

Programme of the 23rd International Conference-School
“Advanced Materials and Technologies 2021”

Date: 23-27 August 2021

Venue: Hotel “Gabija” (<http://www.gabija.lt/en/>)
Vytauto st. 40, Palanga, Lithuania

A National Certificate (*Galimybų pasas*) or EU Digital COVID Certificate is required!

August 23, Monday

14:00 – 20:00 Arrival and registration

August 24, Tuesday

Chairperson Sigitas Tamulevičius

8:30 – 9:00 Registration

9:00 – 9:15 Opening of the Conference-School
Sigitas Tamulevičius (Kaunas University of Technology, Lithuania)

9:15 – 10:00 Ieva Plikusienė (Vilnius University, Lithuania)
Sars-Cov-2 Antigen Binding to Specific Antibody Kinetics Analysis by Spectroscopic Ellipsometry

10:00 – 10:45 Hyeong-Jin Kim (Gwangju Institute of Science and Technology, Korea)
Facile One-pot Solid-state Synthesis of Si/Cu₃Si/Cu/C Anode for High Performance Lithium-ion Batteries (online)

10:45 – 11:00 Coffee Break

11:00 – 11:45 Agnese Brangule (Rīga Stradiņš University, Latvia)
FTIR Spectroscopy: A Promising Method in the Characterisation of Calcium Phosphates

11:45 – 12:30 Aleksej Žarkov (Vilnius University, Lithuania)
Synthesis and Phase Transformations in Calcium Phosphates

12:30 – 14:00 Break

14:00 – 16:00 Social Event: 3x3 Basketball Tournament (Palanga Vladas Jurgutis progymnasium,
<https://www.jurgucioproginnazija.lt/>, Ganyklų st. 2, Palanga)

16:00 – 18:00 Break

18:00 – 21:00 Welcome Party (Hotel Gabija Restaurant, Vytauto st. 40, Palanga)

August 25, Wednesday

Chairperson Karine Mougin

8:30 – 9:00 Registration

9:00 – 9:45 Mangirdas Malinauskas (Vilnius University, Lithuania)
Colorful Laser 3D Nanoprinting (online)

9:45 – 10:30 Titas Gertus (Light Conversion, Lithuania)
Tunable GHz and MHz Femtosecond Burst for Various Material Processing

10:30 – 10:45 Coffee Break

10:45 – 11:30 Joel Henzie (National Institute for Materials Science, Japan)
Controlling Materials-Space in Inorganic Materials (online)

11:30 – 12:15 Jurga Juodkazytė (Center for Physical Sciences and Technology, Lithuania)
Light in Electrochemistry: How to Make Use of It?

12:15 – 12:30 Coffee Break

12:30 – 13:15 Hubert Halbritter (OSRAM Opto Semiconductors GmbH, Germany)
Light - The Ubiquitous Technology

13:15 – 14:00 Patrik Öhberg (Heriot-Watt University, United Kingdom)
Topological Photonics (online)

14:00 – 16:00 Break / Meeting of Project H2020-MSCA-RISE-2017 Marie Skłodowska-Curie Action: Research and Innovation Staff Exchange - Grant Agreement 778308 - SPINMULTIFILM: “Physical Principles of the Creation of Novel SPINtronic Materials on the Base of MULTIlayered Metal-Oxide FILMs for Magnetic Sensors and MRAM” (online)

16:00 – 21:15 Social Event: Orienteering Competition (“HBH Palanga”, Žibininkai vlg., <http://www.hbh.lt/en/hbh-palanga/>)

August 26, Thursday

Chairperson Donats Erts

8:30 – 9:00 Registration

9:00 – 9:45 Witold Brostow (University of North Texas, United States of America)
Fire Resistance of Materials

9:45 – 10:15 Rynno Lohmus (University of Tartu, Estonia)
How to Use Wood as a Material More Efficiently?

10:15 – 10:30 Coffee Break

10:30 – 11:15 Ashok Vaseashta (International Clean Water Institute, United States of America)
Nanofibers of High-Performance Electret Polymers for Tactile Sensing and Wearable Electronics

11:15 – 12:00 Azhar Ariffin (University Malaya, Malaysia)
Carbazole-Based Organic Compounds in Organic Light Emitting Diodes, OLED, Applications

12:00 – 12:15 Coffee Break

12:15 – 13:15 Morten Madsen (University of Southern Denmark, Denmark)
Metal Oxide Interlayers for Scalable Organic and Perovskite Solar Cells

13:15 – 15:00 Break

15:00 – 18:30 Poster Sessions with online voting for the Best Poster *Chairperson Tomas Tamulevičius*
15:00 – 15:45 Poster Session A
15:55 – 16:40 Poster Session B
16:50 – 17:35 Poster Session C
17:45 – 18:30 Online Poster Session

18:45 – 19:15 Best Poster Awards and Conference photo

August 27, Friday

Chairperson Aivaras Kareiva

9:00 – 9:45 Miho Yamauchi (Kyushu University, Japan)
Inorganic Nanocatalysts for Efficient Material Conversion (online)

9:45 – 10:15 Gunnar Suchaneck (Technische Universität Dresden, Germany)
Electro Caloric Cooling: Fundamentals and Electrocaloric Oxide Materials (online)

10:15 – 10:30 Break

10:30 – 11:00 Gunnar Suchaneck (Technische Universität Dresden, Germany)
Electro Caloric Cooling: EC Upper Limit, Material Efficiency and EC Devices (online)

11:00 – 11:45 Elīna Pajuste (University of Latvia, Latvia)
Currently Existing and Cutting Edge Technologies for Isotope Separation

11:45 – 12:30 Presentations of the Best Poster Awards Winners

12:30 – 12:45 Closing Remarks

12:45 – 13:15 Certificates and Coffee Break

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Vytauto Str. 40, LT-00160
Palanga, Lithuania

Poster Sessions
August 26, Thursday, 15:00 – 18:30

Poster Session A 15:00 – 15:45

METHODS OF SURFACE ANALYSIS

P1	Contact Angle Measurements as a Method of Surface Analysis Edyta Rekiel, Anna Zdziennicka
P2	Analysis of Interaction Kinetics between SARS-CoV-2 Nucleoprotein and Specific Antibody by Combined SE/QCM-D Method Vincentas Maciulis, Ieva Plikusiene, Silvija Juciute, Justina Liesyte, Almira Ramanaviciene, Arunas Ramanavicius
P3	Influence of Silk Wastes Indicators on Silk-raws Roughness Sharof Shukhratov, Rimvydas Milasius, Tulkin Ochilov
P4	Intercalation of Organic Anions to the Mg₃Al₂ Layered Double Hydroxide Using Ion Exchange Approach Ligita Valeikiene, Kamile Kriukaite, Inga Grigoraviciute-Puroniene, Anton Popov, Aivaras Kareiva

SURFACE ENGINEERING AND NANOSTRUCTURES

P13	Determination of ZnO Tetrapods Particle Size and Distribution in Solvents Andrius Vitkauskas, Ieva Stašaitytė, Agnė Šulčiūtė, Simas Račkauskas
P14	Heat-Energy Generation by X-rays Interaction with Si Crystals Arvydas Juozapas Janavičius, Saulius Balakauskas, Mindaugas Viliūnas, Saulius Daugėla
P15	Ultrafast Laser Surface Structuring for Wettability Control of Stainless Steel Andrius Žemaitis, Greta Merkininkaitė, Saulė Steponavičiūtė, Paulius Gečys, Alexandros Mimidis, Antonis Papadopoulos, Emmanuel Stratakis, Mindaugas Gedvilas
P16	In-situ XPS Analysis of Thermally Induced Changes in the Molecular Structure of Plasma Deposited CoOx-based Nanocatalysts Jacek Balcerzak, Ryszard Kapica, Hanna Kierzkowska-Pawlak, Jacek Tyczkowski
P17	Impact of Amino Acids on the Electrocatalytic Properties of MoS₂ Films Paulius Gaigalas, Arūnas Jagminas
P18	Heat Transfer in Ultrafast Laser Interference Ablation Simonas Indrišiūnas, Mindaugas Gedvilas
P19	Optical Elements Generating Bessel-like Beams Kernius Vilkevičius, Evaldas Stankevičius
P20	Gold Microbumps Gratings Exciting Hybrid Lattice Plasmon Polaritons Kernius Vilkevičius, Evaldas Stankevičius
P21	Synthesis of Colloidal Gold and Silver Solutions Using Laser Ablation Vita Petrikaitė, Martynas Skapas, Evaldas Stankevičius
P22	Porous Anodized Aluminium Oxide Thickness Dependence on Anodization Time Aušrinė Jurkevičiūtė, Raimonds Poplauskis, Aleksandrs Dutovs, Juris Prikulis
P23	Corrosion Behavior of Electrodeposited Ceria Oxide Coatings on Zinc Surface Aliona Kirdeikienė, Laima Gudavičiūtė, Algirdas Selskis, Jurgis Pilipavičius, Gediminas Niaura, Rimantas Ramanauskas
P24	Controlled Growth of Au Hierarchically Ordered Crystals Architectures for Electrochemical Detection of Traces of Molecules Karine Mougin, Pierre Bauer, Vincent Vignal, Arnaud Buch, Pierre Ponthiaux, Delphine Faye
P25	Distributed Feedback Waveguide Laser under Second-Order Bragg Conditions Iryna Yaremchuk, Halyna Petrovska, Pavlo Stakhira, Volodymyr Fitio
P26	Distributed Feedback Lasers Based on the Mixture of Cholesteric Liquid Crystals and Organic Semiconductors Halyna Petrovska, Pavlo Stakhira, Iryna Yaremchuk, Volodymyr Fitio
P27	Novel Synthesis of Graphene Oxide: Structural and Electrochemical Investigation Justina Gaidukevič, Rasa Pauliukaitė, Rūta Aukštakojsytė, Jurgis Barkauskas

P28	Robotized Mechanical Manipulation in Micro-scale <u>Jurga Subačiūtė-Žemaitienė</u> , Vytautas Bučinskas, Andrius Dzedzickis, Inga Morkvėnaitė-Vilkončienė
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ELECTRONIC AND OPTICAL MATERIALS

P60	On the Formation of Amorphous Phases at High Temperature Aivaras Kareiva, Andrius Pakalniskis, Aldona Beganskiene, Ramunas Skaudzius, Greta Inkrataitė, Zivile Stankeviciute, Inga Grigoraviciute-Puroniene, Aleksej Zarkov, Dovydas Karoblis, Andrius Laurikenas
P61	Ultraprecise Rydberg Atomic Localization Using Standing Waves and Optical Vortices <u>Teodora Kirova</u> , Ning Jia, Hamid Reza Hamed, Seyyed Hossein Asadpour, Jing Qian, Gediminas Juzeliūnas
P62	Investigation of Optical Properties of ZnO Nanotetrapods <u>Mindaugas Ilickas</u> , <u>Simas Račkauskas</u>
P63	Investigation of Sm Doped Bismuth Ferrite Across its Phase Boundary from Local and Microscopic Perspectives Andrius Pakalniškis, Ramūnas Skaudžius, Dmitry Karpinsky, Gediminas Niaura, Aivaras Kareiva
P64	Investigation of Diphenylsulfone Derivatives as Hosts for TADF based OLEDs <u>Karolis Leitonas</u> , Oleksandr Bezvikonnyi, Dalius Gudeika, Dmytro Volyniuk, Martins Rutkins, Juozas V. Gražulevičius
P65	Tri/Tetraphenylethenyl Substituted Tetrafluorophenylcarbazoles as Exciplex-forming Hosts for Organic Light Emitting Diodes <u>Jurate Simokaitiene</u> , Galyna Sych, Oleksandr Bezvikonnyi, Uliana Tsiko, Dalius Gudeika, Dmytro Volyniuk, Juozas Vidas Gražulevičius
P66	Characterization of Photoluminescence Garnet Coatings Derived by Sol-Gel Spin/Dip Coating Techniques <u>Greta Inkrataitė</u> , Ramūnas Skaudžius
P67	Off-axis Optical Vortices Using Double-Raman Singlet Light-Matter Scheme Hamid Reza Hamed, Julius Ruseckas, Emmanuel Paspalakis, Gediminas Juzeliūnas
P68	All-organic Exciplexes Exhibiting Host with Thermally Activated Delayed Fluorescence Matas Guzauskas, Dmytro Volyniuk, Kaspars Traskovskis, Armands Sebris, Irina Novosjolova, Aivars Vembris, Juozas V. Gražulevičius
P69	Effect of Different Additional Electron Accepting Moieties on Electroluminescent Properties of Trifluoromethyl-containing Multicarbazoles <u>Malek Mahmoudi</u> , Dalius Gudeika, Dmytro Volyniuk, Stepan Kutsiy, Jurate Simokaitiene, Juozas V. Gražulevičius
P70	Effect of Different Number of Di-tert-butylcarbazole Donor Moieties of Bipolar Hosts on Their Performance in OLEDs <u>Dmytro Volyniuk</u> , Simas Macionis, Dalius Gudeika, Oleksandr Bezvikonnyi, Viktorija Andruleviciene, Jiun Haw Lee, Bo-An Fan, Chia-Hsun Chen, Bo-Yen Lin, Tien-Lung Chiu, Juozas V. Gražulevičius
P71	Derivatives of Trifluoromethylphenyl and Various Donors as Emitters Exhibiting Thermally Activated Delayed Fluorescence and Room-Temperature Phosphorescence Rasa Keruckiene, Juozas Vidas Gražulevičius
P72	Synthesis of Controlled Size GdPO₄·H₂O Nanorods <u>Darius Budrevičius</u> , Ramūnas Skaudžius
P73	Evidence of a Strong Coupling Regime in a Photonic-Plasmonic Structure Supporting Hybrid Tamm-Surface Plasmon Polaritons <u>Ernesta Bužavaitė-Vertelienė</u> , Vilius Vertelis, Zigmantas Balevičius
P74	Application of Dianthracenylazatrioxa[8]circulene in OLEDs and QLEDs <u>Pavlo Stakhira</u> , Khrystyna Ivaniuk, Iryna Danyliv, Serhii Melnykov, Yan Danyliv, Michael Pittelkow
P75	High Triplet Energy Aryl Sulfones for Exciplex-based White Electroluminescent Devices Jonas Keruckas, Xiaofeng Tan, Dmytro Volyniuk, Khrystyna Ivaniuk, Juozas Vidas Gražulevičius
P76	Determination of Dominant Recombination Processes by Extraction of Injected Charge Carriers <u>Romualdas Jonas Čepas</u> , Lukas Kukulas, Gytis Juška, Kristijonas Genevičius

CERAMICS

P110	Low-temperature Synthesis and Characterization of Magnesium Whitlockite Powder <u>Anastasija Afonina</u> , Inga Grigoraviciute-Puroniene, Aivaras Kareiva
P111	Thermoluminescence Properties of Yttria Doped AlN Ceramics After Sunlight and X-ray Irradiation <u>Janis Cipa</u> , Laima Trinkler, <u>Dace Nilova</u> , <u>Pavels Rodionovs</u> , Baiba Berzina
P112	Preparation of CaMnO₃-based Compounds Applying Molten Salt Synthesis <u>Dovydas Karoblis</u> , Aleksej Zarkov, Aldona Beganskiene, Aivaras Kareiva

P113	Influence of Sample Pre-treatment on Radiation-Induced Processes in Advanced Ceramic Breeder Pebbles <u>Madara Tomele</u> , Anna Ansone, Artūrs Zariņš, Jānis Čipa, Larisa Baumanė, Gunta Ķizāne, Julia M. Leys, Regina Knitter
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POLYMERS AND COMPOSITES

P124	Structural Parameters of Fabric Affecting Performance of Electromagnetic Shielding Textile with Conductive Coating <u>Julija Petkevičiūtė</u> , Vitalija Rubežienė, Audronė Sankauskaitė, Julija Baltušnikaitė-Guzaitienė, Paulius Ragulis, Aušra Abraitienė
P125	Evaluation of Wettability and Water Absorption Properties of Natural Fiber Reinforced Polyester Hybrid Composites for Microfluidic Applications <u>Ayyappa Atmakuri</u> , Arvydas Palevicius, Giedrius Janusas
P126	Surface Modification and Physico-mechanical Properties of Newly Developed Banana Fiber Nonwoven Material K.Z.M. Abdul Motaleb, Rimvydas Milašius
P127	Curing of BPA-based Epoxy Resins Using Various Amines: Study by DSC <u>Jūratė Jonikaitė-Švėgždienė</u> , Virginija Juknevičiūtė, Ričardas Makuška
P128	Synthesis of Brush Copolymers Carrying Phosphorylcholine Moieties <u>Marius Jurkūnas</u> , Vaidas Klimkevičius, Ričardas Makuška
P129	Incorporation of Modified organic PCM microcapsules with conductive additives into textiles <u>Virginija Skurkytė-Papievienė</u> , Aušra Abraitienė, Audronė Sankauskaitė
P130	Electrochemical Deposition of Polypyrrole Layers Modified by Phenothiazine Derivatives <u>Raimonda Boguzaite</u> , Vilma Ratautaite, Lina Mikoliunaite, Almira Ramanaviciene, Arunas Ramanavicius
P131	Permeation System Optimization for Analysis of Polymers and Other Membranes <u>Patricija Kalnina</u> , Elina Pajuste, Līga Avotina, Gunta Kizane
P132	Analysis and Evaluation of Mechanical Properties of 3D Printed Heels <u>Edita Gelažienė</u> , Daiva Milašienė

ADVANCED ENGINEERING MATERIALS

P151	Influence of Silver Additives Containing Fibers Incorporated in Knitted Fabrics on their Thermoregulation Properties <u>Laimutė Stygienė</u> , Sigitas Krauledas, Aušra Abraitienė, Sandra Varnaitė-Žuravlioja, Virginija Skurkytė-Papievienė
P152	Spruce Cones as Precursors for Obtaining Effective Carbon Adsorbents <u>Magdalena Zięzio</u> , Barbara Charmas, Karolina Kucio, Monika Raczekiewicz
P153	Doping of Activated Carbon with Magnetic Nanoparticles <u>Magdalena Zięzio</u> , Barbara Charmas, Karolina Kucio
P154	Preparation and Characterization of Physicochemical Properties of TiO₂/Bi Composites Karolina Kucio, Barbara Charmas, Magdalena Zięzio
P155	Photocatalytic Properties of Composite Materials Prepared by Mechanochemical Synthesis Karolina Kucio, Barbara Charmas, Magdalena Zięzio
P157	Black Silicon-based SERS-active Substrates for the Doxorubicin Concentration Determination <u>Lena Golubewa</u> , Aliona Klimovich, Marina Fetisova, Ieva Matulaitienė, Tatsiana Kulahava, Renata Karpicz, Petri Karvinen, Polina Kuzhir
P158	Stable and Uniform Black Silicon-based SERS-active Substrates for the Detection of Analytes with a High Potential for Reusability <u>Aliona Klimovich</u> , Lena Golubewa, Marina Fetisova, Ieva Matulaitienė, Renata Karpicz, Petri Karvinen, Polina Kuzhir
P159	Study of Tensile Properties of Antistatic Knitted Fabrics <u>Norina Asfand</u> , Virginija Daukantiėnė
P160	How the Presence of Chitosan Influences the Properties of Polyethylene Terephthalate in Terms of its Biocompatibility <u>Klaudia Szafran</u> , Małgorzata Jurak, Agnieszka Ewa Wiącek, Kacper Przykaza, Agata Ładniak
P161	Hybrid Tamm-surface Plasmon Polaritons Mode Based on Planar Plasmonic Photonic Nanostructures for Highly Sensitive Real Time Biosensing of GsCF and BSA Proteins <u>Justina Anulytė</u> , Ernesta Bužavaitė-Vertelienė, Ieva Plikusienė, Zigmās Balevičius
P162	Formation of Oriented Hydroxyapatite Structures Through the Hydrolysis of Ion-doped Alpha-tricalcium Phosphate <u>Eva Raudonytė-Svirbutavičienė</u> , Aleksej Žarkov, Aivaras Kareiva

MATERIALS FOR ENERGY APPLICATIONS

P182	Sb₂Se₃ Growth Mechanism on Mica Muscovite Substrates <u>Martynas Bertašius</u> , Rokas Kondrotas
P183	Biocathode for Glucose Biofuel Cell Based on H₂O₂ Reduction: Synthesis, Optimization and Electrical Properties <u>Algimantas Kaminskas</u> , Asta Kausaite-Minkstiniene
P184	Changes in Tritium Concentration after Sorption Depending on Storage Conditions <u>Elza Lagzdina</u> , Elina Pajuste, Liga Avotina, Gunta Kizane
P185	Oxidation of Neutron-Irradiated & Non-Irradiated Beryllium in Air at Elevated Temperatures with Varying Relative Humidity Rudolfs Janis Zabolockis, Elina Pajuste, Liga Avotina, Mihails Halitovs, Gunta Kizane
P186	Investigating Effects of 3-dimensional Graphite Anodes on the Electrochemical Property of Lithium-ion Batteries <u>Seokho Suh</u> , Daeun Jang, Hocheol Yoon, Jihun Kim, Hyunsu Kim, Juyeon Baek, Hyeong-Jin Kim
P187	Synthesis and Investigation of Na₄Fe₃(PO₄)₂(P₂O₇) for Aqueous Na-ion Batteries <u>Gintarė Plečkaitytė</u> , Jurgis Pilipavičius, Milda Petrulevičienė, Nadežda Traškina, Jurga Juodkazytė, Linas Vilčiauskas
P188	The Effect of Diphenyl Diselenide as a Bi-functional Additive for High Voltage LiNi_{0.8}Mn_{0.1}Co_{0.1}O₂/graphite Battery <u>Hyeonghun Park</u> , Geumyong Park, WooJun Seol, Seokho Suh, Jihun Kim, Ji Young Jo, Hyeong-Jin Kim
P189	Charge Carrier Transport at Close-to-Real Operation Conditions of Organic Solar Cells Rokas Jasiūnas, Vidmantas Jašinskas, Huotian Zhang, Tanvi Upreti, Feng Gao, Martijn Kemerink, Vidmantas Gulbinas
P190	Using of Polypyrrole-modified Graphite Electrode as Biofuel Cell Anode <u>Kasparas Kižys</u> , <u>Joris Juška</u> , Inga Morkvėnaitė-Vilkončienė
P191	Enhanced Stability and Photovoltage for Multi-cation Perovskite Solar Cells via Hindering Photo-inactive Perovskite Phase Formation <u>Sijo Chacko</u> , Marius Franckevicius, Jolanta Doneliene, Matas Rudzikas, Egle Fataraitė-Urboniene, Francisco Fabregat-Santiago, Juras Ulbikas
P192	Development of Enzymatic Biofuel Cells <u>Šarūnas Žukauskas</u> , Deimantė Stankūnaitė, Arūnas Ramanavičius

Poster Session B 15:55 – 16:40

METHODS OF SURFACE ANALYSIS

P5	Towards Electrochemical Affinity Sensors for the COVID 19 Diagnosis <u>Maryia Drobys</u> , Viktorija Liustrovaite, Alma Rucinskiene, Martynas Simanavicius, Aurelija Zvirbliene, Rimantas Slibinskas, Ieva Plikusiene, Evaldas Ciplys, Roman Viter, Chien-Fu Chen, Arunas Ramanavicius
P6	Evaluation of Chlorophyll-a Immobilization within Tethered Bilayer Lipid Membrane <u>Viktorija Liustrovaitė</u> , Aušra Valiūnienė, Gintaras Valinčius, Arūnas Ramanavičius
P7	Preparation of Bare Metallic Nanostructures and Activity Mapping with Scanning Electrochemical Microscopy Magdalena Michalak, Justyna Jedraszko, Joanna Celej, Steven Linfield, Bhavana Gupta, <u>Wojciech Nogala</u>
P8	Thermal Annealing Effect on the Structure of LiF Single Crystals Irradiated with Swift ³⁶S Ions <u>Jelena Sušinska</u> , Ilze Manika, Jānis Maniks, Līga Bikše

SURFACE ENGINEERING AND NANOSTRUCTURES

P29	Thermal Reduction of Graphene Oxide Using Carbon Suboxide <u>Rūta Aukštakojytė</u> , Justina Gaidukevič, Jurgis Barkauskas
P30	Wet Chemical Etching of Bi₂Se₃ Nanoribbons <u>Didzis Salnājs</u> , Raitis Sondors, Edijs Kauranens, Donats Erts, Gunta Kunakova
P31	Composition and Fluorescence Properties of Electrochemically Synthesized Nanoporous Anodic Alumina/Carbon Composites <u>Katsiaryna Chernyakova</u> , Renata Karpicz, Arunas Jagminas
P32	Manipulation and Characterization of Individual Nanostructures <u>Sergei Vlassov</u> , Boris Polyakov, Sven Oras, Edgars Butanovs, Rünno Lõhmus, Vahur Zadin, Andreas Kyritsakis
P33	Simulation of TiO₂ and TiO₂/Au Nanoparticles Interaction with Gram-negative Bacteria Envelope Membrane Using Molecular Dynamics and Monte-Carlo Methods <u>Sridhar Hariharaputran</u> , Arul Murugan Natarajan, Zilvinas Rinkevicius, Patrick Norman

P34	Modelling and Optimization of Aloe vera/PVA/ZnO Nanomembranes and Their Applications in Nonwoven Masks Muhammad Usman Munir, Daiva Mikučionienė
P35	Microwave-Assisted Solvothermal Synthesis and Characterization of NaYF₄ Nanoparticles Kasparas Šukaitis, Lukas Šerpytis, Simas Šakirzanovas
P36	Nickel Thin Films as a Catalyst in Graphene Growth by Plasma-enhanced CVD Marjan Monshi, Andrius Vasiliauskas, Erika Rajackaitė, Sigita Tamulevičius
P37	Plasma Deposited Alumina-based Washcoat for Catalytic Structured Packings Aleksandra Kędzierska-Sar, Kozłowski Konrad, Maciej Fronczak, Magdalena Leśniak, Hanna Kierzkowska-Pawlak, Jacek Tyczkowski
P38	Analysis of the Oxygen Plasma Treatment Influence on the Properties of Diamond-Like Carbon Nanocomposite Films with Copper Julija Jokšaitė, Asta Tamulevičienė, Erika Rajackaitė, Šarūnas Meškinis, Tomas Tamulevičius, Sigita Tamulevičius
P39	Microwave Synthesis of Magnetic Fe₃O₄ Nanoparticles Greta Zambzickaite, Lina Mikoliunaite
P40	Catalyst-Less and Transfer-Less Synthesis of Graphene on Si(100) Using Direct Microwave Plasma Enhanced Chemical Vapor Deposition and Protective Enclosures Šarūnas Jankauskas, Rimantas Gudaitis, Algirdas Lazauskas, Šarūnas Meškinis
P41	Artificial Phospholipid Membrane Formation on Tin Oxide Surfaces Inga Gabriunaite, Margarita Poderyte, Aušra Valiūnienė
P42	Obtaining of Platinum-cobalt-ceria Supported on Graphene Oxide and Application as Electrocatalysts Adriana Marinoiu
P43	Coprecipitation Synthesis of Adjustable Size Magnetic Fe₃O₄ Nanoparticles Gytautė Sirgėdaitė, Lina Mikoliūnaitė
P44	Fabrication of Double Period Diffracting Gratings Employing Moiré Patterns in Holographic Lithography Gvidas Klyvis, Virgilijus Minialga, Tomas Tamulevičius

ELECTRONIC AND OPTICAL MATERIALS

P77	Synthesis and Investigation of the Properties of Electroactive Heteroaromatic Compounds Ronit Sebastine Bernard, Viktorija Andruleviciene, Oleksandr Bezikonnyi, Dmytro Volyniuk, Juozas Vidas Grazulevicius
P78	Red-fluorescing BODIPY-based Polarity Sensor Karolina Maleckaitė, Jelena Dodonova, Rugilė Žilėnaitė, Sigita Tumkevičius, Aurimas Vyšniauskas
P79	Investigation of Tantalum (V) or Vanadium (V) Doped YAG Phosphors Monika Skruodiene, Anatolijs Sarakovskis
P80	Synthesis and Properties of Star-Shaped 1,8-naphthalimide Based Derivatives Naveen Masimukku, Dalius Gudeika, Asta Dabulienė, Malek Mahmoudi Sharabiani, Dmytro Volyniuk, Juozas V. Grazulevicius
P81	Structural and Electrical Investigation of the “Buffer-Free” AlGaIn/GaN Heterostructures on SiC Substrate Justinas Jorudas, Pawel Prystawko, Maksym Dub, Algirdas Selskis, Martynas Skapas, Pavlo Sai, Maciej Sakowicz, Sergey Rummyantsev, Wojciech Knap, Irmantas Kašalynas
P82	Synthesis and Studies of Properties of Organic Semiconductors Containing Donor and Acceptor Moieties Levani Skhirtladze, Juozas Vidas Grazulevicius, Karolis Leitonas, Azhar Bin Ariffin, Woon Kai Lin, Omar Mukbaniani
P83	Characterisation of Colored Glass Plates with Bragg Lattice Structure Formed from Sol-gel Solutions Matas Rudzikas, Jolanta Donėlienė, Juras Ulbikas, Arūnas Šetkus
P84	Novel Phosphate Glass Matrices as a Potential Host for Luminescent Rare Earth Ions Mantas Norkus, Ramūnas Skaudžius
P85	FTIR Analysis of Oxidized Tungsten and Tungsten Diboride Nanolayers Annija Elizabete Goldmane, Liga Avotina, Marina Romanova, Alexei Muhin, Aleksandrs Zaslavskis, Gunta Kizane, Yuri Dekhtyar
P86	Synthesis and Analysis of YAG Doped with Pentavalent Ions Ruta Juodvalkyte, Monika Skruodiene, Ramunas Skaudzius
P87	Luminescence Properties of Doped and Undoped ZnO Single Crystals, Ceramics and Powders Agnese Spustaka, Donāts Millers, Ivita Bite, Krišjānis Šmits, Jurgis Grūbe, Anatolijs Šarakovskis, Piotr Rodnyi, Elena Gorokhova
P88	Spectroscopic Investigation of BODIPY-based Fluorophores for Sensing Viscosity Rugilė Žilėnaitė, Karolina Maleckaitė, Jelena Dodonova, Sigita Tumkevičius, Aurimas Vyšniauskas

P89	Synthesis of Novel $Y_{1-x}Ln_x(BTC)(DMF)_2(H_2O)$ and $Y_{0.8-x}Yb_{0.2}Ln_x(BTC)(DMF)_2(H_2O)$ Metal Organic Frameworks and Determination of Their Upconversion Properties <u>Andrius Laurikėnas, Aivaras Kareiva</u>
P90	Measurement of Magnetic Field at Cryogenic Temperatures Using Thin Polycrystalline Manganite-cobaltite Films <u>Jorūnas Dobilas, Vakaris Rudokas, Voitech Stankevič, Nerija Žurauskienė</u>
P91	Synthesis and Studies of Iminostilbene Containing D-A-D Type Emitters <u>Sanjay Madhuran Punniyakoti, Asta Dabulienė, Juozas Vidas Gražulevičius</u>
P92	Mobile Charged Defects Determines Multiphase Performance Dynamics of Perovskite LEDs <u>Rokas Gegevičius, Lukas Jonušis, Weiming Qiu, Vidmantas Gulbinas</u>

CERAMICS

P114	Synthesis of Neodymium Iron Orthoferrites, Fabrication into Coatings and Nanotubes <u>Justinas Januškevičius, Ieva Čėsnaitytė, Živilė Stankevičiūtė, Aldona Beganskienė, Aivaras Kareiva</u>
P115	Influence of Fe^{3+} Doping on Thermally Induced Crystallization and Phase Evolution of Amorphous Calcium Phosphate <u>Diana Griesiute, Lauryna Sinusaite, Agne Kizalaite, Aleksej Zarkov</u>
P116	The Influence of Thermal Synthesis Parameters on Mayenite Structure <u>Kristina Ruginytė, Anatolijus Eisinis</u>
P117	Comparative Study of Zinc Whitlockite Synthesized by Different Methods <u>Agne Kizalaite, Aleksej Zarkov</u>
P118	Photoluminescence of Lithium Orthosilicate Pellets Prepared via Solid-state Synthesis <u>Mareks Senko, Artūrs Zariņš, Līga Avotiņa, Aija Trimdale, Juris Prikulis, Gunta Kizāne</u>

POLYMERS AND COMPOSITES

P133	Poly(amidoamines) Containing Disulfide Bonds as Efficient Reagent for DNA Transfection <u>Alma Bočkusienė, Laura Matikaitė, Eigilė Eidėnaitė, Lolita Žaliauskienė</u>
P134	Improvement of Anti-abrasion Properties of Anti-corrosive Epoxy Coating for Industrial Applications <u>Liepa Pastarnokienė, Tatjana Kochanė, Ričardas Makuška</u>
P135	Spectrometric and Thermal Analysis of Radiation Modified Natural Keratinous Fibers <u>Līga Avotina, Arturs Zarins, Vladislavs Perkanuks, Larisa Baumane, Rudolfs Janis Zabolockis, Aleksandrs Petjukevics, Gunta Kizane</u>
P136	Development of PEDOT:PSS-based Screen Printing Inks for Stretchable Electrochromic Thin Films <u>Juzef Kučinski, Mindaugas Gicevičius, Lina Mikoliūnaitė</u>
P137	Effect of Thermoplastic Meltdown on the Joint Produced by Laser Quasi-simultaneous Transmission Welding <u>Simonas Mindaugas Jankus, Regita Bendikienė</u>
P138	Investigation of N,N'-Methylenebisacrylamide Influence on Sensitivity of Polymer Gel Dosimeters with Reduced Toxicity <u>Mantvydas Merkis, Ignas Pikas, Diana Adlienė</u>
P139	Processing of Polymer Materials with High Energy Stream of Powder Particles <u>Yulia Usherenko, Viktors Mironovs</u>
P140	Attenuation Properties of Thin Layers Silicone Composites Containing Metal Basis and Comparison with Lead and Lead-free Protection Materials Used in Clinical Practice <u>Laurynas Gilys, Egidijus Griškonis, Diana Adlienė</u>
P141	Effect of Gold Surface Roughness on Growth of Lactic Acid Bacteria <u>Joanna Grudzień, Magdalena Jarosz, Kamil Kamiński, Marcin Koziel, Karol Wolski, Grzegorz D. Sulka</u>

ADVANCED ENGINEERING MATERIALS

P162	Study of Puncture-resistant 3D Knitted Fabrics <u>Julija Krauledaitė, Kristina Ancutienė, Sigitas Krauledas, Virginijus Urbelis</u>
P163	Study of Organic Semiconductors Containing Phenyl(pyridin-4)methanone Group and the Different Acceptor Moieties <u>Giorgi Parulava, Dalius Gudeika, Dmytro Volyniuk, Pavlo Stakhira, Juozas Vidas Gražulevičius</u>
P164	Remote Epitaxy of GaN via Few-layer Graphene <u>Kazimieras Badokas, Arūnas Kadys, Dominykas Augulis, Ilja Ignatjev, Giedrius Juška, Jūras Mickevičius, Tadas Malinauskas</u>
P165	Development of Multi-layered Weft-knitted Fabrics for Thermal Insulation <u>Vaida Buzaitė, Daiva Mikučionienė</u>
P166	Influence of Synthesis and Subcritical Drying Conditions on the Porosity of TiO_2 Aerogel <u>Jolanta Donėlienė, Juras Ulbikas, Eglė Fataraitė-Urbonienė</u>

P167	3D Printing Concrete Modification with Waste Karolina Butkutė, Vitoldas Vaitkevičius
P168	Electrodeposition of Fe₂O₃ on Anodic TiO₂ Monika Sołtys-Mróz, Karolina Syrek, Grzegorz D. Sulka
P169	Mechanical Characteristics of Thigh Prosthesis Materials Tomas Kuncius, Aurelijus Domeika, Donatas Daublys, Linas Puodžiukynas, Saulius Diliūnas
P170	Silica Sol Characterization and Particle Size Dependence to Environmental Factors Lukas Šerpytis, Matas Damonskis, Lukas Taujenis, Simas Šakirzanovas
P171	Theoretical Modelling of Weft-Knitted Structures Edgaras Arbataitis, Daiva Mikučionienė

MATERIALS FOR ENERGY APPLICATIONS

P193	Microbial Biofuel Cell Based on Saccharomyces Cerevisiae Modified with Polypyrrole Antanas Zinovicius, Timas Merkelis, Inga Morkvenaite-Vilkonciene, Arunas Ramanavicius
P194	Photoelectrochemical Performance of Anodically Formed Nanostructured SnO_x/FTO Systems Magdalena Gurgul, Patryk Kocwa, Leszek Zaraska
P195	Stabilisation of Na₃V₂(PO₄)₃ as Cathode Material for Aqueous Sodium-ion Batteries Milda Petrulėvičienė, Jurgis Pilipavičius, Jurga Juodkazytė, Linas Vilčiauskas
P196	Development of Methodology for Preparation and Transportation of Lithium Orthosilicate Based Ceramic Pellets for High Energy Heavy Ion Irradiation Experiments Anna Ansonē, Artūrs Zariņš, Andris Antuzevičs, Līga Avotiņa, Kristaps Saršūns, Gatis Sliters, Gunta Kizāne, Larisa Baumanē
P197	Precisely Controlled Carbon Coating of NaTi₂(PO₄)₃ for Enhanced Electrochemical Performance Nadežda Traškina, Gintarė Plečkaitytė, Jurgis Pilipavičius, Jurga Juodkazytė, Linas Vilčiauskas
P198	Aqueous Electrochemical Properties and Stability of Isovalently and Aliovalently Substituted Na_{1±y}Ti_{2-x}M_x(PO₄)₃ (M = Zr(IV), Hf(IV), Al(III), Mg(II)) Skirmantė Tutlienė, Jurgis Pilipavičius, Jurga Juodkazytė, Linas Vilčiauskas
P199	Influence of Hydrothermal Annealing on Photocurrent Response of ZnO Nanowires Obtained by Anodic Oxidation of Metallic Zinc in Bicarbonate Electrolytes Krystyna Mika, Karolina Podsiadło, Leszek Zaraska, Grzegorz D. Sulka
P200	Rotating Ring-disc Electrode Study of Cathode Materials for Aqueous Na-ion Battery Davit Tediashvili, Linas Vilčiauskas
P201	Investigation of Competition Between Photo-Oxidation of Water and Anions on WO₃ Photoanode in Chloride and Sulfate Electrolytes Maliha Parvin, Milda Petrulėvičienė, Irena Savickaja, Benjaminas Šebeka, Arnas Naujokaitis, Vidas Pakštas, Renata Karpicz, Jurga Juodkazytė
P202	Fe₂O₃-WO₃ Heterojunction Operating Under Visible Light Spectrum Marta Zych, Karolina Syrek, Grzegorz D. Sulka
P203	Synthesis of CdS on FTO/ZnO by Chemical Bath Deposition Method Eglė Usovienė, Edita Paluckienė, Neringa Petrašauskienė
P204	Investigation of SILAR Deposition of Cadmium Selenide Thin Films on FTO/ZnO Substrate from Aqueous Solutions Gediminas Jakubauskas, Neringa Petrašauskienė, Edita Paluckienė

Poster Session C 16:50 – 17:35

METHODS OF SURFACE ANALYSIS

P9	Facile Preparation of Iodine-doped Graphene and its Application as Low Cost Catalyst for Hydrogen Fuel Cells Adriana Marinoiu, Mircea Raceanu
P10	Probing Light-induced Surface Charge Kinetics Using Kelvin Probe Force Microscopy in a Non-imaging Mode Yuri Dekhtyar, Hiran Chanaka Gunawardana Maladenige, Hermanis Sorokins
P11	Preliminary Study of Electrophysical Properties of Blood in Dependence on Rh-factor Maria Kovaleva, Aliaksandr Burko, Nadzeya Khinevich, Vladimir Petrovich, Olga Polulyakh, Hanna Bandarenka
P12	Various Factors of Weave Estimation and their Correlation with Some Properties Most. Setara Begum, Rimvydas Milašius

SURFACE ENGINEERING AND NANOSTRUCTURES

P45	Impact of Graphene Transferred onto Au Nanoparticles Deposited on Porous Alumina Template <u>Aleksandrs Dutovs</u> , Raimonds Poplauskis, Andrei Felsharuk, Donats Erts, Juris Prikulis
P46	Synthesis and Structural Characterization of Magnetically-doped Bi₂Se₃ Nanostructures <u>Andrei Felsharuk</u> , Kiryl Niherysh, Jana Andzane, Krisjanis Smits, Donats Erts
P47	Effect of Au Catalyst Morphology on the Growth of Bi₂Se₃ Nanoribbons <u>Raitis Sondors</u> , Gunta Kunakova, Elza Dzene, Liga Jasulaneca, Jana Andzane, Edijs Kauranens, Donats Erts
P48	Hall Effect Measurements in TI Nanoribbons <u>Kiryl Niherysh</u> , Xavier Palermo, Gunta Kunakova, Jana Andzane, Thilo Bauch, Donats Erts, Floriana Lombardi
P49	Preparation of Bi₂Se₃/CNT High Porosity Material <u>Vanda Voikiva</u> , Raimonds Meija, Donats Erts
P50	Glass Processing with Different Laser Techniques Juožas Dudutis, Miglė Mackevičiūtė, Laimis Zubauskas, Edgaras Markauskas, <u>Paulius Gečys</u>
P51	Photoluminescence of Variable-Length Zinc Oxide Nanorods Embedded in Porous Anodic Aluminum Oxide Matrix Uldis Malinovskis, Aleksandrs Dutovs, Raimonds Poplauskis, Mikhael Bechelany, Donats Erts, <u>Juris Prikulis</u>
P52	Switching with Bi₂Se₃ Nanoribbons at Cryogenic Temperatures <u>Liga Jasulaneca</u> , Edijs Kauranens, Raitis Sondors, Elza Dzene, Jana Andzane, Donats Erts
P53	Fabrication of Templates for Nanoparticle Deposition Based on Mesoporous Silicon with Open Pores <u>Nadzeya Khinevich</u> , Mindaugas Juodėnas, Asta Tamulevičienė, Hanna Bandarenka, Sigita Tamulevičius
P54	Integration of Nanostructured Sensor for the Electrochemical Detection of Biomarkers: Towards Search for Life in Space <u>Marc Keller</u> , Karine Mougín, Jérôme Launay, Delphine Faye, Vincent Vivier, Arnaud Buch, Pierre Bauer, Pierre Ponthiaux
P55	Ultrafast Plasmon Relaxation Dynamics of Various Shapes Gold Nanoparticles <u>Domantas Peckus</u> , Karine Mougín, Arnaud Spangenberg, Quentin Bauerlin, Marc Keller, Tomas Tamulevičius, Sigita Tamulevičius
P56	Copper Interconnections with High Adhesion to Silicon for MEMS Technology <u>Aliaksandr Burko</u> , Alexey Dolgiy, Nadzeya Khinevich, Hanna Bandarenka
P57	Ultrafast Modulation of the Surface Lattice Resonance via Optomechanical Modes <u>Mindaugas Juodėnas</u> , Domantas Peckus, Tomas Tamulevičius, Joel Henzie, Sigita Tamulevičius
P58	Optical Properties of Coatings Based on Plasmonic and Up-conversion Nanoparticles for Solar Cells <u>Aliaksandr Burko</u> , Daniil Markevich, <u>Nadzeya Khinevich</u> , Hanna Bandarenka
P59	Sensing of Vascular Endothelial Growth Factor Using Zinc Oxide - Porous Anodic Aluminum Oxide Hybrid Film Uldis Malinovskis, Aleksandrs Dutovs, Raimonds Poplauskis, Juris Prikulis, Mikhael Bechelany, <u>Donats Erts</u>

ELECTRONIC AND OPTICAL MATERIALS

P93	Modification of Polyamide 6 Films Surface by the Layers of Cadmium Sulfide – Cadmium Telluride <u>Miglė Liudžiūtė</u> , Skirma Žalėnienė
P94	Manganite Film Application for Microsecond Duration High Magnetic Field Measurement <u>Modestas Čeikauskas</u> , Justas Dilys, Milita Vagner, Voitech Stankevič, Valentina Plaušnaitienė, Nerija Žurauskienė
P95	Formation of Cobalt Sulfide Films on Polyamide Surface by Sorption-diffusion Method <u>Klaudija Vaičiukynaitė</u> , Skirma Žalėnienė
P96	Luminescence of AlN:Eu <u>Rihards Ruska</u> , Baiba Bērziņa, Laima Trinklere
P97	Carbazole-Based Hole-Selective Monolayers for Solar Cells <u>Artiom Magomedov</u> , Ernestas Kasparavičius, Amran Al-Ashouri, Eike Köhnen, Yuanbao Lin, Yuliyar Firdaus, Bor Li, Thomas Anthopoulos, Tadas Malinauskas, Steve Albrecht, Vytautas Getautis
P98	Novel Sintering Additive for Densification of Transparent YAG Ceramics <u>Vojtěch Nečina</u> , Jan Hostaša, Willi Pabst
P99	THz Excitation Spectroscopy of the Layered Semiconductor Crystals <u>Ričardas Norkus</u> , Ignas Nevinskas, Arūnas Krotkus
P100	Neural Network Enabled Prediction of Power Reflection of Polarized Light from Material Surface Tomas Klinavičius, Tomas Tamulevičius
P101	Sol-gel Synthesis of Transparent Nanoporous Monolithic Silicon Dioxide Glass <u>Madara Leimane</u> , Ivita Bite, Linards Skuja, Krišjānis Šmits, Virgīnija Vītola
P102	Growth and Investigation of Bi-containing A3-B5 Compounds <u>Arnas Pukinskas</u> , Nerijus Jurkūnas, Algirdas Jasinskas, Simona Pūkienė, Andrius Bičiūnas, Bronislovas Čechavičius, Virginijus Bukauskas, Renata Butkutė

P103	Synthesis of Manganese-doped Zinc Sulfide Nanomaterials <u>Milena Dile</u> , <u>Katrīna Laganovska</u> , <u>Ivita Bite</u> , <u>Līga Bikše</u>
P104	Study of Defects in Hafnia via Luminescent Properties <u>Katrīna Laganovska</u> , <u>Ivita Bite</u> , <u>Krišjānis Šmits</u>
P105	Dependence of Electrical Properties of Bismuth Selenide Nanoribbons on External Electrical Field and Bending at 5 K <u>Edijs Kauranens</u> , <u>Līga Jasulaneca</u> , <u>Raitis Sondors</u> , <u>Elza Dzene</u> , <u>Jana Andzane</u> , <u>Donats Erts</u>
P106	Investigation of Radiation Induced Defect Stability in GAGG:Ce for Particle Collider Detector Applications <u>Toms E. Šusts</u> , <u>Elīna Pajuste</u> , <u>Artūrs Zariņš</u> , <u>Jānis Čipa</u> , <u>Vladimir Pankratov</u> , <u>Anatoli I. Popov</u>
P107	The Influence of Different Chemical Synthesis Methods on Physical Properties of HfO₂ Nanoparticles <u>Ivita Bite</u> , <u>Katrīna Laganovska</u> , <u>Krisjans Smits</u> , <u>Virginija Vitola</u>
P108	Chromium-doped Alumina as a Potential Dosimetric Material <u>Ernests Einbergs</u> , <u>Aleksejs Zolotarjovs</u> , <u>Krisjanis Smits</u> , <u>Ivita Bite</u> , <u>Laima Trinkler</u>
P109	Theoretical and Experimental Investigation of Mobilities of Tetraoxa[8]circulene <u>Stepan Kutsiy</u> , <u>Iryna Danyliv</u> , <u>Pavlo Stakhira</u> , <u>Nataliya Karaush-Karmazin</u> , <u>Glib Baryshnikov</u> , <u>Boris Minaev</u>

CERAMICS

P119	Impact of the Initial pH Value on the Calcium Phosphate Ceramics Derived from Eggshells <u>Marta Kalbarczyk</u> , <u>Aleksandra Szcześ</u>
P120	Thermal and Elastic Properties of Open Kelvin-cell Metamaterials – Computer Modeling of Systematic Processing Defects in Ceramic Foams <u>Soňa Hříbalová</u> , <u>Tereza Uhlířová</u> , <u>Willi Pabst</u>
P121	A New Method for the Formation of Bioceramic Nano-calcium Hydroxyapatite Coatings <u>Rasa Karalkeviciene</u> , <u>Aleksej Zarkov</u> , <u>Greta Briedyte</u> , <u>Tomas Murauskas</u> , <u>Mantas Norkus</u> , <u>Aivaras Kareiva</u>
P122	Role of Mechanical Activation on Sintering of NBT Ceramics <u>Arturs Atvars</u> , <u>Marija Duncce</u>
P123	Hydrothermal and Microwave Assisted Hydrothermal Synthesis of Sodium Bismuth Titanate <u>Otto Freimanis</u> , <u>Sanija Dutkeviča</u> , <u>Marija Duncce</u>

POLYMERS AND COMPOSITES

P142	Viscosity Variation During Addition of Ester and Ether Macrodiols to Isocyanates <u>Paulina Nemaniūtė</u> , <u>Marijus Jurkūnas</u> , <u>Dalia Bražinskienė</u> , <u>Svajus J. Asadauskas</u>
P143	Simulation of Single Lap Adhesive Joints Behaviour by Finite Element Method <u>Stasė Petraitienė</u> , <u>Eglė Fataraitė-Urbonienė</u> , <u>Juras Ulbikas</u> , <u>Jolanta Donelienė</u>
P144	Tendencies of Solid Phase Formation in Deep Eutectic Solvents of Betaine and Xylitol <u>Audrė Kalinauskaitė</u> , <u>Dalia Bražinskienė</u> , <u>Svajus Asadauskas</u>
P145	Cost Optimization of Polycarbonate Matrix for Antibacterial Composites <u>Tomasz Flak</u> , <u>Adrian Barylski</u> , <u>Jadwiga Gabor</u> , <u>Andrzej Swinarew</u>
P146	Toward the Development of Sensors and Actuators by 4D Printing <u>Quentin Bauerlin</u> , <u>Xingyu Wu</u> , <u>Benjamin Leuschel</u> , <u>Feriel Ghellal</u> , <u>Damien Favier</u> , <u>Christian Gauthier</u> , <u>Thierry Roland</u> , <u>Karine Mougín</u> , <u>Arnaud Spangenberg</u>
P147	4D Micro-printing: Photocomposites for the Realization of Micro-actuators <u>Sébastien Dominici</u> , <u>Xingyu Wu</u> , <u>Laurent Ranno</u> , <u>Nora Dempsey</u> , <u>Quentin Bauerlin</u> , <u>Karine Mougín</u> , <u>Arnaud Spangenberg</u>
P148	The Influence of Orange Essential Oil on the Structure of Electrospun Polyvinylpyrrolidone Mat <u>Mohaiminul Quayum</u> , <u>Erika Adomavičiūtė</u>
P149	Synthesis and Characterization of Encapsulated Bi₂Se₃/CNT and Sb₂Te₃/CNT Hybrid Structures <u>Krisjanis Buks</u> , <u>Jana Andzane</u> , <u>Vanda Voikiva</u> , <u>Michael Katkov</u> , <u>Donats Erts</u>
P150	Synthesis and Flexibility Tests of CNT-Metal Chalcogenide Thermoelectrical Thin Films <u>Lasma Bugovecka</u> , <u>Krisjanis Buks</u> , <u>Paulius Dolmantas</u> , <u>Kiryl A. Niherysh</u> , <u>Jana Andzane</u> , <u>Donats Erts</u>

ADVANCED ENGINEERING MATERIALS

P172	Sol-Gel Fabrication and Characterization of Different Garnet Structure Compounds <u>Jolanta Raudonienė</u> , <u>Vytautas Balevicius</u> , <u>Arunas Marsalka</u> , <u>Rimantas Raudonis</u> , <u>Aleksej Zarkov</u> , <u>Aivaras Kareiva</u>
P173	Modified Williamson-Hall Method in USDM Model for Estimating More Accurate Values of Young's modulus of Hydroxyapatite <u>Marzieh Rabiei</u> , <u>Sohrab Nasiri</u> , <u>Arvydas Palevicius</u> , <u>Giedrius Janusas</u>
P174	Waste Fluid Catalytic Cracking in the Systems of Binding Materials <u>Danutė Vaičiukynienė</u> , <u>Vilimantas Vaičiukynas</u> , <u>Aras Kantautas</u> , <u>Rėda Bistrickaitė</u> , <u>Jūratė Mockienė</u> , <u>Dalia Nizevičienė</u>

P175	The Cyclic Stress Strain Behaviour of Electro-conductive Compression Fabrics on Heat Generation Md Reazuddin Repon, Daiva Mikučionienė
P176	GaN Polarity Inversion using ALD-Al₂O₃ Interlayer Marek Kolenda, Arūnas Kadys, Tadas Malinauskas, Edvinas Radiunas, Riina Ritasalo, Tomas Grinys, Martynas Skapas, Roland Tomašiūnas
P177	Investigation of Long-Term Stability of Resistivity and Magnetoresistance of Nanostructured La-Sr-Mn-Co-O Films Mykola Koliada, Vakarīs Rudokas, Milita Vagner, Karolis Motiejutis, Voitech Stankevič, Valentina Plaušinitienė, Nerija Žurauskienė
P178	Laser Technology for Epitaxial GeSn Layers: Redistribution of Sn Atoms by Nd:YAG Laser Radiation Pavels Onufrijevs, Patrik Ščajev, Algirdas Mekys, Tadas Malinauskas, Liudvikas Subačius, Arturs Medvids, Sarunas Varnagiris, Kuo-Chih Lee, Hung Hsiang Cheng
P179	Comparison of Simulated p-type Si_{1-x}Ge_x and Si LGAD with Traps Kornelijus Pūkas, Tomas Čeponis, Eugenijus Gaubas
P180	Laser-induced Oxidation of Titanium Foils: Control of TiO₂ Phases Liga Grase, Pavels Onufrijevs, Arturs Medvids, Imants Adijans, Lubomir Lazov
P181	The Comparative Study of Different Hardened Cement Paste Systems with Zeolitic Waste Containing Ammonium Ions Agnė Mikelionienė, Danutė Vaičiukynienė, Algirdas Radzevičius, Aras Kantautas

MATERIALS FOR ENERGY APPLICATIONS

P205	One-step Synthesis of Nitrogen-doped Graphene Oxide as Electrocatalyst for Fuel Cells Adriana Marinoiu
P206	Aqueous Degradation Protection of NaTi₂(PO₄)₃ by ALD Laurynas Staišiūnas, Jurgis Pilipavičius, Linas Vilčiauskas
P207	Synthesis and Properties of Bismuth and Antimony Chalcogenide Based Nanolaminates on Graphene Substrates Jana Andzane, Andrei Felsharuk, Anatolijs Sarakovskis, Kiryl Niherysh, Donats Erts
P208	Monolayers with Different Linkers for Perovskite Solar Cells Aida Drevilkauskaitė, Amran Al-Ashouri, Steve Albrecht, Vytautas Getautis, Artiom Magomedov
P209	Intensity Modulated Photocurrent Spectroscopy as a Tool for WO₃ Photoanode Characterization Ramunas Levinas, NataliaTsyntsaru, Henrikas Cesiulis
P210	Polyetheretherketone Composites with Ionic Liquids for All Solid Sodium-ion Batteries Samanta Homiča, Einārs Sprūģis, Guntars Vaivars
P211	Electrochemical Properties of Single-walled Carbon Nanotubes (SWCNT) Using LiNO₃ Aqueous Electrolyte Vitālijs Lazarenko, Yelyzaveta Rublova, Raimonds Meija, Jana Andžāne, Vanda Voikiva, Arturs Vīksna, Alexander Okotrub, Donāts Erts
P212	Features of the Formation of Natural SEI Layers from Aqueous Electrolytes on the Surface of SWCNT and Bi₂Se₃ Anodes and Their Impacts on the Electrochemical Properties Yelyzaveta Rublova, Vitalijs Lazarenko, Vanda Voikiva, Raimonds Meija, Jana Andzane, Donats Erts
P213	Sulfonated Polyetheretherketone and Graphene Composite Membranes: Preparation and Characterization Reinis Kaparkalējs, Linda Briede, Elīna Pajuste, Einārs Sprūģis, Guntars Vaivars
P214	2-methyl-1,4-naphthoquinone Mediated Microbial Fuel Cell Juste Rozene, Antanas Zinovicius, Katazyna Blazevic, Uldis Žaimis, Inga Morkvenaite-Vilkonciene
P215	Bi₂Se₃ Thin Films for Aqueous Na-ion Batteries Raimonds Meija, Anna Skrastina, Vitalijs Lazarenko, Yelyzaveta Rublova, Vanda Voikiva, Jana Andzane, Donats Erts

Online Poster Session 17:45 – 18:30

For everyone not able to participate in physical sessions.