

Poster Session 2
(Sept. 9, 2025, Tuesday, 5:30 P.M.)

ID	No	Abstract Title	Authors	Track
1585		Eco-Friendly Synthesis of ZnO Nanostructures Using Aloe Vera Extract for Supercapattery Applications	Mohit Bhatt, Kajal Gautam, Anil Kumar Sinha	Electrochemistry of Nanomaterials & Batteries (ENB)
1636		Morphology and Electrochemical Properties of the Silicon/Graphite Anodes Coated by Ultrathin ZnO Using Atomic Layer Deposition	Magdalena Precnerova, Prangya Parimita Sahoo, Ahmed Nada, Boris Hudec, Karol Frohlich	Electrochemistry of Nanomaterials & Batteries (ENB)
1756		A Multifunctional 2D-Cu MXene Catalyst for Selective CO ₂ Electroreduction to Ethanol and Low-Overpotential Ammonia Decomposition	Esraa Ragab Kotob	Electrochemistry of Nanomaterials & Batteries (ENB)
1784		Iron Doped Graphene - an Effective Catalyst for PEM Fuel Cell	Adriana Marinoiu	Electrochemistry of Nanomaterials & Batteries (ENB)
1792		Electro-Fenton Degradation of Pirimicarb Using Basil Waste-Derived Catalyst Support	Antón Puga, Ana Rita Alves, Cristina Soares, Sónia Figueiredo, Cristina Delerue-Matos	Electrochemistry of Nanomaterials & Batteries (ENB)
1383		Protective effect of modified montmorillonite nanoreservoirs as an anti-corrosion pigment in epoxy coating on steel	Mariia-Olena Danyliak, Sergiy Korniy	Multifunctional Thin Films & Coatings (MTFC)
1388		Functional Hard Multi-Nanolayer Coatings of TiMoN/NbN with High Mechanical Durability	Olga Maksakova, Vyacheslav Beresnev, Mária Čaplovičová, Zaoli Zhang, Martin Sahul, Sergiy Lytovchenko, Bohdan Mazilin	Multifunctional Thin Films & Coatings (MTFC)
1394		LOW-TEMPERATURE SYNTHESIS AND CHARACTERIZATION OF NANOSTRUCTURED Al-DOPED ZnO THIN FILMS ON PEN FOR FLEXIBLE OPTOELECTRONICS.	Samir HAMRIT, Abdelhafid Mahroug	Multifunctional Thin Films & Coatings (MTFC)
1423		Temperature Stability of the Tetragonal β -phase in the Ta Thin Films Obtained by Electron-Beam Evaporation	Renata Osyppova, Sergiy Bogatyrenko, Oleksandr Kryshthal	Multifunctional Thin Films & Coatings (MTFC)
1477		Preparation and Properties of Organic-Inorganic Hybrid Anti-glare Hard Coating Films with Hollow Silica Nanospheres	Woo Seok Yang	Multifunctional Thin Films & Coatings (MTFC)
1513		Investigation of Two-dimensional Scandium Carbide Structures Deposited by Magnetron Sputtering	Marek Běloušek, Adéla Jagerová, Martin Kormunda, Jan Vopat	Multifunctional Thin Films & Coatings (MTFC)
1523		Improving the Corrosion Resistance of Titanium Manufactured from Secondary Resources – Sheet Scrap Waste	Serhii Lavrys, Iryna Pohrelyuk, Roman Proskurnyak, Ihor Bilonik, Oleksandr Kuprin, Dmytro Bilonik	Multifunctional Thin Films & Coatings (MTFC)

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1536		ENHANCED BIOCOMPATIBILITY OF POLYPROPYLENE SURGICAL MESHES VIA TANTALUM-BASED COATINGS DEPOSITED BY MAGNETRON SPUTTERING	Stanislav Dudin, Stanislav Yakovin, Valeriy Lisovskiy, Oksana Nakonechna, Oleksandr Kyslov, Nadiia Harazha	Multifunctional Thin Films & Coatings (MTFC)
1591		Numerical simulation of the energy density induced by strain and stress fields of a GaAs/GaAs twist boundary in anisotropic elasticity	Salah Madani	Multifunctional Thin Films & Coatings (MTFC)
1597		Role of Mn Ions in the Optical Properties and Band Structure Modification of Ni ₂ MnTe Topological Epitaxial Layers	Nataliia Tataryn, Oksana Yastrubchak, Sergii Mamykin, Volodymyr Romanyuk, Olga Kondratenko, Viktor Strelczuk, Oleksandr Kolomys, Jaroslaw Domagala, Janusz Sadowski	Multifunctional Thin Films & Coatings (MTFC)
1680		Surface Protection of Al-AlN metal matrix composites: Anodisation and Corrosion Study	Khrystyna Shliakhetka, Martin Balog, Peter Krizik, Petra Krajnakova, Erik Simon	Multifunctional Thin Films & Coatings (MTFC)
1702		Growth of Nitride/Carbide Coatings based on Tungsten and Niobium using C ₂ H ₂ as a Carbon Source	Olga Maksakova, Vyacheslav Beresnev, Sergiy Lytovchenko, Martin Sahul, Denys V Horokh, Bohdan Mazilin, Inna Afanasieva	Multifunctional Thin Films & Coatings (MTFC)
1755		Lateral Size-Dependent Raman Scattering of Uniform Nanographene Ensembles	Peter Hutár, Gokul Raj Mini Rajendran, Pavol Tisovsky, Milan Sýkora	Multifunctional Thin Films & Coatings (MTFC)
1815		Functional Thin Film Deposition on Metallic Lithium Electrodes	Ivan Kundrata, Michal Pecz, Karol Frohlich, Boris Hudec	Multifunctional Thin Films & Coatings (MTFC)
1910		Effect of the PECVD Plasma Power Density on the Structural and Friction Properties of the Si-C-N Coatings	Andrii Kozak, Volodymyr Ivashchenko, Oleksandr Porada, Lenka Pribusová Slušná, Milan Tapajna	Multifunctional Thin Films & Coatings (MTFC)
1911		Nano- and Macroscale Tribological Properties of the PtSe ₂ Layers with Different Morphology in Ambient Air and Vacuum Conditions	Andrii Kozak, Michaela Sojkova, Iuliia Vetrova, Jana Hrdá, Martin Hulman, Milan Tapajna	Multifunctional Thin Films & Coatings (MTFC)
1387		Dual-Responsive Polymersomes for Cancer Therapy	Li-Fang Wang, Yi-Jou Joe Chen	Nanobiomedical Research & Applications (NRA)
1393		Ultrafast Template Free Synthesis of Biocompatible Hierarchical Micro Structures Self-Assembled From Coffee Leaf Infusion	HARSHA HARIDAS E S, Goutam Kumar Chandra, Ravi Varma M K	Nanobiomedical Research & Applications (NRA)
1433		Magnetic Exosome-Based Delivery of Nano-selenium for Targeted Therapy in Huntington's Disease	Yong-Ji Chen, Xuan-Yi Yan, Shwu Jen Chang	Nanobiomedical Research & Applications (NRA)
1445		The Evaluation the Potential of GdVO ₄ :Eu ³⁺ Nanoparticles as a Multifunctional Agent for Wound Treatment: In Vitro Studies	Ganna Grygorova, Vladimir Klochkov, Olga Sedyh, Svetlana Yefimova	Nanobiomedical Research & Applications (NRA)

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1460		Structure-Dependent Aspects of Ceftriaxone Release from a Bioactive Wound Dressing	Mariia Kumeda, Liudmyla Sukhodub, Leonid Sukhodub	Nanobiomedical Research & Applications (NRA)
1470		Precise Engineering of Dual-Atom Catalytic Sites in Smart NanoStructures for Customized Regulation of Tumor-Endogenous Immunotherapy	Nai-Lun Kuo, Hung-Wei Cheng, San-Yuan Chen	Nanobiomedical Research & Applications (NRA)
1474		Temozolamide-Loaded Mucoadhesive Lipid Nanosystem for Nasal Delivery: Effect in Cellular Uptake and In Vitro Cytotoxicity in Glioblastoma Multiforme Cells	Marlus Chorilli, Jonatas Lobato Duarte, Leonardo Delello Di Filippo, Kelle Villela Jarcy Azevedo Villela, Jessyca Aparecida Paes Dutra	Nanobiomedical Research & Applications (NRA)
1481		Nano-MOFs as Carriers of Anti-parasitic Potential Drugs	Hebert Arcia, Guillermina Peraza, Mercedes Fernández, Santiago Rostan, Martín Esteves, Lucía Otero, Julia Torres	Nanobiomedical Research & Applications (NRA)
1514		Chemical Composition and Phase Structure of Lung Calcifications in Various Pathologies	Alina Baryshok, Yuliia Moskalenko, Roman Moskalenko	Nanobiomedical Research & Applications (NRA)
1520		Graphene Oxide Modification of Hydroxyapatite Different Origin for Medical Application	Olena Sych, Artem IATSENKO, Anna Synytsia, Tamara Tomila	Nanobiomedical Research & Applications (NRA)
1532		ZnO NPs-hydroxyapatite Composites Loaded With Phytoextracts For Bone Defect Healing	Viktoriia Holubnycha, Roman Pshenychnyi, Svitlana Bolshanina, Tamara Derevianko, Volodymyr Deineka, Ewa Skwarek, Yevhenia Husak, Klaudia Kowalska, Anna Yanovska	Nanobiomedical Research & Applications (NRA)
1538		Injectable Biocomposites Based on Sodium Alginate and Calcium Phosphates of Various Types and Origin	O. Sych, N. Pinchuk, P. Vorotytskyi, K. Samchenko, L. Kernosenko, N. Pasmurtseva, Yu. Samchenko	Nanobiomedical Research & Applications (NRA)
1545		Electrically Stimulated Release of NSAIDs from Bilayered Electroactive Polymer Nanofilms	Šarūnas Žukauskas, Felix Luecke, Almira Ramanaviciene	Nanobiomedical Research & Applications (NRA)
1549		Bioactive Nanostructured Phosphorylated Hyaluronic Acid Hydrogels with Enhanced Mineralization for tissue engineering Applications	Bang Yu Wen, Ray-Neng Chen, Ming-Thau Sheu, Shih-Syuan Yeh, Ling-Chun Chen	Nanobiomedical Research & Applications (NRA)
1589		Advanced Organ-on-a-Chip Platform for Physiologically Relevant Blood-Brain Barrier Research and Drug Development	How TSENG, Yu-Jui FAN, Shu-Mei CHEN, Her-I LEE, Chia-Wei Li	Nanobiomedical Research & Applications (NRA)
1603		Design of Mechanically Bio-Compatible Lattice Structures Cancellous Bone Realised by Fused Filament of Z-ABS Material	Outtas Toufik	Nanobiomedical Research & Applications (NRA)
1631		ROS-Responsive Polyphenol/NO-Releasing Protein/Fucoidan Nanoparticles for Targeted Combinatorial Treatment of Atherosclerosis	Lin Chi, Fwu-Long Mi	Nanobiomedical Research & Applications (NRA)

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1681		Fabrication and Physical/Rheological Characterization of Highly TEMPO-Oxidized Sacchachitin Nanofibers for Biomaterials	Bang Yu Wen, Ray-Neng Chen, Ming-Thau Sheu, Shih-Syuan Yeh, Ling-Chun Chen	Nanobiomedical Research & Applications (NRA)
1709		Enhanced Fibroblast Functionality in PCL Nanofiber-Reinforced Hyaluronic Acid Hydrogels	Hyun Jong Lee	Nanobiomedical Research & Applications (NRA)
1734		Irradiated Multi-Walled Carbon Nanotubes Loaded with Doxorubicin Mitigate Doxorubicin-Related Cytotoxicity in Vitro	Jelena Filipovic Trickovic, Ana Valenta Šobot, Branko Matović, Ksenija Radošević, Svetlana Butulija	Nanobiomedical Research & Applications (NRA)
1735		Physicochemical Properties Influence the Cytotoxicity Level of Gold Nanoparticles	Ana Valenta Šobot, Sanja Živković, Miloš Momčilović, Nebojša Potkonjak, Svetlana Butulija, Tatjana Momić, Jelena Filipovic Trickovic	Nanobiomedical Research & Applications (NRA)
1765		Shifting Targets: How Photodegradation Tunes PDI Nanofiber Selectivity	Vojtěch Liška, Lenka Horníková, Jiří Mosinger	Nanobiomedical Research & Applications (NRA)
1812		A Cell-Seeded Scaffold Approach for Treating Battlefield Injuries: A Case Report on PLA-Based Regenerative Therapy	Andrii Liutyi, Olena Ponomarenko, Milena Yalyzhko, Ilya Yanko, Inna Chorna, Oksana Sulaieva, Oleg Mishchenko, Maksym Pogorielov	Nanobiomedical Research & Applications (NRA)
1836		DNA Sequencing with Enhanced Sensitivity of Electrical Current Signal Using Silicene Nanoribbon Nanopore: A DFT + NEGF Approach	Ashutosh shah, Abhishek Sharma, Arti Kashyap	Nanobiomedical Research & Applications (NRA)
1877		β -Glucans- Functionalized Theranostic Nanoparticles for Inflammation-Targeted Therapy in Preclinical Models	Hsing-Wen Sung, Shih-Kai Lo, Nhien Nguyen	Nanobiomedical Research & Applications (NRA)
1430		Thermal Stability of Magnetic and Magnetoresistive properties of [Ni ₈₀ Fe ₂₀ /SiO ₂] _n Discontinuous Multilayers Under High-temperature Annealing	Iryna Pazukha, Oleksandr Pylypenko, Serhii Romanovych Dolhov-Hordiichuk, Andrii Lohvynov, Kostyantyn Tyschenko, Yurii Shkurdoda, Maksym Lisnichuk, Vitalii Latyshev, Vladimir Tkáč, Serhii Vorobiov, Vladimir Komanicky	Nanomagnetic Materials & Phenomena (NMP)
1472		Magnetic Fluid Core Variable Inductor Design	Sare Akkuş, Alkim Senturk, Yavuz Ozturk	Nanomagnetic Materials & Phenomena (NMP)
1511		Study of Magnetic Resonance Properties of Thin Py Films Suitable for Excitation of Surface Spin-Wave	Tetiana Kalmykova, Sergey Krylov, Tomáš Ščepka, Pavol Neilinger, Vladimír Cambel	Nanomagnetic Materials & Phenomena (NMP)
1515		Defining the Magnetic Configuration of the Artificial Spin System by FIB Fabrication	Juraj Feilhauer, Sergei Krylov, Tetiana Kalmykova, Michal Mruczkiewicz, Vladimír Cambel	Nanomagnetic Materials & Phenomena (NMP)

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1658		Surface Interactions Between a Helical Polymer and the Non-Conventional Ferromagnet $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$	Michal Bennar, Marianna Španková, Marcel Talacko, Andrej Dvurecenskij, Alexander Cigáň, Martin Škrátek, Natalia Nedelko, Piotr Gierłowski, Stefan Chromik	Nanomagnetic Materials & Phenomena (NMP)
1661		Numerical Proposal of Experimental Proof of Unidirectional Edge States in Topological Magnonic Crystal	Juraj Feilhauer, Ján Šoltýs, Iuliia Vetrova, Michal Mruczkiewicz	Nanomagnetic Materials & Phenomena (NMP)
1840		Temperature Stability of Magnetoresistive Properties in Alloy Thin Films Based on $\text{Ni}_{80}\text{Fe}_{20}$ and Cu	Viktor Hrebynakha, Ihor Shpetnyy, Uliana Shvets, Yurii Shkurdoda, Serhij Lyfar, Tetiana Kulyk, Vasyl Pak, Anatolii Ruban, Leonid Satrapinskyy, Tomáš Plecenik	Nanomagnetic Materials & Phenomena (NMP)
1881		Design of a Magnonic Convolver	György Csaba, Kovacs Istvan Tamas, Levente Maucha, Adam Papp, Domonkos Laszlo Farkas	Nanomagnetic Materials & Phenomena (NMP)
1769		Structural Evolution of Resistive Switching Behavior in Bismuth Oxyarsenide Resistive Random Access Memory	Yen-Jung Chen, Wen-Wei Wu	Nanosensors, Nanodevices & Applications (NNA)
1895		Vertically Aligned MoS_2 - WS_2 Nanosheets Heterostructures for Enhanced Photocatalytic Hydrogen Production via Chemical Vapor Deposition	Dong-Bum Seo, Saewon Kang, Soonmin Yim, Sun Sook Lee, Ki-Seok AN	Nanomaterials for Energy & Environment (NEE)
1439		Photocatalytic Activity Of Anatase-Rutile Nanopowders Doped With Noble Metals And Cerium	Olena Mykolaivna Lavrynenko, Maksym Zahornyi Mykitovich, Alisa Atamanchuk, Erwan Paineau	Nanomaterials for Energy & Environment (NEE)
1885		Electrical Transport and Dielectric Relaxation in Metal Carbide Nanocomposites with Amorphous Carbon Matrix.	Piotr Gałaszkiwicz, Alexander Pogrebnjak	Nanomaterials for Energy & Environment (NEE)