

MSN-2026 program

August 24, Monday

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

Youth Conference

“Functional Imaging of Nanomaterials”

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

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	11. Vladimir Shur , <i>Ural Federal University, Ekaterinburg, Russia</i> Domain wall orientation and domain shape in uniaxial ferroelectrics
09.40	12. Lyudmila Kokhanchik , <i>Institute of Microelectronics Technology and High Purity Materials RAS, Chernogolovka, Russia</i> Domain engineering in the Y-cut lithium niobate-tantalate mixed crystal by using an electron beam irradiation
10.05	13. Andrei Akhmatkhanov , <i>Ural Federal University, Ekaterinburg, Russia</i> Dendrite domain growth in single crystals of lithium niobate
10.30	01. Boris Sturman , <i>Institute of Automation and Electrometry of RAS, Novosibirsk, Russia</i> On mechanisms of domain reversal by femtosecond light pulses in ferroelectrics
10.45	02. Andrey Ushakov , <i>Ural Federal University, Ekaterinburg, Russia</i> 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	14. Sergey Lushnikov , <i>Ioffe Institute, St. Petersburg, Russia</i> Short-range order dynamics in an optical spectroscopy of relaxor ferroelectrics
11.45	15. Ilya Shnidshtein , <i>Lomonosov Moscow State University, Moscow, Russia</i> Metastable polarization effects on caloric properties of uniaxial ferroelectrics
12.10	16. Andrei Telegin , <i>Mikheev Institute of Metal Physics UB RAS, Ekaterinburg, Russia</i> From static to ultrafast magneto-optics in ferromagnetic semiconductors
12.35	03. Stanislav Shandarov , <i>Tomsk State University of Control Systems and Radioelectronics, Tomsk, Russia</i> Radio pulses attendant on the pyroelectrically generated electron beams under heating and cooling cycles of lithium niobate crystals at atmospheric pressure

12.50	<i>Group photo and lunch</i> <i>Onegin restaurant, Rozy Luxemburg str. 49, 15th floor</i>
	Session 3. Characterization of micro- and nano-materials I Chair: Ilya Shnaidshtein
14.10	I7. Oleksandr Ivasenko , <i>Soochow University, Suzhou, China</i> Morphology control in ferroelectric microcrystals
14.35	I8. Alexander Kuntsevich , <i>Higher School of Economics, Moscow, Russia</i> All-optical picoacoustic probing of nanostructures and 2D materials
15.00	O4. Yuri Vysokikh , <i>MTEON, Moscow, Russia</i> Analytical and technological equipment for research and small-scale production
15.15	O5. Andrei Shubin , <i>Ostec, Moscow, Russia</i> New analytical instruments of Russian production
15.30	O6. Veronika Dmitrieva , <i>IMC Group, Moscow, Russia</i> IMC analytical instruments for advanced characterization of functional materials and nanoscale systems
15.45	<i>Tea break</i>
	Session 4. Fundamentals of ferroelectric and magnetic materials II Chair: Alexander Kuntsevich
16.05	I9. Petr Yudin , <i>Kutateladze Institute of Thermophysics SB RAS, Novosibirsk, Russia</i> Actuation and energy conversion using the nonclassical electrostrictor (Zr _{0.1} ,Ce _{0.9})O ₂
16.30	O7. Nikita Derets , <i>Ioffe Institute, St. Petersburg, Russia</i> 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 , <i>Moscow Institute of Physics and Technology, Dolgoprudny, Russia</i> 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, 5 th floor
19.30	<i>End of sessions</i>

August 26, Wednesday

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

	Session 5. Characterization of micro- and nano-materials II Chair: Oleksandr Ivasenko
9.00	I10. Alexander Krylov , <i>Kirensky Institute of Physics SB RAS, Krasnoyarsk, Russia</i> Coexistence of two structural phases in a single DUT-8 (Ni) microcrystal using Raman imaging
9.25	I11. Elena Mishina , <i>MIREA-Russian Technological University, Moscow, Russia</i> 2D materials for THz photonics
9.50	O9. Irina Zaytseva , <i>Institute of Automation and Electrometry SB RAS, Novosibirsk, Russia</i> Probing protein secondary structure via the Amide I band by IR spectroscopy
10.05	O10. Svetlana Krylova , <i>Kirensky Institute of Physics SB RAS, Krasnoyarsk, Russia</i> Vibrational spectra of hybrid ferroelectric (Me ₂ NH ₂)[NaFe(CN) ₅ (NO)] crystal
10.20	O11. Yuhang Wang , <i>Soochow University, Suzhou, China</i> Bipolar membranes reveal surface-hydroxyl-structure-dependent water dissociation mechanism
10.35	O12. Elena Pelegova , <i>Tel Aviv University, Tel Aviv, Israel</i> Investigation of phase and domain evolution in ferroelectrics and ferroelastics using birefringence microscopy
10.50	<i>Tea break</i>
	Session 6. Micro- and nano-domain engineering II Chair: Elena Mishina
11.10	I12. Anton Turygin , <i>Ural Federal University, Ekaterinburg, Russia</i> Kinetics of domain structure during local switching in TGS and Bi ₄ Ti ₃ O ₁₂ crystals
11.35 online	I13. Nail Inogamov , <i>Landau Institute for Theoretical Physics RAS, Moscow, Russia</i> Creation of microstructures by weak and moderate laser nanosecond heating of metals in a large-crystalline state

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

	Session 8. Application of ferroic materials Chair: Alexander Krylov
16.10	I16. Rinat Mamin , <i>Zavoisky Physical-Technical Institute RAS, Kazan, Russia</i> Features of the conductive and magnetic properties of the heterostructures on ferroelectrics
16.35	I17. Anastasia Chouprik , <i>Moscow Institute of Physics and Technology, Dolgoprudny, Russia</i> Role of non-ferroelectric phases and ferroelectric texture in the reliability of HZO memory devices
17.00	I18. Maria Chuvakova , <i>Ural Federal University, Ekaterinburg, Russia</i> Periodical poling in optical waveguides in lithium niobate single crystals for integrated optical applications
17.25	O20. Zeke Liu , <i>Soochow University, Suzhou, China</i> Infrared quantum dot inks and optoelectronic applications
17.40	O21. Fedor Fadeyev , <i>Ural State Medical University, Ekaterinburg, Russia</i> Exposure to a constant magnetic field does not interfere the differentiation and maturation of human monocyte-derived dendritic cells loaded with maghemite nanoparticles
17.55	O22. Dmitry Kuznetsov , <i>Ural Federal University, Ekaterinburg, Russia</i> Fabrication of hierarchical micro- and nanostructures on aluminum alloy via nanosecond laser treatment and their capillary properties
18.10	O23. Anna Vasileva , <i>St. Petersburg State University, St. Petersburg, Russia</i> Self-assembled thin polyaniline films for electrochromic application
18.25	<i>End of sessions</i>
19.00	<i>Banquet</i> <i>Onegin restaurant, Rozy Luxemburg str. 49, 15th floor</i>

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	I19. Alexey Pugachev , <i>Institute of automation and electrometry SB RAS, Novosibirsk, Russia</i> Raman scattering as a tool for studying the order parameter and mechanical stresses in $\text{Ba}_x\text{Sr}_{(1-x)}\text{TiO}_3$
9.25	O24. Yaroslav Barnash , <i>St. Petersburg Nuclear Physics Institute, St. Petersburg, Russia</i> Dynamic features of 5CB liquid crystals modified with non-carbon MoS_2 and WS_2 nanotubes
9.40	O25. Valentin Guryev , <i>Kurchatov Institute, Moscow, Russia</i> Angular dependences of critical fields in composite REBCO coated conductors
9.55	O26. Sergey Koryagin , <i>St. Petersburg Nuclear Physics Institute, St. Petersburg, Russia</i> Modification of free surface energy considering substrate type for liquid crystal molecule alignment
10.10	O27. Ilya Morozov , <i>Institute of Continuous Media Mechanics Perm, Russia</i> Machine learning and atomic force microscopy in physical-mechanical surface analysis
10.25	O28. Irina Dzhun , <i>Lomonosov Moscow State University, Moscow, Russia</i> FMR characteristics of different types IrMn-based exchange biased structures
10.40	O29. Aleksei Kalinichev , <i>St. Petersburg State University, St. Petersburg, Russia</i> Characterization of materials for nanophotonic devices using micro-photoluminescence spectroscopy
10.55	<i>Tea break</i>

	Session 10. Multiferroic and magnetic materials I Chair: Alexey Pugachev
11.15	I20. Ekaterina Elfimova , <i>Ural Federal University, Ekaterinburg, Russia</i> Tuning the dynamic magnetic response of magnetoactive composites via nanoparticle clustering
11.40	I21. Zukhra Gareeva , <i>Institute of Molecule and Crystal Physics, Ufa, Russia</i> Spin dynamics and magnetogalvanic current in metallic antiferromagnets. CuMnAs, Mn ₂ Au
12.05	O30. Evgeny Skorokhodov , <i>Institute for Physics of Microstructures RAS, Nizhny Novgorod, Russia</i> Investigation of vortex imprinting in a ferromagnet/antiferromagnet system
12.20	O31. Stanislav Zabotnov , <i>Lomonosov Moscow State University, Moscow, Russia</i> Structural and magnetic properties of laser-fabricated components for magnetic biosensorics
12.35	O32. Anna Pasyunkova , <i>Mikheev Institute of Metal Physics UB RAS, Ekaterinburg, Russia</i> Modeling of the magnetoimpedance effect in amorphous ribbons with non-uniform thickness distribution of magnetic anisotropy
12.50	<i>Lunch</i> <i>Onegin restaurant, Rozy Luxemburg str. 49, 15th floor</i>
	Session 11. Multiferroic and magnetic materials II Chair: Zukhra Gareeva
14.00	I22. Roman Yusupov , <i>Kazan Federal University, Kazan, Russia</i> Wrinkles and magnetic flux trapping in graphite nanoflakes: a possible source and manifestation of room-temperature superconductivity
14.25	O33. Grigory Melnikov , <i>Ural Federal University, Ekaterinburg, Russia</i> α -Fe and Ni ensembles of magnetic nanoparticles: magnetic hysteresis, effects of size distribution and magnetocrystalline anisotropy axis dispersion
14.40	O34. Semyon Baidak , <i>Mikheev Institute of Metal Physics UB RAS, Ekaterinburg, Russia</i> Electronic structure and thermoelectric properties of HfTe ₂ and TiTe ₂ semimetals under pressure
14.55	<i>Closing</i>

Short oral talks, August 25

- SO1/P6. Nikita Solovyev**, *Ural Federal University, Ekaterinburg, Russia*
First-principles study of magnetic and half-metallic properties of $\text{Mn}_2\text{Co}_{1-x}\text{Ni}_x\text{Sn}$ and $\text{CoMn}_{2-x}\text{Fe}_x\text{Sn}$ alloys with spin polarization
- SO2/P8. Kirill Zhivetev**, *Moscow Institute of Physics and Technology, Dolgoprudny, Russia*
Structural mechanism of reentrant-like phase transition in $\text{BiScO}_3\text{-PbTiO}_3$
- SO3/P13. Gregory Shnaidstein**, *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, Novosibirsk, Russia*
Characterization of microscale elastic properties of biological tissues as a function of hydration using combined Brillouin and Raman spectroscopy
- SO5/P20. Antonina Bayankina**, *Ural Federal University, Ekaterinburg, Russia*,
Creation of periodic domain structure in KTiOPO_4 single crystals for optical parametric oscillators
- SO6/P23. Ilya Kipenko**, *Ural Federal University, Ekaterinburg, Russia*,
Superfast domain walls, Barkhausen pulses, dendrite structures and domain growth in the bulk of uniaxial ferroelectrics
- SO7/P24. Semyon Melnikov**, *Ural Federal University, Ekaterinburg, Russia*,
Domain shape transformation during backswitching under the action of depolarization field in lithium niobate crystal
- SO8/P26. Violetta Safina**, *Ural Federal University, Ekaterinburg, Russia*,
Influence of thickness on charge transport and piezoelectricity in ultrathin RF-sputtered bismuth ferrite films
- SO9/P53. Nikita Shulaev**, *Tyumen State University, Tyumen, Russia*
Synthesis and study of $\text{Al:Ta}_2\text{O}_5$ thin films: structure and properties
- SO10/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
- SO11/P60. Vera Pakhomova**, *Krasnoyarsk Science Center, Krasnoyarsk, Russia*
Glass-ceramic microspheres for magnetoresonance hyperthermia
- SO12/P61. Polina Paletskikh**, *Ural Federal University, Ekaterinburg, Russia*,
Infrared-extended photoresponse in hyperdoped silicon diode
- SO13/P62. Daria Shivarova**, *Ural Federal University, Ekaterinburg, Russia*,
Role of nanosecond laser processing parameters in controlling capillary transport on structured aluminum surfaces
- SO14/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 $\text{Mn}_{1-x}\text{Rh}_x\text{Si}$ with low rhodium concentrations
- P2. Stepan Nuzhin**, *Ural Federal University, Ekaterinburg, Russia*,
Phase states with competing interactions in a model orthornickelate 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. Vitaly Ryumshin**, *Ural Federal University, Ekaterinburg, Russia*,
Magnetic structures in a model nickelate: Monte Carlo study
- P6. Nikita Solovyev**, *Ural Federal University, Ekaterinburg, Russia*,
First-principles study of magnetic and half-metallic properties of $\text{Mn}_2\text{Co}_{1-x}\text{Ni}_x\text{Sn}$ and $\text{CoMn}_{2-x}\text{Fe}_x\text{Sn}$ alloys with spin polarization
- P7. 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
- P8. Kirill Zhivetev**, *Moscow Institute of Physics and Technology, Dolgoprudny, Russia*,
Structural mechanism of reentrant-like phase transition in $\text{BiScO}_3\text{-PbTiO}_3$
- P9. 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

- P10. Anastasia Ostaltsova**, *Ufa University of Science and Technology, Ufa, Russia*,
Polymer films with silver iodide nanoparticles are an excellent basis for sensor systems
- P11. Idris Safargalin**, *Ufa University of Science and Technology, Ufa, Russia*,
Chitosan with added silver iodide nanoparticles for an optical sensor
- 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 Shnidshtein**, *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. Evgeniy Greshnyakov**, *Ural Federal University, Ekaterinburg, Russia*,
Domain structure of lead halide perovskite CsPbBr_3
- P22. Maria Kholodenko**, *Ural Federal University, Ekaterinburg, Russia*,
Local polarization reversal by electron beam irradiation in single-domain SBN single crystals
- P23. Ilya Kipenko**, *Ural Federal University, Ekaterinburg, Russia*,
Superfast domain walls, Barkhausen pulses, dendrite structures and domain growth in the bulk of uniaxial ferroelectrics
- P24. Semyon Melnikov**, *Ural Federal University, Ekaterinburg, Russia*,
Domain shape transformation during backswitching under the action of depolarization field in lithium niobate crystal
- P25. Anastasia Meng**, *Ural Federal University, Ekaterinburg, Russia*,
Current-limited local polarization switching in lithium niobate crystals
- P26. Violetta Safina**, *Ural Federal University, Ekaterinburg, Russia*,
Influence of thickness on charge transport and piezoelectricity in ultrathin RF-sputtered bismuth ferrite films

- P27. Violetta Safina**, *Ural Federal University, Ekaterinburg, Russia*,
Kinetics of the domain structure in inhomogeneous electric field in lithium niobate thin films
- P28. Vera Shikhova**, *Ural Federal University, Ekaterinburg, Russia*,
Formation of periodical domain structures in SBN single crystals
- P29. Anton Turygin**, *Ural Federal University, Ekaterinburg, Russia*,
Evolution of the domain structure during local polarization reversal in lead germanate single crystal
- P30. Andrey Ushakov**, *Ural Federal University, Ekaterinburg, Russia*,
Domain structure evolution in lead germanate crystal under the action of femtosecond near-infrared laser irradiation
- P31. 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

- P32. Anastasia Dryagina**, *Ural Federal University, Ekaterinburg, Russia*,
Effect of pore filling factor on the magnetic properties of Ni nanowires in aluminum oxide templates
- P33. 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
- P34. Viktoria Filippova**, *Institute of Physics of Molecules and Crystals, Ufa, Russia*,
Topological magnetic states in ferromagnetic multilayers
- P35. Elena Grokhotova**, *Ural Federal University, Ekaterinburg, Russia*,
Textured magnetoactive composites: Modeling of dynamic magnetic response
- P36. 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
- P37. Maksim Kalinin**, *Ural Federal University, Ekaterinburg, Russia*,
Magnetoelectric effect in thin film composites of Fe₁₀Ni₉₀/PVDF type on rigid and flexible substrates
- P38. Elvira Lopatko**, *Ural Federal University, Ekaterinburg, Russia*,
Topological electronic transition in the semimetal CoSi
- P39. Rinat Mamin**, *Zavoisky Physical-Technical Institute RAS, Kazan, Russia*,
Magnetoelectric polarization and effect of external electric field on the properties of 2D Néel skyrmions
- P40. Svetlana Semenova**, *Ural Federal University, Ekaterinburg, Russia*,
Structure and magnetic properties of thin films of magnetostrictive alloy Fe_{100-x}Al_x

Section 5. Ceramics and thin films

- P41. Tatyana Andryushchenko**, *Kirensky Institute of Physics, Krasnoyarsk, Russia*,
Determination of the termination layer of epitaxial MAX films ($\text{Cr}_{1-x}\text{Sc}_x$)AlC
using Auger electron spectroscopy
- P42. Vladimir Bystrov**, *Institute of Mathematical Problems of Biology RAS, Pushchino, Russia*,
Properties of 2D-materials nanostructures influenced by ferroelectric domain
- P43. Elena Ievleva**, *Voronezh State Technical University, Voronezh, Russia*,
Structure, microstructure, and dielectric permittivity of BaTiO_3 after intensive
mechanical treatment
- P44. 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
- 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
($\text{Cr}_{1-x}\text{Sc}_x$)₂AlC ($x = 0 \dots 1$)
- 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 $(110)\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-PbTiO}_3$
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 $\text{FeNi-V}_2\text{O}_3$ 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 $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2$ -based capacitors
- P53. Nikita Shulaev**, *Tyumen State University, Tyumen, Russia*,
Synthesis and study of $\text{Al:Ta}_2\text{O}_5$ 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)₃Al₂Ga₃O₁₂ (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}O₂-based FeFET
with a ferroelectric capacitor in the gate stack
- P58. Olga Kryukova**, *Krasnoyarsk Science Center SB RAS, Krasnoyarsk, Russia*,
Magnetic NiFe₂O₄@SiO₂@NH₂ 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}O₂-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