienė, Rasa Šlinkšienė
- P97 Dependence of Woven Fabric Tearing on Weave Construction**  
Brigita Legaudienė, Rimvydas Milašius
- P98 Synthesis of Well-Ordered Nano Structure of Anodic Aluminium Oxide Using Different Electrolytes**  
Chiung Fen Chang, Nhat Huy Luan, Yesong Gu
- P99 Penetration of Esters, Derived from Vegetable Oils, into Anodized Coating for Friction Reduction**  
Dalia Bražinskienė, Tadas Matijošius, Gedvidas Bikulčius, Svajus Asadauskas
- P100 Investigation of Pilling Resistance of Linen / Silk Woven Fabrics Dyed in Light and Dark Colours**  
Indrė Tautkutė-Stankuvienė, Eglė Kumpikaitė
- P101 The Influence of Chromium and Aluminium Ions on the Calcium Silicate Hydrates Formation**  
Inga Knabikaite, Kestutis Baltakys, Anatolijus Eisinas, Tadas Dambrauskas, Domante Niuniavaite
- P102 Investigation of the Thermoregulation Properties of Knitted Fabrics with Fibres Containing Phase Change Materials**  
Laimutė Stygienė, Sigita Krauledas, Aušra Abraitienė Sandra Varnaitė-Žuravliova, Vitalija Rubežienė
- P103 Functional and Advanced Applications of Electro-Conductive Materials for Smart Textiles**  
Md. Reazuddin Repon, Daiva Mikučionienė
- P104 Silver Plating of Polyacrylonitrile Graphite Fiber and Ball Milled Quartz for Electrically Conductive Application**  
Nijolė Buškuvienė, Indrė Danisevičienė
- P105 Investigation of the Laser Treatment Parameters for the Creation of Reinforcing Ribs in Metal Thin Sheet Materials**  
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- P106 Investigation on Influence of Antimicrobial Treatment on Structural and Physical Properties of Textile**  
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- P107 Analysis of Latvian Sheep Breed Wool Chemical Composition and Properties**  
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- P108 Material Properties of Bend Multilayered Wood Base Materials**  
Inga Zotova, Edgars Kirilovs, Ilze Gutmane
- P109 Development of the Smart Materials Ecosystem in Latvia**  
Gunars Bajars, Lauma Muižniece

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Liga Britala, Krisjanis Buks, Jana Andzane, Aleksandrs Neciporenko, Malvine Nelda Strakova, Donats Erts
- P111 Development of Innovative Low Density Thermal Insulation from Wet-Preserved Hemp**  
Edgars Kirilovs, Silvija Kukle, Hans-Jörg Gusovius, Inga Zotova
- P112 Ionic Liquid Additive Significantly Increases MAPbI<sub>3</sub> Perovskite Stability**  
Rokas Jasiūnas, Rui Xia, Vidmantas Gulbinas, Mohammad Khaja Nazeeruddin, Paul Joseph Dyson
- P113 Efficient Catalytic Systems for Oxygen Reduction Reaction in PEM Fuel Cells**  
Adriana Marinoiu, Claudia Cobzaru, Corina Cernatescu, Elena Marin, Radu Andrei, Catalin Capris, Elena Carcadea
- P114 Influence of TiO<sub>2</sub> *in situ* Doping With Graphene Nanoparticles on Electrochemical Properties**  
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- P115 Graphite Felt Modification with Lead(II) Oxide Using Lead(II) Formate for Application in Lead Acid Batteries**  
Arminas Ilginis, Egidijus Griškonis
- P116 Cobalt-Boron Alloy Modified with Gold Nanoparticles as Electrocatalysts for Glucose Electro-Oxidation**  
Daina Upskuvienė, Zita Sukackienė, Aldona Balčiūnaitė, Birutė Šimkūnaitė-Stanyrienė, Loreta Tamašauskaitė-Tamašiūnaitė, Eugenijus Norkus
- P117 Thin Film Bismuth Selenide and Antimony Telluride Near-room Temperature Thermoelectric Generators**  
Edijs Kauranens, Jana Andžāne, Uldis Maļinovskis, Donats Erts
- P118 XRD Studies of Tin Sulfide Layers on FTO Glass**

Asta Bronušienė, Ingrida Ancutienė

**P119 Electrodeposition of a  $\text{Mo}_{1-x}\text{W}_x\text{S}_2$  Material for Electrocatalysis of the Hydrogen Evolution Reaction**

Ramunas Levinas, Natalia Tsyntsaru, Henrikas Cesiulis

**P120 Neutron Irradiation Effects on the Oxidation Process of Beryllium in Nuclear Fusion Devices**

Elina Pajuste, Gunta Kizane, Liga Avotina, Arturs Zarins

**P121 Overshoot Effect in Triple Cation Perovskite Solar Cells**

Rokas Gegevičius, Marius Franckevičius, Jevgenij Chmeliov, Vidmantas Gulbinas

**P122 Synthesis and Characterization of New V886 Analogues**

Aida Drevilkaukaitė, Marytė Daškevičienė, Egidijus Kamarauskas, Vygintas Jankauskas, Vytautas Getautis

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