MSN-2026 program

August 24, Monday

Time zone: GMT+5 (Moscow time +2 hours)

Youth Conference
"Functional Imaging of Nanomaterials"

11.00-17.00	*Registration, Kuibysheva str. 48, 7th floor*
10.00-12.00	*Visit to Ural Center for Shared Use "Modern Nanotechnology" UrFU, Kuibysheva str. 48, 2nd floor*
13.00	**L1. Dmitry Pelegov**, *Technion Israel Institute of Technology, Haifa, Israel* An introduction to rechargeable batteries: From early history to the present day
13.40	**L2. Vladimir Shur**, *Ural Federal University, Ekaterinburg, Russia* Discoveries of ferroelectricity: students' fundamental inputs
14.20	*Tea break*
14.40	**L3. Semyon Gorfman**, *Tel Aviv University, Tel Aviv, Israel* Crystallography of ferroelectrics: introduction
15.20	**L4. Alexander Kolobov**, *Herzen University, Saint-Petersburg, Russia* Amorphous chalcogenides in nanoelectronics and photonics: from memory devices to neuromorphic networks and beyond
16.15-18.00	*Excursion*
19.00-21.00	*Welcome party* *Onegin restaurant, Rozy Luxemburg str. 49, 15th floor*

August 25, Tuesday

Time zone: GMT+5 (Moscow time +2 hours)

08.30	***Registration, Kuibysheva str. 48, 7th floor***
09.00	*Opening, Kuibysheva str. 48, 7th floor*
	Session 1. Micro- and nano-domain engineering I **Chair: Sergey Lushnikov**
09.15	**I1. Vladimir Shur**, *Ural Federal University, Ekaterinburg, Russia* Domain wall orientation and domain shape in uniaxial ferroelectrics
09.40	**I2. Lyudmila Kokhanchik**, *Institute of Microelectronics Technology and High Purity Materials RAS, Chernogolovka, Russia* Domain engineering in the Y-cut lithium niobate-tantalate mixed crystal by using an electron beam irradiation
10.05	**I3. Andrei Akhmatkhanov**, *Ural Federal University, Ekaterinburg, Russia* Dendrite domain growth in single crystals of lithium niobate
10.30	**O1. Boris Sturman**, *Institute of Automation and Electrometry of RAS, Novosibirsk, Russia* On mechanisms of domain reversal by femtosecond light pulses in ferroelectrics
10.45	**O2. Andrey Ushakov**, *Ural Federal University, Ekaterinburg, Russia* Jump-like superfast domain kinetics in lithium niobate crystals by in situ in-bulk imaging in slanted-cut plate
11.00	*Tea break*
	Session 2. Fundamentals of ferroelectric and magnetic materials I **Chair: Vladimir Shur**
11.20	**I4. Sergey Lushnikov**, *Ioffe Institute, St. Petersburg, Russia* Short-range order dynamics in an optical spectroscopy of relaxor ferroelectrics
11.45	**I5. Ilya Shnaidshtein**, *Lomonosov Moscow State University, Moscow, Russia* Metastable polarization effects on caloric properties of uniaxial ferroelectrics
12.10	**I6. Andrei Telegin**, *Mikheev Institute of Metal Physics UB RAS, Ekaterinburg, Russia* From static to ultrafast magneto-optics in ferromagnetic semiconductors
12.35	**O3. Stanislav Shandarov**, *Tomsk State University of Control Systems and Radioelectronics, Tomsk, Russia* Radio pulses attendant on the pyroelectrically generated electron beams under heating and cooling cycles of lithium niobate crystals at atmospheric pressure

12.50	*Group photo and lunch* *Onegin restaurant, Rozy Luxemburg str. 49, 15th floor*
	Session 3. Characterization of micro- and nano-materials I **Chair: Ilya Shnaidshtein**
14.10	**I7. Oleksandr Ivasenko**, *Soochow University, Suzhou, China* Morphology control in ferroelectric microcrystals
14.35	**I8. Alexander Kuntsevich**, *Higher School of Economics, Moscow, Russia* All-optical picoacoustic probing of nanostructures and 2D materials
15.00	**O4. Yuri Vysokikh**, *MTEON, Moscow, Russia* Analytical and technological equipment for research and small-scale production
15.15	**O5. Andrei Shubin**, *Ostec, Moscow, Russia* New analytical instruments of Russian production
15.30	**O6. Veronika Dmitrieva**, *IMC Group, Moscow, Russia* IMC analytical instruments for advanced characterization of functional materials and nanoscale systems
15.45	*Tea break*
	Session 4. Fundamentals of ferroelectric and magnetic materials II **Chair: Oleksandr Ivasenko**
16.05	**I9. Petr Yudin**, *Kutateladze Institute of Thermophysics SB RAS, Novosibirsk, Russia* Actuation and energy conversion using nonclassical electrostrictor $(Zr_{0.1},Ce_{0.9})O_2$
16.30	**O7. Nikita Derets**, *Ioffe Institute, St. Petersburg, Russia* Anisotropy of quasielastic light scattering in the Brillouin spectra of $Na_{1/2}Bi_{1/2}TiO_3$ single crystals
16.45	**O8. Elizaveta Kalika**, *Moscow Institute of Physics and Technology, Dolgoprudny, Russia* Influence of substitution atoms on the functional properties of ferroelectric aluminum nitride films
17.00 - 18.00	**Short oral talks** **Chair: Andrei Akhmatkhanov**
18.00 - 19.30	**Poster session**, Kuibysheva str. 48, 5th floor
19.30	*End of sessions*

August 26, Wednesday

Time zone: GMT+5 (Moscow time +2 hours)

	Session 5. Characterization of micro- and nano-materials II **Chair: Alexander Vtyurin**
9.00	**I10. Alexander Krylov**, *Kirensky Institute of Physics SB RAS, Krasnoyarsk, Russia* Coexistence of two structural phases in a single DUT-8 (Ni) microcrystal using Raman imaging
9.25	**I11. Elena Mishina**, *MIREA-Russian Technological University, Moscow, Russia* 2D materials for THz photonics
9.50	**O9. Irina Zaytseva**, *Institute of Automation and Electrometry SB RAS, Novosibirsk, Russia* Probing protein secondary structure via the Amide I band by IR spectroscopy
10.05	**O10. Svetlana Krylova**, *Kirensky Institute of Physics SB RAS, Krasnoyarsk, Russia* Vibrational spectra of hybrid ferroelectric $(Me_2NH_2)[NaFe(CN)_5(NO)]$ crystal
10.20	**O11. Yuhang Wang**, *Soochow University, Suzhou, China* Bipolar membranes reveal surface-hydroxyl-structure-dependent water dissociation mechanism
10.35	**O12. Elena Pelegova**, *Tel Aviv University, Tel Aviv, Israel* Investigation of the phase and domain structure evolution in ferroelectrics and ferroelastics using birefringence microscopy
10.50	*Tea break*
	Session 6. Micro- and nano-domain engineering II **Chair: Elena Mishina**
11.10	**I12. Anton Turygin**, *Ural Federal University, Ekaterinburg, Russia* Kinetics of domain structure during local switching in crystals with C_2 symmetry
11.35	**I13. Nail Inogamov**, *Landau Institute for Theoretical Physics RAS, Moscow, Russia* Creation of microstructures by weak and moderate laser nanosecond heating of metals in a large-crystalline state

12.00	**O13. Evgeny Saveliev**, *Ural Federal University, Ekaterinburg, Russia* Formation of self-assembled stripe domain structures in the surface layer of lithium niobate crystals modified by proton exchange
12.15	**O14. Vera Shikhova**, *Ural Federal University, Ekaterinburg, Russia* Domain switching by femtosecond NIR laser irradiation in bulk of strontium barium niobate single crystals
12.30	**O15. Dmitriy Masalkin**, *Perm State University, Perm, Russia* Lithium niobate surface structure activated by oxygen plasma
12.45	*Lunch* *Onegin restaurant, Rozy Luxemburg str. 49, 15th floor*
	Session 7. Ceramics and thin films **Chair: Anastasia Chouprik**
14.00	**I14. Jose Antonio Eiras**, *São Carlos Federal University, São Carlos, Brazil* Defect engineering and microstructural control for high performance lead free energy storage ceramics
14.25	**I15. Alexander Vtyurin**, *Kirensky Institute of Physics SB RAS, Krasnoyarsk, Russia* To the interpretation of Raman spectra in perovskite-like ceramics
14.50	**O16. Vladimir Bystrov**, *Institute of Mathematical Problems of Biology RAS, Pushchino, Russia* Electric potential and electron work function of the hydroxyapatite surface layer
15.05	**O17. Arseny Kiriakov**, *Institute of Solid State Chemistry RAS, Ekaterinburg, Russia* Spectral modification of YAG:Ce nanoceramics with carbon nanoparticles
15.20	**O18. Vladislav Yakushev**, *MIREA-Russian Technological University, Moscow, Russia* Magnetic anisotropy of thin Ni films grown by atomic layer deposition studied by MOKE, SQUID, and MFM
15.35	**O19. Vitaly Demin**, *Perm State National Research University, Perm, Russia* Filtration problem for the saturation of porous composite materials by liquid mixtures during sol-gel technology realization
15.50	**O20. Leonid Korotkov**, *Voronezh State Technical University, Voronezh, Russia* The effect of crystal lattice defects on the infra-low-frequency internal friction of modified PZT ceramics
16.05	*Tea break*

	Session 8. Application of ferroic materials **Chair: Alexander Krylov**
16.25	**I16. Anastasia Chouprik**, *Moscow Institute of Physics and Technology, Dolgoprudny, Russia* Role of non-ferroelectric phases and ferroelectric texture in the reliability of HZO memory devices
16.50	**I17. Maria Chuvakova**, *Ural Federal University, Ekaterinburg, Russia* Periodical poling in optical waveguides in lithium niobate single crystals for integrated optical applications
17.15	**O21. Zeke Liu**, *Soochow University, Suzhou, China* Infrared quantum dot inks and optoelectronic applications
17.30	**O22. Fedor Fadeyev**, *Ural State Medical University, Ekaterinburg, Russia* Exposure to a constant magnetic field does not interfere the differentiation and maturation of human monocyte-derived dendritic cells loaded with maghemite nanoparticles
17.45	**O23. Dmitry Kuznetsov**, *Ural Federal University, Ekaterinburg, Russia* Fabrication of hierarchical micro- and nanostructures on aluminum alloy via nanosecond laser treatment and their capillary properties
18.00	**O24. Anna Vasileva**, *St. Petersburg State University, St. Petersburg, Russia* Self-assembled thin polyaniline films for electrochromic application
18.15	*End of sessions*
19.00	*Banquet* *Onegin restaurant, Rozy Luxemburg str. 49, 15th floor*

August 27, Thursday

Time zone: GMT+5 (Moscow time +2 hours)

	Session 9. Characterization of micro- and nano-materials III **Chair: Roman Yusupov**
9.00	**I18. Alexey Pugachev**, *Institute of automation and electrometry SB RAS, Novosibirsk, Russia* Raman scattering as a tool for studying the order parameter and mechanical stresses in $Ba_xSr_{(1-x)}TiO_3$
9.25	**O25. Yaroslav Barnash**, *St. Petersburg Nuclear Physics Institute, St. Petersburg, Russia* Dynamic features of 5CB liquid crystals modified with non-carbon MoS_2 and WS_2 nanotubes
9.40	**O26. Valentin Guryev**, *Kurchatov Institute, Moscow, Russia* Angular dependences of critical fields in composite REBCO coated conductors
9.55	**O27. Sergey Koryagin**, *St. Petersburg Nuclear Physics Institute, St. Petersburg, Russia* Modification of free surface energy considering substrate type for liquid crystal molecule alignment
10.10	**O28. Ilya Morozov**, *Institute of Continuous Media Mechanics Perm, Russia* Machine learning and atomic force microscopy in physical-mechanical surface analysis
10.25	**O29. Irina Dzhun**, *Lomonosov Moscow State University, Moscow, Russia* FMR characteristics of different types IrMn-based exchange biased structures
10.40	**O30. Aleksei Kalinichev**, *St. Petersburg State University, St. Petersburg, Russia* Characterization of materials for nanophotonic devices using micro-photoluminescence spectroscopy
10.55	*Tea break*

	Session 10. Multiferroic and magnetic materials I **Chair: Alexey Pugachev**
11.15	**I19. Ekaterina Elfimova**, *Ural Federal University, Ekaterinburg, Russia* Tuning the dynamic magnetic response of magnetoactive composites via nanoparticle clustering
11.40	**I20. Rinat Mamin**, *Zavoisky Physical-Technical Institute RAS, Kazan, Russia* Features of the conductive and magnetic properties of the heterostructures on ferroelectrics
12.05	**I21. Zukhra Gareeva**, *Institute of Molecule and Crystal Physics, Ufa, Russia* Spin dynamics and magnetogalvanic current in metallic antiferromagnets. CuMnAs, Mn_2Au
12.30	**O31. Evgeny Skorokhodov**, *Institute for Physics of Microstructures RAS, Nizhny Novgorod, Russia* Investigation of vortex imprinting in a ferromagnet/antiferromagnet system
12.45	**O32. Stanislav Zabotnov**, *Lomonosov Moscow State University, Moscow, Russia* Structural and magnetic properties of laser-fabricated components for magnetic biosensorics
13.00	*Lunch* *Onegin restaurant, Rozy Luxemburg str. 49, 15th floor*
	Session 11. Multiferroic and magnetic materials II **Chair: Zukhra Gareeva**
14.15	**I22. Roman Yusupov**, *Kazan Federal University, Kazan, Russia* Wrinkles and magnetic flux trapping in graphite nanoflakes: a possible source and manifestation of room-temperature superconductivity
14.40	**O33. Anna Pasynkova**, *Mikheev Institute of Metal Physics UB RAS, Ekaterinburg, Russia* Modeling of the magnetoimpedance effect in amorphous ribbons with non-uniform thickness distribution of magnetic anisotropy
14.55	**O34. Grigory Melnikov**, *Ural Federal University, Ekaterinburg, Russia* α-Fe and Ni ensembles of magnetic nanoparticles: magnetic hysteresis, effects of size distribution and magnetocrystalline anisotropy axis dispersion
15.10	**O35. Semyon Baidak**, *Mikheev Institute of Metal Physics UB RAS, Ekaterinburg, Russia* Electronic structure and thermoelectric properties of $HfTe_2$ and $TiTe_2$ semimetals under pressure
15.25	*Closing*

Short oral talks, August 25

SO1/P7. **Nikita Solovyev**, *Ural Federal University, Ekaterinburg, Russia*
First-principles study of magnetic and half-metallic properties of $Mn_2Co_{1-x}Ni_xSn$ and $CoMn_{2-x}Fe_xSn$ alloys with spin polarization

SO2/P9. **Kirill Zhivetev**, *Moscow Institute of Physics and Technology, Dolgoprudny, Russia*
Structural mechanism of reentrant-like phase transition in $BiScO_3$-$PbTiO_3$

SO3/P13. **Gregory Shnaidshtein**, *Tver State University, Tver, Russia,*
The effect of crystallization in a corona discharge field on the structure and properties of polyvinylidene fluoride films

SO4/P18. **Daria Zolotorenko**, *Institute of Automation and Electrometry SB RAS, Novosibirsk, Russia*
Characterization of microscale elastic properties of biological tissues as a function of hydration using combined Brillouin and Raman spectroscopy

SO5/P19. **Elena Abramova**, *Ural Federal University, Ekaterinburg, Russia,*
Formation of domain pattern in near-congruent lithium tantalate crystals by electron beam irradiation

SO6/P20. **Antonina Bayankina**, *Ural Federal University, Ekaterinburg, Russia,*
Creation of periodic domain structure in $KTiOPO_4$ single crystals for optical parametric oscillators

SO7/P21. **Evgeny Chernousov**, *Ural Federal University, Ekaterinburg, Russia,*
Peculiarities of the domain structure evolution during polarization reversal using fringing field effect in 36Y-cut LN crystals

SO8/P24. **Ilya Kipenko**, *Ural Federal University, Ekaterinburg, Russia,*
Superfast domain walls, Barkhausen pulses, dendrite structures and domain growth in the bulk of uniaxial ferroelectrics

SO9/P25. **Semyon Melnikov**, *Ural Federal University, Ekaterinburg, Russia,*
Domain shape transformation during backswitching under the action of depolarization field in lithium niobate crystal

S10/P27. **Violetta Safina**, *Ural Federal University, Ekaterinburg, Russia,*
Influence of thickness on charge transport and piezoelectricity in ultrathin RF-sputtered bismuth ferrite films

SO11/P53. **Nikita Shulaev**, *School of Natural Sciences Tyumen State University, Tyumen, Russia*
Synthesis and study of Al:Ta_2O_5 thin films: structure and properties

SO12/P55. **Lev Amromin**, *Ural Federal University, Ekaterinburg, Russia,*
Influence of the ferroelectric domain structure in lithium niobate and SBN crystals on the morphology of stem cells

SO13/P60. **Vera Pakhomova**, *Krasnoyarsk Science Center SB RAS, Krasnoyarsk, Russia*
Glass-ceramic microspheres for magnetoresonance hyperthermia

SO14/P61. Polina Paletskikh, *Ural Federal University, Ekaterinburg, Russia,*
Infrared-extended photoresponse in hyperdoped silicon diode

SO15/P62. Daria Shivarova, *Ural Federal University, Ekaterinburg, Russia,*
Role of nanosecond laser processing parameters in controlling capillary transport on structured aluminum surfaces

SO16/P63. Daria Tkachuk, *Ural Federal University, Ekaterinburg, Russia,*
Pulsed laser melting for Si hyperdoping with transition metals

Poster session, August 25

Section 1. Fundamentals of ferroelectric and magnetic materials

P1. Ivan Manko, *Ural Federal University, Ekaterinburg, Russia,*
Topological features of the electronic structure and neutron scattering in $Mn_{1-x}Rh_xSi$ with low rhodium concentrations

P2. Stepan Nuzhin, *Ural Federal University, Ekaterinburg, Russia,*
Phase states with competing interactions in a model orthonickelate $RNiO_3$ within the mean-field approximation

P3. Yury Panov, *Ural Federal University, Ekaterinburg, Russia,*
Monte Carlo simulation of mixed spin-orbit ordering

P4. Sergey Pavlov, *Lomonosov State University, Moscow, Russia,*
Construction and classification of phenomenological models of phase transitions with three one-component order parameters by methods of catastrophe theory

P5. Evgeny Rumyantsev, *Ural Federal University, Ekaterinburg, Russia,*
Some new results in the Kolmogorov-Mehl-Johnson-Avrami problem

P6. Vitaly Ryumshin, *Ural Federal University, Ekaterinburg, Russia,*
Magnetic structures in a model nickelate: Monte Carlo study

P7. Nikita Solovyev, *Ural Federal University, Ekaterinburg, Russia,*
First-principles study of magnetic and half-metallic properties of $Mn_2Co_{1-x}Ni_xSn$ and $CoMn_{2-x}Fe_xSn$ alloys with spin polarization

P8. Darya Yasinskaya, *Ural Federal University, Ekaterinburg, Russia,*
Two-step magnetism from frozen disorder: a Monte Carlo study of $LiCu_3O_3$ on a depleted quasi-2D lattice

P9. Kirill Zhivetev, *Moscow Institute of Physics and Technology, Dolgoprudny, Russia,*
Structural mechanism of reentrant-like phase transition in $BiScO_3$-$PbTiO_3$

P10. Dmitry Mekhonoshin, *Ural Federal University, Ekaterinburg, Russia,*
The influence of domain walls pinning sites on the self-organization of magnetic domains in uniaxial films in an oscillating magnetic field

Section 2. Characterization of micro- and nano-materials

P11. Anastasia Ostaltsova, *Ufa University of Science and Technology, Ufa, Russia,*
Polymer films with silver iodide nanoparticles are an excellent basis for sensor systems

P12. Sofia Pudova, *Institute of Automation and Electrometry SB RAS, Novosibirsk, Russia,*
Protein characterization in biological fluids using Raman spectroscopy and centrifuge filters

P13. Gregory Shnaidshtein, *Tver State University, Tver, Russia,*
The effect of crystallization in a corona discharge field on the structure and properties of polyvinylidene fluoride films

P14. Vladislav Umylin, *National University of Science and Technology MISIS, Moscow, Russia,*
Investigation of the temperature dependences of the conductive coatings on the langasite crystals

P15. Xinghao Wang, *Qilu University of Technology, Jinan, China,*
Formation and investigation of photonic metastructures by two-photon lithography

P16. Vladimir Yuzhakov, *Ural Federal University, Ekaterinburg, Russia,*
Quantitative assessment of PVDF phase composition using low-frequency Raman spectroscopy

P17. Irina Zaytseva, *Institute of Automation and Electrometry SB RAS, Novosibirsk, Russia,*
Vibrational spectroscopy of triglycine as a model for peptide-based materials

P18. Daria Zolotorenko, *Institute of Automation and Electrometry SB RAS, Novosibirsk, Russia,*
Characterization of microscale elastic properties of biological tissues as a function of hydration using combined Brillouin and Raman spectroscopy

Section 3. Micro- and nano-domain engineering

P19. Elena Abramova, *Ural Federal University, Ekaterinburg, Russia,*
Formation of domain pattern in near-congruent lithium tantalate crystals by electron beam irradiation

P20. Antonina Bayankina, *Ural Federal University, Ekaterinburg, Russia,*
Creation of periodic domain structure in $KTiOPO_4$ single crystals for optical parametric oscillators

P21. Evgeny Chernousov, *Ural Federal University, Ekaterinburg, Russia,*
Peculiarities of the domain structure evolution during polarization reversal using fringing field effect in 36Y-cut LN crystals

P22. Evgeniy Greshnyakov, *Ural Federal University, Ekaterinburg, Russia,*
Domain structure of lead halide perovskite $CsPbBr_3$

P23. Maria Kholodenko, *Ural Federal University, Ekaterinburg, Russia,*
Local polarization reversal by electron beam irradiation in single-domain SBN single crystals

P24. Ilya Kipenko, *Ural Federal University, Ekaterinburg, Russia,*
Superfast domain walls, Barkhausen pulses, dendrite structures and domain growth in the bulk of uniaxial ferroelectrics

P25. Semyon Melnikov, *Ural Federal University, Ekaterinburg, Russia,*
Domain shape transformation during backswitching under the action of depolarization field in lithium niobate crystal

P26. Anastasia Meng, *Ural Federal University, Ekaterinburg, Russia,*
Current-limited local polarization switching in lithium niobate crystals

P27. Violetta Safina, *Ural Federal University, Ekaterinburg, Russia,*
Influence of thickness on charge transport and piezoelectricity in ultrathin RF-sputtered bismuth ferrite films

P28. Violetta Safina, *Ural Federal University, Ekaterinburg, Russia,*
Kinetics of the domain structure in inhomogeneous electric field in lithium niobate thin films

P29. Vera Shikhova, *Ural Federal University, Ekaterinburg, Russia,*
Formation of regular domain structures in a spatially inhomogeneous electric field created by system of electrodes in SBN single crystals

P30. Anton Turygin, *Ural Federal University, Ekaterinburg, Russia,*
Evolution of the domain structure during local polarization reversal in lead germanate single crystal

P31. Andrey Ushakov, *Ural Federal University, Ekaterinburg, Russia,*
Domain structure evolution in lead germanate crystal under the action of femtosecond near-infrared laser irradiation

P32. Vladimir Vasipullin, *Ural Federal University, Ekaterinburg, Russia,*
Dynamics of local charge injection in nonpolar Y-cut lithium niobate single crystal

Section 4. Multiferroic and magnetic materials

P33. Anastasia Dryagina, *Ural Federal University, Ekaterinburg, Russia,*
Effect of pore filling factor on the magnetic properties of Ni nanowires in aluminum oxide templates

P34. Anastasia Feshchenko, *Ural Federal University, Ekaterinburg, Russia,*
The effect of doping on the magnetic anisotropy of Cr-Mn antiferromagnet and the effect of exchange bias in films based on it

P35. Viktoria Filippova, *Institute of Physics of Molecules and Crystals, Ufa, Russia,*
Topological magnetic states in ferromagnetic multilayers

P36. Elena Grokhotova, *Ural Federal University, Ekaterinburg, Russia,*
Textured magnetoactive composites: Modeling of dynamic magnetic response

P37. Nikita Gruzdev, *Mikheev Institute of Metal Physics UB RAS, Ekaterinburg, Russia,*
Optical properties and magnetic moments of the topological spin semimetallic FeRhCrGe and FeRhCrSi Heusler alloys

P38. Maksim Kalinin, *Ural Federal University, Ekaterinburg, Russia,*
Magnetoelectric effect in thin film composites of Fe10Ni90/PVDF type on rigid and flexible substrates

P39. Elvira Lopatko, *Ural Federal University, Ekaterinburg, Russia,*
Topological electronic transition in the semimetal CoSi

P40. Rinat Mamin, *Zavoisky Physical-Technical Institute RAS, Kazan, Russia,*
Magnetoelectric polarization and effect of external electric field on the properties of 2D Néel skyrmions

P41. Svetlana Semenova, *Ural Federal University, Ekaterinburg, Russia,*
Structure and magnetic properties of thin films of magnetostrictive alloy Fe_xAl_{100-x}

Section 5. Ceramics and thin films

P42. Tatyana Andryushchenko, *Kirensky Institute of Physics, Krasnoyarsk, Russia,*
Determination of the termination layer of epitaxial MAX films $(Cr_{1-x}Sc_x)AlC$ using Auger electron spectroscopy

P43. Vladimir Bystrov, *Institute of Mathematical Problems of Biology RAS, Pushchino, Russia*,
Properties of 2D-materials nanostructures influenced by ferroelectric domain

P44. Elena Ievleva, *Voronezh State Technical University, Voronezh, Russia,*
Structure, microstructure, and dielectric permittivity of $BaTiO_3$ after intensive mechanical treatment

P45. Yan Lee, *Kurchatov Institute, Moscow, Russia,*
Study of colloidal method of production planar ceramic scintillators

P46. Sergey Lyaschenko, *Kirensky Institute of Physics SB RAS, Krasnoyarsk, Russia,*
The influence of substrate on the structure of epitaxial MAX films $(Cr_{1-x}Sc_x)_2AlC$ (x = 0…1)

P47. Konstantin Nagornykh, *Institute of Radio Engineering and Electronics RAS, Moscow, Russia,*
Electrophysical characteristics of thin films of strontium iridate $SrIrO_3$ and manganite $LaSrMnO_3$ grown on a piezoelectric (110)$Pb(Mg_{1/3}Nb_{2/3})O_3$-$PbTiO_3$ substrate

P48. Gennady Patrin, *Siberian Federal University, Krasnoyarsk, Russia,*
The role of the interface in the formation of magnetic properties of bilayer films in the Fe-Bi system

P49. Gennady Patrin, *Siberian Federal University, Krasnoyarsk, Russia,*
Magnetic properties of two-layer films in FeNi-V_2O_3 system

P50. Ilya Savichev, *Moscow Institute of Physics and Technology, Dolgoprudny, Russia,*
Reactive magnetron sputtering of aluminum nitride-based films

P51. Alexey Sergeev, *Kurchatov Institute, Moscow, Russia,*
Photocurable ceramic slurries for production of bulk and complex-shape object via stereolithography 3D printing

P52. Artyom Shcherbakov, *Moscow Institute of Physics and Technology, Dolgoprudny, Russia,*
Effect of switching kinetics and charge injection on the splitting of the I-V curves of $Hf_{0.5}Zr_{0.5}O_2$-based capacitors

P53. Nikita Shulaev, *Tyumen State University, Tyumen, Russia,*
Synthesis and study of Al:Ta_2O_5 thin films: structure and properties

P54. Lyubov Tonova, *Kurchatov Institute, Moscow, Russia,*
Effect of sintering additives on the properties of scintillation ceramics $(Gd,Y,Lu)_3Al_2Ga_3O_{12}$ (GYLAGG:Ce)

Section 6. Bioinspired materials

P55. Lev Amromin, *Ural Federal University, Ekaterinburg, Russia,*
Influence of the ferroelectric domain structure in lithium niobate and SBN crystals on the morphology of stem cells

P56. Anastasiia Omelchenko, *Institute of Automation and Electrometry SB RAS, Novosibirsk, Russia,*
The vibrational properties of L-phenylalanine and L-phenylalanine-d8 by Raman spectroscopy

Section 7. Application of ferroic materials

P57. Anastasia Chouprik, *Moscow Institute of Physics and Technology, Dolgoprudny, Russia,*
Effect of charge injection on the memory window of a $Hf_{0.5}Zr_{0.5}O_2$-based FeFET with a ferroelectric capacitor in the gate stack

P58. Olga Kryukova, *Krasnoyarsk Science Center SB RAS, Krasnoyarsk, Russia,*
Magnetic $NiFe_2O_4@SiO_2@NH_2$ composites for magnetoresonance hyperthermia

P59. Ilya Margolin, *Moscow Institute of Physics and Technology, Dolgoprudny, Russia,*
Coexistence of non-volatile memory and synaptic plasticity in a ferroelectric $Hf_xZr_{1-x}O_2$-based memristor

P60. Vera Pakhomova, *Krasnoyarsk Science Center SB RAS, Krasnoyarsk, Russia,*
Glass-ceramic microspheres for magnetoresonance hyperthermia

P61. Polina Paletskikh, *Ural Federal University, Ekaterinburg, Russia,*
Infrared-extended photoresponse in hyperdoped silicon diode

P62. Daria Shivarova, *Ural Federal University, Ekaterinburg, Russia,*
Role of nanosecond laser processing parameters in controlling capillary transport on structured aluminum surfaces

P63. Daria Tkachuk, *Ural Federal University, Ekaterinburg, Russia,*
Pulsed laser melting for Si hyperdoping with transition metals