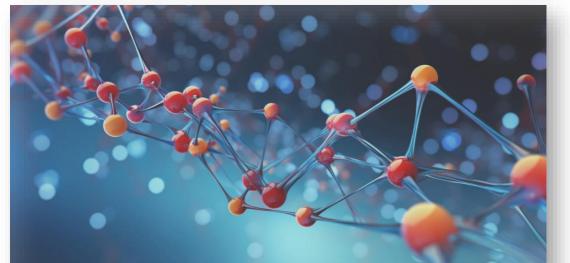
# **APMAS 2024**

# 14<sup>th</sup> International Advances in Applied Physics & Materials Science Congress & Exhibition

# **ENEFM 2024**

# **10<sup>th</sup> International Congress on Energy Efficiency and Energy Related Materials**

# MEDOPTICS 2024 3<sup>rd</sup> International Conference on Medical Optics





## **PROGRAM TIMETABLE**

# Sponsors



# **APMAS 2024**

# 14<sup>th</sup> International Advances in Applied Physics & Materials Science Congress & Exhibition

# **ENEFM 2024**

# 10<sup>th</sup> International Congress on Energy Efficiency and Energy Related Materials

# **MEDOPTICS 2024**

# **3<sup>rd</sup> International Conference on Medical Optics**

October 08-14, 2024

Liberty Hotels Lykia, Oludeniz MUGLA / TURKEY

	P R O G R A M	
SUNDAY, OCTOBER 06, 2024		
14:00-16:30	REGISTRATION FOR EARLY ARRIVALS	
14.00 10.00	(14:00 Check-in)	

P R O G R A M			
	MONDAY, OCTOBER 07, 2024		
9:00-16:30 REGISTRATION			
	(14:00 Check-in)		
Everyday Tours	Social PROGRAM • Saklikent Jeep Safari		
	• Paragliding in Oludeniz		

	P R O G R A M	
	TUESDAY, OCTOBER 08, 2024	
APMAS & ENEFM & MEDOPTICS		
	YUNUS EMRE 1	

Chairperson: A.Yavuz Oral		
Alper Sahiner		
Seton Hall University, USA		
"ID2782- Artificial Intelligence in Materials Science and Renewable Energy Research"		
COFFEE BREAK		
Chairperson: A.Yavuz Oral		
Lech Tomasz Baczewski		
Institute of Physics PAS, Poland		
"ID2597- Interaction between chirality and magnetism in hybrid nanostructures"		

12:30- 14:00	LUNCH	
	APMAS & ENEFM & MEDOPTICS	APMAS & ENEFM & MEDOPTICS
	YUNUS EMRE 1	ARISTO
	Chairperson: Arcady Zhukov	Chairperson: Pietro Galinetto
<i>(</i> <b>)</b>	14:00-14:30	14:00-14:30
NS	Arcady Zhukov	Pietro Galinetto
8 00	Univ. Basque Country, UPV/EHU San Sebastián, Spain	University of Pavia, Italy
<b>5ES</b> 15:(	(invited speaker)	(invited speaker)
Е <b>Г</b>	ID2590- Development of Amorphous Microwires with Graded	ID2695- SERS performances of PDA-coated silver and gold nano-
PARALLEL SESSIONS 14:00-15:00	Magnetic Anisotropy	objects for emerging pollutants monitoring
PAR	14:30-15:00	14:30-14:50
	Andrei Mitru	Yonggyu Lee
	Romanian Research and Development Institute for Gas Turbines	Korea Construction Equipment Technology Institute, Korea,
	COMOTI, Romania	Republic Of
	(invited speaker)	<b>ID2772</b> - A Study on the Development and Vaildation of an
	ID588- Thermal and energy efficiency solutions for natural gas	Integrated Steering and Driving Dynamics Model for an MR-Base
	compression using industrial automation	K9 Howitzer Firing Simulator
15:00- 15:30	COFFEE BREAK	
	APMAS & MEDOPTICS	ENEFM
	YUNUS EMRE 1	ARISTO
	Chairperson: Vijaya Srinivasu Vallabhapurapu	Chairperson: Marian Gaiceanu
	15:30-16:00	15:30-16:00
	Vijaya Srinivasu Vallabhapurapu	Marian Gaiceanu
	University of South Africa, South Africa	Dunarea de Jos University of Galati, Romania
S	(invited speaker)	(invited speaker)
SSIONS 7:40	ID2603- Resistive Switching Memory (ReRAM) through	ID603- SHUNT ACTIVE POWER FILTER AS ENERGY EFFICIENCY
SSI	biomaterials	SOLUTION

biomaterials

#### 16:00-16:30 Sandra Lepak-Kuc Warsaw University of Technology, Poland (invited speaker)

**ID2770-** Eco-Friendly Carbon-Based Conductive Composites: Shaping the Future of Biosensors and Beyond

16:30-17:00 Gabriel P. Potirniche University of Idaho, USA (invited speaker)

#### SOLUTION

#### 16:00-16:30 Ashton Swartbooi CSIR, South Africa

#### (invited speaker)

**ID602-** Thermo-catalytic decomposition of methane to hydrogen and carbons – kinetic studies for a novel perovskite catalyst

#### 16:30-16:50

#### **Timur Atabaev** Nazarbayev University, Kazakhstan **ID563-** Deposition of Luminescent and Hydrophobic Coating for Efficiency Improvement of Si Solar Cells

ID2578- Experimental and Computational Study of Fatigue Crack	16:50-17:10
Growth in Austenitic Stainless-Steel Alloy 709 at Elevated	Fatmanur KOCAMAN KABİL
Temperatures	Gebze Technical University, Turkiye
	ID604- PEDOT:PSS /LIG Composites: Preparation and
17:00-17:20	Thermoelectric Characterization
Seda KOL	
Gebze Technical University, Turkiye	17:10-17:40
<b>ID614-</b> Characterization of DNT/TNT Specific Binding Peptides	Mohamed Ahmeid
Immobilized on Laser-Induced Graphene	Newcastle University, UK
	(invited speaker)
	ID592- EV Battery Sustainability: Diagnostic Techniques, Safety
	Challenges, and Circular Economy Solutions

P R O G R A M					
	WEDNESDAY, OCTOBER 09, 2024				
	APMAS & ENEFM & MEDOPTICS YUNUS EMRE 1				
PLENARY SESSION 10:00-10:45	Chairperson: A.Yavuz Oral Mohamed Naceur BELGACEM University Grenoble Alpes, France "ID2664- Biomass conversion: The raw material of tomorrow"				
10:45- 11:15	COFFEE BREAK				
	APMAS & ENEFM & MEDOPTICS YUNUS EMRE 1				
PARALLEL SESSIONS 11:15-12:25	Chairperson: Balázs Illés 11:15-11:45 Balázs Illés Budapest University of Technology and Economics, Hungary (invited speaker) ID2602- Properties of Sn99Ag0.3Cu0.7-(ZrO <sub>2</sub> /CuO/TiO <sub>2</sub> ) composite solder joints 11:45-12:05 Erdem Sahin Mugla University, Turkey ID2691- Cementitious coatings on magnesium alloys for in vivo passivation 12:05-12:25 Chengcheng Wang China Nuclear Power Engineering Co. Ltd, China ID2651- New Requirements of Defense in Depth and Extension of Its Application				
12:35- 13:15	LUNCH				

	SOCIAL PROGRAM	
13:15-18:00	13:15-18:00 GHOST TOWN & BLUE LAGOON	
13:19	(Gathering at Congress registration desk)	

	P R O G R A THURSDAY, OCTOB		
	APMAS & ENEFM & N	<b>MEDOPTICS</b>	
YUNUS EMRE 1			
NO	Chairperson: A.Yavuz Oral		
<b>NARY SESSI(</b> 10:00-10:45	Ahmed Abdala		
PLENARY SESSION 10:00-10:45	Hamad Bin Khalifa University, Doha, Qatar "ID553- High-performance Membranes for Energy Efficient Air cooling"		
	COFFEE BREAK		
10:45- 11:15			
	APMAS & ENEFM	MEDOPTICS	
	YUNUS EMRE 1	ARISTO	
	Chairperson: Konstantin Vorotilov	Chairperson: Ersin Kayahan	
	11:15-11:45 Konstantin Vorotilov	11:15-11:45 Alexey V. Feofanov	
	RTU MIREA, Russian Federation	Lomonosov Moscow State University, Russian Federation	
	(invited speaker)	(invited speaker)	
<b>SIONS</b> 45	<b>ID2640-</b> THIN POROUS FILMS: HOW TO CONTROL MICROSTRUCTURE AND ELECTRICAL PROPERTIES?	ID611- Nanobiophotonics: decoding molecular interactions in chromatin	
<b>PARALLEL SESSI</b> 11:15-12:45	11:45-12:15	11:45-12:15	
EL S 15-1	Juris Blums	Horace Crogman	
ALL	Riga Technical University, Latvia	California State University Dominguez Hills, USA	
PAR	(invited speaker)	(invited speaker)	
_	<b>ID594-</b> Developing key components of energy-independent wearables: human body energy harvesting and self-powered sensors	ID606- Epigallocatechin Gallate (EGCG) Mitigates the Effects of Camptothecin-induced Oxidative Stress on Bone-like Cancer Cells (UMR 106-01 BSP)	
	12:15-12:45		
	Alexander Sigov	12:15-12:45	
	MIREA - Russian Technological University, Russian Federation	M.L. Thakur	
	(invited speaker)	Sidney Kimmel Cancer Center, USA	
	ID2644-PHYSICAL PHENOMENA IN PZT THIN FILMS	(invited speaker) ID612- Biophotonic imaging for noninvasive detection and therapy of oncologic diseases	
12-20			
12:30- 14:00	LUNCH		

	APMAS & ENEFM	MEDOPTICS
	YUNUS EMRE 1	ARISTO
	Chairperson: Amela Ajanovic	Chairperson: Ersin Kayahan
PARALLEL SESSIONS 14:00-16.10	14:00-14:30 <b>Amela Ajanovic</b> Vienna University of Technology - TU WIEN, Austria (invited speaker) ID554- Techno-economic analysis of hydrogen production and transportation 14:30-15:00 <b>Eugenia Rossi di Schio</b> Alma Mater Studiorum - University of Bologna, Italy (invited speaker) ID568- The reuse of end-of-life Home Materials (EoLHM) in buildings' energy harvesting 15:00-15:20 <b>Qianwen Liu</b> China Nuclear Power Engineering Co., Ltd, China ID559- Risk-Informed Defense-in-depth Strategy for Nuclear Power Plant 15:20-15:40 <b>Vanni Lughi</b> University of Trieste, Italy ID562- Recyclable Composites Based on Natural and Waste Materials for Thermal Insulation Applications: An Example Of "Deep Materials Sustainability" 15:40-16:10 <b>Vladimir Krasnov</b> Stockholm University, Sweden (invited speaker) ID597- Perspectives of energy-efficient superconducting computer	14:00-14:30 Christos Boutopoulos University of Montreal, Canada (invited speaker) ID607- Improving the safety and precision of eye surgery interventions with "smart" fiber-based OCT systems 14:30-15:00 NICOLA DALDOSSO University of Verona, Italy (invited speaker) ID609- Light emitting porous nano-silicon as a multimodal platform for theranostics 15:00-15:30 Kostadinka Bizheva University of Waterloo, Canada (invited speaker) ID608- Line-Scan Optical coherence tomography for in-vivo cellular resolution imaging of the human cornea and limbus
16:10- 16:40	COFFEE BREAK	
16:40-	FOYER (Poster Session Area)	
17:40	Chairperson: A. Yavuz Oral	
	POSTER SESSION- I	
	APMAS & ENEFM & MEDOPTICS	

	P R O G R A M			
	FRIDAY, OCTOBER 11, 2024			
	APMAS & ENEFM & MEDOPTICS			
	YUNUS EMRE 1			
i	Chairperson: A.Yavuz Oral			
PLENARY SESSION 10:30-11:1	Dominik Zumbühl S S S O University of Basel and NCCR SPIN, Switzerland			

	"ID2659- Quantum Computing with Silicon Spins"		
11:15- 11:45	COFFEE BREAK		
7	Chairperson: Ersin Kayahan		
PLENARY SESSION 11:45-12:30	<b>Meltem Izzetoglu</b> Villanova University, USA <b>"ID613-</b> Multimodal Diffuse Optical Methods for The Assessment of Brain Function and Injury"		
12:30- 14:00	LUNCH		
		M & MEDOPTICS S EMRE 1	
0-15:00	Chairperson: <b>Bing Guo</b> 14:00-14:30 <b>Bing Guo</b> Texas A&M University at Qatar, Qatar (invited speaker) ID585- Solar photovoltaic soiling loss: quantification, measurement and monitoring 14:30-15:00 <b>Satoshi Kokado</b> Shizuoka University, Japan (invited speaker) ID2593- Theoretical study on in-plane, out-of-plane, and transverse anisotropic magnetoresistance effects for ferromagnetic films		
<b>RALLEL SESSIONS</b> 14:00-15:00			
PARALLEL			
15:00- 15:30	COFFEE BREAK		
	APMAS YUNUS EMRE 1	ENEFM ARISTO	
	Chairperson: Wael Alnahhal	Chairperson: Mehmet Emre Aköz	
G	15:30-16:00 Wael Alnahhal Qatar University, Qatar (invited speaker) ID2773- Mechanical Properties of Recycled Aggregate Concrete Incorporating Recycled Concrete Powder	15:30-16:00 <b>Giuseppe Forte</b> University of Catania, Italy (invited sp CANCELLED ID599- Enhancing and sitized solar cells efficiency: insights from Density Functional Theory	
PARALLEL SESSIONS 15:30-17:00	16:00-16:20 <b>Ngonidzashe Masunga</b> University of South Africa, South Africa <b>ID2733</b> - Looking at photocatalysis from a different perspective: considering hybridisation of low energy waves with visible light for organic pollutant removal	16:00-16:30 Ladislav Kavan J. Heyrovsky Institute of Physical Chemistry, Czech Republic (invited speaker) ID598- Work Function and Photo/electrochemistry of Oxide Semiconductors (SnO2 TiO2 and ZnO)	
	16:20-16:40 Jamil Renno Qatar University, Qatar ID2573- Base Excitation and Finite Element Simulation for Assessing the Risk of Acoustic Induced Fatigue	16:30-17:00 <b>Alexandra Ushakova</b> INEOS RAS, Russian Federation Sergo Ordzhonikidze Russian State University for Geological Prospecting, Russian Federation (invited speaker)	
	16:40-17:00 Gan Redhi Durban University of Technology, South Africa ID2650- Application of Ionic liquid-multi walled carbon nanotubes-l- lysine modified glassy carbon electrode for detection of prednisolone	<b>ID601-</b> Novel liquids for increasing the mobility of aqueous solutions for low permeable and ultra-low permeable oil formations	

	P R O G R A M
	SATURDAY, OCTOBER 12, 2024
	APMAS
	YUNUS EMRE 1
	Chairperson: Emil Babić
PARALLEL SESSIONS 10:30-12:20	10:30-11:00 Emil Babić University of Zagreb, Croatia (invited speaker) ID2668- High entropy alloys: some prospects and problems 11:00-11:30 Carmen Tuca National Institute for R&D in Physics and Nuclear Engineering, Romania (invited speaker) ID2609- Assessment of Soil Activity Levels from Decommissioning Area of A VVR-S Nuclear Research Reactor 11:30-11:50 Miroslav Cieslar Charles University, Czech Republic ID2674- Self propagating high temperature synthesis in Ti-Ni core-shell nanoparticles
<b>a</b> .	11:50-12:20 Sergei Katsyuba Kazan Scientific Center of Russian Academy of Sciences, Russian Federation (invited speaker) ID2779- Self-assembly formation of water-soluble nanoparticles explored by computational techniques
12:30- 13:15	LUNCH
13:15-18:00	SOCIAL PROGRAM 13:15-18:00 THE BOAT CRUISE AROUND EXCELLENT BAYS OF BLUE LAGOON & VISIT TO St. NICHOLAS ISLAND (Gathering at Congress registration desk)

P R O G R A M
SUNDAY, OCTOBER 13, 2024

APMAS

YUNUS EMRE 1

Chairnerson: A Yavuz Oral

	Champerson. A. Favuz Oral
PLENARY SESSION 10:30-11:15	Janusz Lewinski Polish Academy of Sciences, Poland "ID2767- Effect of preparation methodologies on the properties of ZnO QDs and metal halide perovskites"
11:15- 11:45	COFFEE BREAK

	Chairperson: Victor Pavlov
PARALLEL SESSIONS 11:45-12:35	11:45-12:15 Victor Pavlov Ioffe Institute, RAS, Russian Federation (invited speaker) ID2731- ULTRAFAST PHOTO-INDUCED PHENOMENA IN EUROPIUM CHALCOGENIDES 12:15-12:35 Michał Zieliński Nicolaus Copernicus University, Poland ID2576- Exploiting underlying crystal lattice for efficient computation of multi-million atoms nanostructures
12:30- 14:00	LUNCH

	APMAS
	YUNUS EMRE 1
	Chairperson: Wolfgang Werner
PARALLEL SESSIONS 14:00-15:20	14:00-14:30 Wolfgang Werner TU Wien, Austria (invited speaker) ID2774- Electron Beam Attenuation and Energy Dissipation between 0 eV and Relativistic Energies 14:30-15:00 Alessandra Bellissimo Technische Universität Wien, Austria (invited speaker) ID2778- Electron Emission from Graphitic Surfaces in the Low-Energy Regime 15:00-15:20 Mara-Georgiana Popovici ELI-NP, Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering, Romania ID2717-Radiation protection and dosimetry in high power laser-driven experiments
15:30- 16:00	COFFEE BREAK
16:00- 17:00	FOYER (Poster Session Area) Chairperson: A. Yavuz Oral POSTER SESSION- II APMAS

MONDAY, OCTOBER 14, 2024
APMAS
YUNUS EMRE 1

	Chairperson: Eduard Gevorkyan
	10:10-10:30
	Mehmet Emre Aköz
	Gebze Technical University, Turkiye
	ID2780- Perpendicular Magnetic Anisotropy on Co/Pt Multilayers with Ru Spacers as TMR Sensor Applications
00	10:30-11:00
-12	Eduard Gevorkyan
:10	Moscow Witte University, Russia
10	(invited speaker)
PARALLEL SESSIONS 10:10-12:00	ID2605- On the Theory of Transition Radiation of a Charge in a Waveguide Filled with an Anisotropic Magnetodielectric Medium
SESS	11:00-11:30
LEL	Svetoslav Kuzmichev
<b>3</b> AL	Lomonosov Moscow State University, Russian Federation
PAI	(invited speaker)
-	ID2629- Direct observation of Spin Exciton in Superconducting Oxypnictides by Andreev Spectroscopy
	11:30-12:00
	Tatiana Kuzmicheva
	Lebedev Physical Institute RAS, Russian Federation
	(invited speaker)
	ID2637- Spectroscopic Study of K0.8Fe1.7(Se,S)2 Selenides in the Superconducting and the Normal State
12:00	Hotel Check Out

PROGRAM LEGEND DESCRIPTIONS		
ID-	APMAS 2024 oral presentations	
ID-	ENEFM 2024 oral presentations	
ID-	MEDOPTICS 2024 oral presentations	

## POSTER PROGRAM

### THURSDAY, OCTOBER 10, 2024

### 16:40-17:40

### FOYER (Poster Session Area)

Chairperson: A. Yavuz Oral

#### POSTER SESSION- I

### **APMAS & ENEFM & MEDOPTICS**

ID	TITLE	CONTACT AUTHOR
2591	TUNING OF SECOND ORDER PHASE TRANSITION OF NIMNGA HEUSLER- TYPE GLASS-COATED MICROWIRES.	Valentina Zhukova
2604	Influence of SAC0307-Al2O3 composite solder joints on thermal parameters of power electronics devices	Agata Skwarek
2625	Two-dimensional Valleytronic Materials: From Principles to Device Applications	Sake Wang
2630	Mesoporous SiO2-TiO2 Submicron Particles With High Photocatalytic Efficiency for Degradation of Organic Substances Under Solar and Artificial Light	Kuralay Rustembekkyzy
2623	Electronic Lock with Remote Control	Raşit Önver & Ibrahim Alpay
2737	Evaluation of Mare's Milk-Derived Exosomes as Novel Therapeutic Carriers: Comparative Isolation Techniques and Quercetin Bioavailability Enhancement	Shynggys Sergazy
2751	Modeling the operation of a gas compressor station to minimize fuel costs for protection against surge zone	Dinara Zhussupova
2600	Study and Characterization of new dosimeter MAGIC-Glytaraldehyde	Sounila Brahimi Mouss
2587	Diffusion mechanisms in superabsorbent hybrid hydrogels structures usable as water and nutrients carriers/releasers	Gabriela Craciun
2633	Functional borates and fluoride borates and their high-pressure modifications	Tatyana Bekker
2680	Improved Stability and Endurance in ReRAM using Novel Organic- Inorganic Tandem Structure for Synaptic Computing Applications	Sachin Desarada
2652	Doping effect on ferroelectric/piezoelectric properties of Nb-modified BiFeO3-BaTiO3 ceramics	myongho kim
2643	Plastic deformation of bronze under water by laser radiation	Viacheslav Zheleznov
2724	Synthesis of 1-(2,4,6-trimethylpyridin-3-yl)ethan-1-ol and study of its hemorheological and antifibrotic activity	Alexander Gulyayev
2579	The Directional Formation and Anti-corrosion Action of Self-Assembltd Siloxane Nanolayers on Copper Surface	Maxim Petrunin
2681	Chitosan based new ReRAMs for Green Computing	SREEDEVI VALLABHAPURAPU
2729	Measuring the Concentration of Heavy Metals and Radionuclide in the Soil of Jordan Petroleum Refinery and Al-Hussein Thermal Station, Zarqa City, Jordan	Hasan Al-Khateeb

2726	Measurement of L shell X-Ray fluorescence relative intensities of elements with atomic numbers 62 to 75 at 13.5 keV using synchrotron radiation	M. Alqadi
2742	In-Vitro Effectiveness of Photodynamic Therapy on RBCs with Encapsulated Rose bengali by Silica Nanoparticles	Khaled aljarrah
2727	Synthesis and characterization of nanoparticle materials based on zinc oxide, silver, and tin as electrocatalytic towards the azo dyes	Fedda Alzoubi
2722	Observations of the novel low field microwave absorption in ZnxCo1-xFe2- xAlxO4 ferrites	Tebogo Sfiso Mahule
558	Study of oxygen reduction and evolution on palladium-modified cobalt- phosphorus and cobalt-iron-phosphorus coatings	Loreta Tamasauskaite- Tamasiunaite
557	Cobalt-iron-phosphorus catalysts for hydrogen and oxygen evolution	Eugenijus Norkus
570	ICT FOR SMART AND ENERGY EFFICIENT BUILDINGS	Dimitar Karastoyanov
572	NEW ANTHRONE DERIVATIVES AS LIGHT EMITTING SUBSTANCES	Jelena Kirilova
580	Development of On-Board Charger and Solar inverter using Power Module based on Wide Bandgap	Yong-Su Noh
581	Phase Shift Modulation Method for Low Voltage-Light Load Area of Load Resonant Converter with Wide Output Voltage	Dongmyoung Joo
560	STUDY OF CONTAMINANTS PRESENT IN INDUSTRIAL WATER USED FOR COOLING GASES IN THE PYROLYSIS PROCESS	Sergejs Osipovs
605	UV-Vis-NIR Absorption Spectroscopy as a Supporting Technique in Understanding the Electrical Conductivity Behavior of the PEDOT:PSS Films	Bahar Şölen AKDEMİR YILMAZ

## POSTER PROGRAM

### SUNDAY, OCTOBER 13, 2024

### 16:00-17:00

### FOYER (Poster Session Area)

Chairperson: A. Yavuz Oral

#### POSTER SESSION- II

### APMAS

ID	TITLE	CONTACT AUTHOR
2607	Evaluation of hardness and composition of SiCN films deposited by HWCVD method	A. Izumi
2594	Covalent Organic Frameworks for Homojunction SMOSCs and Electrode Materials	lon grosu
2667	Synthesis of metal-organic framework compounds on PET track-etched membranes for CO2 capture	llya Korolkov
2669	Skin dose assessment for patients undergoing medical radiography by LiF:Cu,Mg,P, BeOSL and halide film passive dosimeter systems	Felicia Mihai
2619	Novel 9,9'-Dispiro- and Trispirobifluorene Building Blocks for the Access to Smart Supramolecular and Covalent Organic Frameworks	loana Georgeta Grosu
2677	Towards the theory of crystal growth ahead of the moving solid-liquid phase interface: A U-shaped anomalous behaviour of the crystallization velocity of melt undercooling	Liubov Toropova
2592	Nonvolatile memory cells based on thin film disorder chalcogenide semiconductors	Aliaksandr Smirnov
2750	BENZENE OXIDATION OVER Pt LOADED ON FLY ASH ZEOLITE X	Yuri Kalvachev
2598	Picosecond Ultrasonic Photoacoustic Emitter Based on Graphene- Decorated Gold Nanoparticles	Aleš Mrzel
2608	Evaluation of tritium release from contaminated HEPA filters in extreme conditions	Cristian Postolache
2572	Viscoelastic response of sugar beet root tissue to mechanical loading	Krzysztof Gołacki
2627	Manufacturing of biocompatible coatings for medical implants using robotic microplasma spraying: ensuring coating uniform thickness and specified porosity	Alexander Krasavin

2639	Additive robotic microplasma spraying of multilayer bioactive coatings	Albina Kadyroldina
2647	In vitro testing of microplasma sprayed titanium and hydroxyapatite coatings on Ti6Al4V alloy substrates: the effect of materials and spraying parameters on coating bioactivity and corrosion resistance	Yuliya Safarova (Yantsen)
2626	Enhancing microbial resistance of additive manufactured titanium implants by magnetron sputtering of Nb-Cu and Ta-Cu coatings	Bagdat Azamatov
2638	Manufacturing and research of Ta and Ta-Cu bioactive and antimicrobial coatings of titanium endoprosthesis implants	Darya Alontseva
2641	Recycling of waste aluminium foil as a low-carbon feedstock substitute	Jan Najser

2697	Harnessing PEGylated PLGA Nanoparticles for Drug Delivery of Cdc42 Inhibitor: Unveiling Anti-Cancer Efficacy in Colon Cancer Cell Lines	Aislu Yermekova
2713	Development of 3D coffee ring structure on soft compliant PDMS substrate and interplaying factors	Maryam Jalali
2698	A study of in vitro cytotoxicity of fullerene- and fullerenol- dihydroquercetine complexes: possible implications for the treatment of neurodegenerative disorders	Sholpan Askarova
2743	ANTI-ICING PERFORMANCE OF TRANSPARENT EPOXY-BASED NANOCOMPOSITE COATINGS	Bartlomiej Przybyszewski
2761	A Compositional Engineering and Phase Transitions of DMAxFA1-xPbI3 Perovskites	lwona Justyniak
2723	Synthesis, molecular docking and in vitro α-glucosidase inhibition potential of novel thiourea derivatives based on 3-aminopyridin-2(1H)-ones	Zarina Shulgau
2699	Metals and Antibiotics as Aqueous Sequestration Targets for Magnetic Polyamidoamine-Grafted SBA-15	Fanyana Mtunzi
2739	ADSORPTION OF HEAVY METALS FROM AQUEOUS SOLUTIONS BY MORINGA OLEIFERA PODS AND FELDSPAR CLAY COMPOSITE	Mokete Phele
2783	PERFORMING A N-TYPE DOPING OF THE LASER-INDUCED GRAPHENE USING UREA AND Its CHARACTERIZATION	Vala Can Aşkan
2679	Validation of a UV-VIS-NIR Spectrophotometric Method for Determination of Sodium Benzoate in Water	Abdulrahman Alzahrani

# NOTES

•••••			••••••	•••••	 	•••••	 ••
•••••		•••••	•••••	•••••	 • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	 ••
•••••		•••••	••••••		 •••••	•••••	 ••
•••••		•••••	•••••		 •••••	• • • • • • • • • • • • • • • • • • • •	 ••
		•••••		•••••	 	•••••	 ••
		••••		•••••	 		 ••
•••••		•••••	•••••		 •••••	•••••	 ••
	• • • • • • • •	•••••	•••••		 	• • • • • • • • • • • • • • • • • • • •	 ••

