

Poster Session 3
(Sept. 11, 2025, Thursday, 5:30 P.M.)

ID	No	Abstract Title	Authors	Track
1381		Organoclay-Based Nanomaterials For Uranium (VI) Contamination Environmental Protection	Iryna Kovalchuk	Nanomaterials for Energy & Environment (NEE)
1419		3D ZnO hexagonal prism-decorated 2D MXene-based high-performance flexible symmetric supercapacitor	Sahil Jangra , Manjeet Singh Goyat	Nanomaterials for Energy & Environment (NEE)
1437		New Nanocomposite Heat-accumulating Nanomaterial Erythritol/Thermally Expanded Graphite/CuO Nanoparticles: Preparation and Thermophysical Properties	Vitaly Zhelezny, Dmytro Ivchenko, Viacheslav Khalak, Bohdan Kvasnytskyi, Yana Hlek	Nanomaterials for Energy & Environment (NEE)
1438		Method for Studying the Thermal Conductivity of Nanocomposite Heat-accumulating Materials in the Range of Phase Transition Parameters	Vitaly Zhelezny, Dmytro Ivchenko, Viacheslav Khalak, Bohdan Kvasnytskyi, Yana Hlek	Nanomaterials for Energy & Environment (NEE)
1440		Enhanced Adsorption Of Tetracycline From Aqueous Solutions Via Morphologically Engineered MIL-53 Using Activated Carbon Sponge	Nitin Kumar, Vanish Kumar, Vinod Kumar Garg	Nanomaterials for Energy & Environment (NEE)
1452		Distinct Photofunctional Crystals from a Single Molecule: Reversible Interconversion of Luminescent and Photomechanical States	Shimei Jiang, Ying Xie	Nanomaterials for Energy & Environment (NEE)
1486		Symmetrically Driven Enhancement of High Harmonic Generation in Graphene Quantum Dots	Hamlet Karo Avetissian, Garnik Felix Mkrtchian, Khachik Vazgen Sedrakian, Armenuhi Gevorg Ghazaryan	Nanomaterials for Energy & Environment (NEE)
1489		High Harmonic Generation in Graphene Quantum Dots with Laser Fields of Elliptic Polarization	Khachik Vazgen Sedrakian, Armenuhi Gevorg Ghazaryan, Nairi Oniki Arustamyan, Gayane Hrach Chopuryan	Nanomaterials for Energy & Environment (NEE)
1505		Metal Oxides as Promising Catalysts for Reversible Hydride Decomposition	I. Saldan, S. Tkachenko, S.G. Ullattil, L. Kral, I. Melnyk, O. Zavorotynska, L. Čelko	Nanomaterials for Energy & Environment (NEE)
1568		Insights Into Design and Balanced Parameters of Ga ₂ O ₃ /CsSnBr ₃ -Based Hybrid Dual-Mode Photodetector	Tarak Hidouri	Nanomaterials for Energy & Environment (NEE)
1594		Advanced Osmotic Energy Conversion for Waste Heat Recovery	Thi Hai Van Nguyen, Virgil Davoust, Benoît Laborie, Bruno Mottet	Nanomaterials for Energy & Environment (NEE)
1667		Magnetocaloric Effect in Ni ₃ Pt-Based Nanoribbon Arrays	S. Vorobiov, B. Stropkai, V. Latyshev, M. Lisnichuk, E. Cizmar, I. Shpetnyy, V. Komanicky	Nanomaterials for Energy & Environment (NEE)

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1692		Investigation of the Phase Transformation of PCM Materials in Nanoporous Matrix with the Use of X-Ray Diffraction	Lesia Chepela, Pavlo Lishchuk, Vladyslav Tsehelnii, Olena Gomon, Christel Metivier, Mykola Borovyi, Mykola Isaiev	Nanomaterials for Energy & Environment (NEE)
1718		Nanotechnology-Driven Stress Mitigation and Role of Fe ₃ O ₄ Nanoparticles in Improving Rapeseed (<i>Brassica napus</i> L.) Resilience	Vadims Kolbjonoks, Aleksandrs Petjukevičs, Marina Krasovska, Natalja Škute	Nanomaterials for Energy & Environment (NEE)
1753		Titanium Alloys And Composites: Influence Of Cathode And Anode Environments Of High-Temperature Fuel Cells	Viktoriya Podhurska, Orest Ostash, Roman Chepil	Nanomaterials for Energy & Environment (NEE)
1786		Nitrogen-Iron Supported on Graphene Oxide as Efficient ORR Catalyst	Adriana Marinoiu, Silvia Pintilie, Irina Vagner, Mihai Varlam	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)
1374		Formation of Nanostructured MoS ₂ and its Catalytic Properties in Hydrogenation of Quinoline and Bromoquinolines	Anastasia Terebilenko, Igor Kotenko, Vyacheslav Pashkevych, Sergey Kolotilov	Nanomaterials Synthesis (NS)
1376		Synthesis and Characterization of SmFeO ₃ Nanopowders with Perovskite-Type Structure	Olga Chudinovych, Olena Olifan	Nanomaterials Synthesis (NS)
1397		Titania-based Adsorbent for Selective Removal Lithium Ions from Natural Resources	Iryna Romanova, Dmytro Tarnovsky	Nanomaterials Synthesis (NS)
1473		Lanthanide Decorated ZnS Quantum Dots: Synthesis and Optical Properties	Carolina Mendoza, Carolina Patrón, Martín Esteves, Nicolás Veiga, Julia Torres	Nanomaterials Synthesis (NS)
1571		Design of Antibacterial Nanocomposites Based on Crystalline Titanium Phosphate Using Microwave Assisted Sol-gel Synthesis	Tetiana Hubetska, Olena Khainakova, Belén Cabal, Natalia Kobylinska, Adolfo Fernández	Nanomaterials Synthesis (NS)
1579		Sintering Characteristics of Copper Nano-Particle Attached Spheroidized Tungsten Micro-Powder	Chulwoong Han	Nanomaterials Synthesis (NS)
1580		Influence of Material Solubility and Condensation Behavior on Binary Nanoparticle Formation via Reactive RF Thermal Plasma Synthesis	Chulwoong Han	Nanomaterials Synthesis (NS)
1581		Sintering Behavior of Tungsten Particles based on Size and Shape using Spark Plasma Sintering	Chulwoong Han	Nanomaterials Synthesis (NS)
1645		DNA Origami Decorated Microparticles for Optical Experiments	David Daniel Ruiz, Alexandr Jonáš, Leo Sala, Jaroslav Kočíšek	Nanomaterials Synthesis (NS)
1713		Features of Dimensional Effects in the Thermal Expansion of Carbon Fiber Reinforced Plastic at Low Temperatures	R. Basnukaeva, A. Dolbin, M. Vinnikov, L. Buravtseva	Nanomaterials Synthesis (NS)
1762		Electrochemical Deposition of AlGaAs/GaAs Heterostructures with Tunable Composition	Ya. Suchikova, S. Kovachov, I. Bohdanov, Zh. Karipbaev, M. Konuhova, A.I Popov	Nanomaterials Synthesis (NS)

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1775		Stable Aqueous Dispersions of Carbon Nanotubes - Graphene Nanoparticles	S. Makhno, K. Ivanenko, Z. Dong, D. Wang, O. Lisova, Yu. Hrebelna, P. Gorbyk, M. Stetsenko, Yu. Sementsov	Nanomaterials Synthesis (NS)
1782		Recent Advances in Graphene-Based Materials for Electrode Application for the Next Generation of Energy Technologies	Adriana Marinoiu	Nanomaterials Synthesis (NS)
1788		CheMatSustain in Action: Synthesis and Physicochemical Characterization of (Nano)materials for Next-gen Safety Testing	Emilia Tomaszewska, Katarzyna Ranoszek-Soliwoda, Grzegorz Celichowski, Jarosław Grobelny	Nanomaterials Synthesis (NS)
1791		Synergistic Design of Graphene-Enhanced X_2HgI_4 ($X = \text{Ti, Cu}$) Nanocomposites: Revolutionizing Thermochromic Smart Materials and High-Performance Solid Electrolytes	Faezeh SOOFIVAND	Nanomaterials Synthesis (NS)
1414		DFT INSIGHT INTO THE ELECTRONIC PROPERTIES OF GE NANOSTRUCTURES AS AN ACETONE-SENSING MATERIAL FOR DIABETES DIAGNOSIS	Alejandro Barranco Sainz, Francisco De Santiago Varela, Lucia Guadalupe Arellano Sartorius, Alejandro Trejo Baños, Alvaro Miranda, Miguel Cruz Irisson	Nanosensors, Nanodevices & Applications (NNA)
1422		MECHANISTIC INSIGHTS INTO INTERFACIAL EFFECTS IN PLASMA-MODULATED MOS2 FOR ROOM TEMPERATURE SELECTIVE DETECTION OF NH3 AND NO2	Vishnu G Nath, Angappane Subramanian	Nanosensors, Nanodevices & Applications (NNA)
1492		Mechanical and Electrical Properties Prediction for SU-8 Nanocomposites with Metallic Nano-Inclusions	Rodica Cristina Voicu, Mihai Gologanu, Raluca Muller	Nanosensors, Nanodevices & Applications (NNA)
1530		Electronic Response of a Gate-All-Around Field Effect Transistor with Two Silicon Nanowires as Active Channels Within the Same Insulator Matrix	Reza Nekovei, Amit Verma	Nanosensors, Nanodevices & Applications (NNA)
1555		INHIBITIVE DETERMINATION OF CADMIUM IONS BY AN AMPEROMETRIC GLUCOSE BIOSENSOR: EFFECT OF GOLD NANOSTRUCTURES	Katazyna Blazevic, Natalija German, Asta Kausaite-Minkstiniene, Almira Ramanaviciene	Nanosensors, Nanodevices & Applications (NNA)
1653		Characteristics of a Nonlinear Temperature Sensor for Application in In-Sensor Computing Networks	Matej Horský, Sergey Krylov, Mohammad Dehghan, Roman stoklas, Tomáš Ščepka, Boris Hudec	Nanosensors, Nanodevices & Applications (NNA)
1804		NbTiN thin films: deposition, oxidation, and electrical resistivity	Tomáš Ščepka, Ján Fedor, Ján Šoltýs, Iuliia Vetrova, Pavol Neilinger, Martin Baránek, Samuel Kern, Miroslav Grajcar	Nanosensors, Nanodevices & Applications (NNA)

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1821		Application of a TiO ₂ Gas Sensor as a Component in Neural Networks	Pavol NEMEC, Martin Predanocy, Jaromír Klarák, Boris Hudec, Tomáš Ščepka, Róbert Andok	Nanosensors, Nanodevices & Applications (NNA)
1572		Construction of Zeptosecond Electron-Pulse-Train in Laser Induced Coherent Processes of Cherenkov Type	Hamlet Karo Avetissian, Garnik Felix Mkrtchian, Suren Vardges Sukiasyan	Quantum Computing & Ultrashort Laser Effects (QCUL)
1617		Features of Model Phonon Spectra of Crystals With A15 Structure	Ivan Nebola, Diana Kaynts, Olga Maksakova, Andrii Korneichuk	Superconductivity in Nanoscale & Mesoscopic Systems (SNMS)
1643		Optical Conductivity of Disordered Films for Superconducting Single-Photon Detectors	Pavol Neilinger, Samuel Kern, Martin Baránek, Magdaléna Poláčeková, Miroslav Grajcar	Superconductivity in Nanoscale & Mesoscopic Systems (SNMS)
1896		Temperature- and Excitation Wavelength-dependent Photoluminescence of Nitrogen- and Silicon-vacancy Colour Centres in Diamond	Iryna Kozak, Tibor Izsák, Lukáš Ondič, Andrii Kozak, Martin Hulman, Alexander Kromka, Marián Varga	Ultrawide Bandgap Materials & Photonics (UBMP)