

# CONFERENCE Program

## AUGUST 29 / SUNDAY

09:00 – 14:00	Time for excursions (optional)	
14:00 – 17:00	Registration	
14:30 – 16:30		<b>Early Career Meetings</b>  <b>Polina Khapaeva:</b> Team building for young scientists <i>On-site</i>
17:00 – 17:30	<b>Opening ceremony</b>	
17:30 – 18:15	<b>Tutorial-Plenary I: Andrey Fedyanin</b> Resonant magnetophotonics: where light meets magnetism <u>Chair:</u> Valeria Rodionova	
18:15 – 19:00	<b>Tutorial-Plenary II: Davide Peddis</b> Design advanced magnetic nanocomposites	
19:00 – 21:00	<b>Welcome cocktails</b>	

## AUGUST 30 / MONDAY

08:00 – 09:00	Registration	
09:00 – 09:45	<u>Chairs:</u> Montserrat Rivas, Katerina Levada <b>Plenary Talk I: Jose Rivas</b> Multifunctional superparamagnetic NPs for biomedical applications	
09:45 – 11:00	<b>Conference Section – I</b> <u>Chair:</u> Katerina Levada	<b>Conference Section – II</b> <u>Chair:</u> Christina Gritsenko
09:45 – 10:15	<b>Maxim Nikitin:</b> Smart biomedical nanoagents and enhancement of their in vivo performance with the "MPS-cytoblockade" technology	<b>Sara Laureti:</b> Advanced approaches for the synthesis and characterization of highly ordered L10 alloys
10:15 – 10:45	<b>Roberto Zysler:</b> The design of core/shell bimagnetic nanoparticles for the optimization of magnetic hyperthermia	10:15 – 10:30 <b>Irina Dzhun:</b> Ferromagnetic resonance investigations of exchange biased NiFe/IrMn/NiFe trilayer structures

		10:30 – 10:45 <b>Ivan Tarasov:</b> Epitaxial stabilization of Fe <sub>3</sub> Si(111)-orientated thin films on Si(110) via self-organized growth of $\alpha$ -FeSi <sub>2</sub> nano-stripes: structural analysis and magnetic properties
10:45 – 11:00	<b>Ulf Wiedwald:</b> Magnetic Nanoparticles: From Physical Design to Medical Applications	<b>Nikita Snegirev:</b> Resonant properties and Debye temperature of canted antiferromagnet FeBO <sub>3</sub>
11:00 – 11:30	Coffee break	
11:30 – 13:15	Conference Section <u>Chair:</u> Mikhail Dorokhin	Smart Composites International School <u>Chair:</u> Alexander Pyatakov
11:30 – 12:00	<b>Rastislav Varga:</b> Heusler-based microwires and nanowires for SMART shape memory and magnetocaloric applications	<b>Yuriy Raikher:</b> Ferromagnet particles in polymer harness: mesoscopic description of magnetoactive polymers
12:00 – 12:15	<b>Vasiliy Buchelnikov:</b> Influence of correlation effects on the electronic properties of Co <sub>2</sub> MnGa heusler alloy	12:00 – 12:30 <b>Dmitry Balaev:</b> Physical mechanisms governing the magnetic behavior of nanoparticles of magnetically ordered materials
12:15 – 12:30	<b>Olga Miroshkina:</b> Layered crystal structure in Fe-Ni-Al Heusler alloys: effect on structural and magnetic properties	
12:30 – 12:45	<b>Valeria Kolesnikova:</b> Micromagnetic structure and magnetic properties of micro-scale glass-coated microwires	12:30 – 13:00 <b>Konstantin Neyman:</b> <i>In-silico</i> design of bimetallic nanocrystallites to speed-up their manufacturing
12:45 – 13:00	<b>Anastasiya Gurevich:</b> Forced diffusion of diamagnetic particles in the magnetic potential of arrays of ferromagnetic microwires	
13:00 – 13:15	<b>Svetlana Evstigneeva:</b> Nonlinear effects in Co-based ferromagnetic microwires associated with the magnetization reversal process	13:00 – 13:45 <b>Early Career Meetings</b> <b>Polina Khapaeva:</b> How to communicate your science

13:15 – 15:00	<b>Lunch</b>	
15:00 – 17:00	<b>Conference Section</b> <u>Chair: Oleg Stolbov</u>	<b>Smart Composites</b> <b>International School</b> <u>Chair: Alexander Omelyanchik</u>
15:00 – 15:30	<b>Kalliopi Trohidou:</b> Organic coating effects on the magnetic behavior of nanoparticles systems	<b>Paola Lova:</b> From photopolymers to 4D printing: a blueprint for a new manufacturing paradigm
15:30 – 15:45	<b>Maryam Abdolrahimi:</b> Effect of molecular coating on magnetic properties of spinel ferrite nanoparticles: XAS study	15:30 – 16:00 <b>Alexander Pyatakov:</b> Magnetic straintronics: underlying physical effects and promise for ultra low-consumption electronics
15:45 – 16:00	<b>Danil Baigutlin:</b> Ab initio study of $Mn_2ScZ$ Heusler alloys ( $Z = Al, Si, P, Ga, Ge, As, In, Sn, Sb$ ) with switchable metal to half-metal behavior	
16:00 – 16:15	<b>Aleksei Kozlov:</b> Dzyaloshinskii-Moriya Interaction in epitaxial Pd/Co films with artificial oxidized magnetic layer	16:00 – 16:30 <b>Fedor Senatov:</b> Biomimetic polymer materials and tissue engineering
16:15 – 16:30	<div style="border: 1px solid black; padding: 2px;"><b>Sergey Leble</b></div> <b>Valeriy Uzdin:</b> The nucleation rate of domain wall reversal at plane ferromagnetic stripe: numerical and phi-in-quadro models comparison	
16:30 – 16:45	<b>Nikolay Chitchev:</b> Boson magnetism and quantum phase transitions in a system of strongly correlated cold atoms	16:30 – 17:15 <b>Early Career Meeting</b>  <b>Alexandr Vinogradov:</b> Portfolio of the best SEO
16:45 – 17:00	<b>Alexander Pyatakov:</b> Electric field as a “foaming agent” in micromagnetism: how to blow magnetic bubble domains and skyrmions	
17:00 – 17:30	<b>Technical break</b>	
17:30 – 19:00	<b>Poster session I</b> <u>Chairs: Fedor Senatov, Olga Stolbova, Stanislav Pshenichnikov</u>	

## AUGUST 31 / TUESDAY

08:00 – 09:00	Registration	
09:00 – 09:45	<b>Plenary Talk II: Gisela Schütz:</b> Nanomagnetism in the light of X-rays <u>Chair:</u> Larisa Panina	
09:45 – 11:00	<b>Conference Section – I</b> <u>Chair:</u> Victor Belyaev	<b>Conference Section – II</b> <u>Chair:</u> Alexey Ivanov
09:45 – 10:15	<b>Alberto López-Ortega:</b> Plasmon induced magneto-optical enhancement in hybrid nanostructures: bright and dark plasmons	<b>Yuriy Raikher:</b> Magnetoactive elastomers with high-coercive filler: ferromagnetic particles under non-saturated magnetization and restricted mechanical freedom
10:15 – 10:30	<b>Nikolai Khokhlov:</b> Spectral features of magnetostatic waves optically excited in ferromagnetic anisotropic films	10:15 – 10:45 <b>Liudmila Makarova:</b> “Smart” layered composites based on magnetoactive elastomers and piezopolymer with multiferroic properties
10:30 – 10:45	<b>Grigoriy Ostanin:</b> Ultrafast optics of metal-dielectric magnetoplasmonic metasurface	
10:45 – 11:00	<b>Anna Chernyak:</b> Subpicosecond dynamics of magneto-optical Faraday effect in hybrid metasurfaces	<b>Danil Isaev:</b> The dynamic control of magnetic elastomer surface for biomedical applications
11:00 – 11:30	Coffee break	
11:30 – 13:15	<b>Conference Section</b> <u>Chair:</u> Alexander Omelyanchik	<b>Smart Composites International School</b> <u>Chair:</u> Valeria Rodionova
11:30 – 12:00	<b>Maria del Puerto Morales:</b> Engineering iron oxide nanocatalysts for water remediation	<b>Andrei Petukhov:</b> Self-assembly at the nanoscale in polymers and composites
12:00 – 12:30	<b>David Cabrera:</b> Magnetic nanoparticles for cardiovascular diseases	<b>Larisa Panina:</b> Structural and magnetic properties of arrays of nanowires/nanotubes in polymer templates

12:30 – 12:45	<b>Stanislav Pshenichnikov:</b> Cellular internalization of iron oxide magnetic nanoparticles induce oxidative stress in T-lymphoblastic leukemia cells	12:30 – 13:00 <b>Ester M. Palmero:</b> Permanent Magnet-Polymer based Composites for Bonding and Additive Manufacturing
12:45 – 13:00	<b>Alevtina Semkina:</b> Magnetic nanoparticles based immunotherapeutic agents for macrophage reprogramming	
13:00 – 13:15	<b>Elena Balica:</b> A new therapy for adiposopathy based on low frequency ac filed applications on magnetic nanoparticles	<b>Askold Trul:</b> Conjugated oligomers and polymers for gas sensing via organic field-effect transistors
13:15 – 15:00	Lunch	
15:00 – 17:15	Conference Section – I <u>Chair:</u> Karim Amirov	Conference Section – II <u>Chair:</u> Larisa Panina
15:00 – 15:15	<b>Alexander Ulyanov:</b> Effect of structure and electron configuration on the magnetic properties of $\text{La}_{0.7}\text{Ca}_{0.3-x}\text{Sr}_x\text{Mn}_{0.95}\text{M}_{0.05}\text{O}_3$ manganites	15:00 – 15:30 <b>Manuel Vázquez:</b> Hybrid magneto-polymers arrays
15:15 – 15:30	<b>Kirill Sobolev:</b> Optimized spark-plasma-sintering synthesis of bulk phase-pure $(\text{Cr}_{1-x}\text{Mn}_x)_2\text{AlC}$ MAX-phases	
15:30 – 15:45	<b>Irina Tereshina:</b> High-field magnetization study of R-Fe-H systems with a Laves phase structure	<b>Oleg Stolbov:</b> Field-induced pseudoplasticity of magnetoactive elastomers: a phase transition interpretation
15:45 – 16:00	<b>Elena Voronina:</b> Synthesis aspects and magnetic moment alignment in ternary ordered Fe-Al-M (M = Ga, B, Sn) alloys	<b>Dmitriy Saveliev:</b> Dependence of fiber diameter on magnetoelectric effect in flexible composite
16:00 – 16:15	<b>Mikhail Dorokhin:</b> Switching of magnetoresistive light-emitting diode by external magnetic field	<b>Vyacheslav Lobekin:</b> Torsion mode of the magnetoelectric effect in a Metglas/GaAs layered structure

16:15 – 16:30	<b>Mariya Matyunina:</b> Magnetostriction in Fe-Ga alloys: effect of rare-earth elements doping	<b>Rafael Shakirzyanov:</b> High frequency properties of P(VDF-TFE)/Mn-Zn ferrite/carbonyl iron/graphite composites
16:30 – 16:45	<b>Nikolay N. Kuzmin:</b> Magnetic phase transitions in the new multiferroic $\text{SmCr}_3(\text{BO}_3)_4$	<b>Anastasia Dryagina:</b> Synthesis and magnetic properties of Co nanowires/PVDF composites
16:45 – 17:00	<b>Artem Tarasov:</b> Photoemission from 4f shell as a probe of crystal electric field and magnetism: A view on $\text{TbRh}_2\text{Si}_2$	<b>Pierfrancesco Maltoni:</b> Optimizing the design of magnetically hard $\text{SrFe}_{12}\text{O}_{19}$ based nanocomposites
17:00 – 17:15	<b>Akhmed Aliev:</b> Magnetocaloric effect in $\text{Mn}_{1-x}\text{Fe}_x\text{As}$ in cyclic magnetic fields	<b>Artem Shiryayev:</b> Splitting of the magnetic loss peak of composites under external magnetic field
17:15 – 17:30	Technical break	
17:30 – 19:00	<b>Poster session II</b> <u>Chairs:</u> Alexander Kamantsev, Anastasiya Gurevich, Karim Amirov	

## SEPTEMBER 1 / WEDNESDAY

08:00 – 09:00	Registration	
09:00 – 09:45	<b>Plenary Talk III: Burkard Hillebrands:</b> Advances in coherent magnonics Chair: Alexandr Sadovnikov	
09:45 – 11:00	<b>Conference Section – I</b> Chair: Nikolai Perov	<b>Conference Section – II</b> Chair: Yuriy Raikher
09:45 – 10:15	<b>Alexandr Sadovnikov:</b> Tunable spin-wave propagation in the ensembles of magnonic stripes	<b>Oscar Iglesias:</b> Aggregates and dipolar interactions in nanoparticle assemblies for magnetic hyperthermia
10:15 – 10:30	<b>Kirill Boldyrev:</b> Absorption non-reciprocity on exciton-magnon-phonon states of the magnetoelectric antiferromagnet $\text{CuB}_2\text{O}_4$	<b>Alexey Ivanov:</b> Static magnetic response of multicore particles
10:30 – 10:45	<b>Alexander Musorin:</b> Bound states in the continuum in magnetophotonic metasurfaces	<b>Grzegorz Kwiatkowski:</b> Optimal control of magnetization reversal by means of applied magnetic field
10:45 – 11:00	<b>Tatiana Murzina:</b> Magnetooptics of opal-cobalt based photonic heterostructure	<b>Aleksandr Kamzin:</b> Magnetic GrO-ferrites and core/shell nanostructures for biomedical applications: structure and properties
11:00 – 11:30	Coffee break	
11:30 – 13:15	<b>Conference Section</b> Chair: Irina Tereshina	<b>Smart Composites International School</b> Chair: Alekhina Iuliia
11:30 – 12:00	<b>Giuseppe Muscas:</b> Nanostructured amorphous and hybrid composites	<b>Nikolai Perov:</b> Magnetoelectric effects in composite materials
12:00 – 12:15	<b>Aleksandr Iliasov:</b> Low voltage resistive switching in nanocomposite based on $\text{LiNbO}_3$ with embedded magnetic nanoparticles	12:00 – 12:30 <b>Liudmila Makarova:</b> Polymer-based composites: fabrication, study and application
12:15 – 12:30	<b>Alevtina Smekhova:</b> Synchrotron-based studies of multicomponent systems: a case of single-phase Alx-CoCrFeNi high-entropy alloys	

12:30 – 12:45	<b>Dmitri Zagorskiy:</b> Structure and magnetic properties of layered nanowires made of 3d metals	12:30 – 13:00 <b>Sergey Ponomarenko:</b> Smart polymer materials for organic bioelectronics and robotics
12:45 – 13:00	<b>Iliia Doludenko:</b> FeNi and FeCo alloys nanowires: synthesis, structure and magnetic properties	
13:00 – 13:15	<b>Nikolai Perov:</b> Magnetic properties of the amorphous magnetic microsprints	<b>Svetlana Voronina:</b> Target properties elements control made of polymer composite materials
13:15 – 15:00	Lunch	
15:00 – 17:00	<b>Conference Section – I</b> <u>Chair: Alexandr Sadovnikov</u>	<b>Conference Section – II</b> <u>Chair: Dmitriy Balaev</u>
15:00 – 15:30	<b>Francesco Pineider:</b> Plasmons interacting with magnetic fields: an application-oriented perspective	<b>Jerome Depeyrot:</b> Magnetic colloids: from magnetofluorescent nanofluids to magnetic anisotropies of core/shell nanoparticles
15:30 – 15:45	<b>Mariia Efremova:</b> Solid solution AuFe nanoparticles synthesized by wet-chemistry methods and their transformation to Au/Fe Janus nanostructures	<b>Elizaveta Gubanova:</b> Heating efficiency of magnetic nanoparticles with cubic anisotropy in a viscous liquid
15:45 – 16:00	<b>Alessio Gabbani:</b> Colloidal heavily doped semiconductor nanocrystals as an excellent platform for active magnetoplasmonics	<b>Ruslan Rytov:</b> Specific absorption rate of elongated polydisperse assemblies of magnetic nanoparticles
16:00 – 16:15	<b>Kseniya Tsysar:</b> Magneto-optical properties of metal oxide nanowire	<b>Sawssen Slimani:</b> Magnetic mesoporous silica nanostructures: investigation of magnetic properties
16:15 – 16:30	<b>Eugeny Demikhov:</b> Modelling and optimization of high magnetic field cryogen-free tomograph	<b>Telem Simsek:</b> High moment FeB nanoparticles for magnetic hyperthermia
16:30 – 16:45	<b>Petr Ryapolov:</b> Contactless control of the dynamics of non-magnetic liquid and gas inclusions in a magnetic fluid	<b>Bachir Ouari:</b> Specific absorption rate of magnetic ferromagnetic nanoparticles having a biaxial anisotropy



16:45 – 17:00	<b>Artur Useinov:</b> Application of the point-like contact model: Resistance simulation of the single magnetic domain wall	<b>Daniela P. Valdés:</b> Role of anisotropy, frequency, and interactions in magnetic hyperthermia applications: noninteracting nanoparticles and linear chain arrangements
17:00 – 17:45	Coffee break	
17:45 – 19:15	<b>Early Career Meetings</b>  17:45 – 18:30 <b>Sergei Guriev:</b> Why physicist can be interested in economics career?  18:30 – 19:15 <b>Des Mapps</b> Publishing (really) good research papers	
19:50 – 20:00	<b>Joint photography</b>	
20:00 – 22:00	<b>Conference Dinner</b>	

## SEPTEMBER 2 / THURSDAY

09:00 – 09:45	<b>Plenary Talk IV: Stefano Carretta</b> Magnetic molecules for quantum information  <u>Chair:</u> Nikolai Perov	
09:45 – 11:30	Poster session III  <u>Chairs:</u> Akhmed Aliev, Sokolov Aleksey, Christina Gritsenko	
11:30 – 13:15	<b>Conference Section</b>  <u>Chair:</u> Alexander Musorin	<b>Smart Composites International School</b>  <u>Chair:</u> Sergey Ponomarenko
11:30 – 12:00	<b>Giulia Serrano:</b> On surface control of magnetic and quantum functionalities of molecular magnets	<b>Andrei Kholkin:</b> Magnetoelectric composites for sensing and energy harvesting applications
12:00 – 12:15	<b>Evgeny Skorokhodov:</b> Study of the gyrotropic mode of magnetic vortex oscillations in a magnetic resonance force microscope	12:00 – 12:30 <b>Gaspere Varvaro:</b> Synthetic antiferromagnets for biomedical and flexible spintronic applications
12:15 – 12:30	<b>Alexey Syromyatnikov:</b> Atomic-scale self-organization of monatomic transition-metal oxide chains	

12:30 – 13:00	<b>Rudolf Schaefer:</b> MCD-based magneto-optical microscopy	12:30 – 12:45 <b>Valeriy Vlasov:</b> Strength characteristics of 3D-printed samples determinate
		12:45 – 13:00 <b>Ekaterina Brodovskaya:</b> Packing magnetic nanoparticles into polymer microcapsules increases their cytotoxicity in presence of AMF
13:15 – 13:45	<b>Conference closing and awards ceremony</b>	
15:15	Time for excursions (optional)	

#### Time limitation:

- **Plenary presentations** are limited by **40 minutes** with addition of 5 minutes for questions;
- **Invited talks** are limited by **25 minutes** with addition of 5 minutes for questions;
- **Oral talks** are limited by **12 minutes** with addition of 3 minutes for questions.

## Aug 30, Monday

A-1	Abdulkadirova Nurizhat	Magnetocaloric and thermophysical properties of La-Fe-Co-Si compounds	On-site
A-2	Alekhina Iuliia	Magnetization reversal in amorphous magnetic microwires	On-site
A-3	Antipova Valentina	Development and comprehensive analysis of the physical properties of PVDF substrates and their effect on neural stem cells activity	On-site
A-4	Davkina Alexandra	Ferromagnetic microwire-polymer composite for sensor applications	On-site
A-5	Emelyanova Sabina	Correlation of the structural transition temperatures and electronic characteristics in Ni-Mn-Sb-based magnetocaloric alloys	Online
A-6	Fedulov Fedor	Nonlinear magnetoelectric effects in a periodic Ni-PZT heterostructure	Online
A-7	Fomin Yury	Comparative study of melting of graphite and graphene	On-site
A-8	Gubanov Vladislav	Phase resolution of spin wave propagation in YIG film with linearly varying width	On-site
A-9	Gupalo Marina	Investigation of magnetic elastomers: structural and magnetic properties	On-site
A-10	Ichkitidze Levan	Influence of the magnetic field gradient on the optical density of an aqueous dispersion containing biological material and carbon nanotubes	Online
A-11	Ichkitidze Levan	Planar Superconducting Film Magnetic Field Concentrator	Online
A-12	Ignatov Artem	Length dependence of magnetization properties of amorphous FeCo-based microwire with nearly zero magnetostriction coefficients	On-site
A-13	Iliasov Artem	Selective toxicity of nanoparticles with redox-sensitive coating towards cancer cells	On-site
A-14	Kalganov Dmitrii	Study of mechanically-induced twins in 10M modulated Ni-Mn-Ga martensite	On-site
A-15	Kamantsev Alexander	Non-contact methods for magnetocaloric effect measurements	On-site
A-16	Kobayashi Satoru	Magnetic hysteresis scaling analysis for Fe <sub>3</sub> O <sub>4</sub> spherical particles	Online
A-17	Kozitsina Alisa; Svalova Tatiana	Enzyme-free electrochemical immunoassay and microfluidic immunochip based on magnetite nanoparticles for determination of clinically significant analytes	On-site
A-18	Kudyukov Egor	Obtaining and studying the structural and magnetoelectric properties of nanocomposites	On-site

		of the PVDF/Metal	
A-19	Kulikov Oleg	Synthesis and toxicological studies of biocompatible iron oxide nanoparticles for local hyperthermia and MRI	Online
A-20	Levada Kateryna	Co-Zn magnetic nanoparticles by antimicrobial properties inhibited <i>E.Coli</i> growth rate in different timepoints	On-site
A-21	Litvinova Alyona	Influence of internal stress on the magnetic properties of amorphous ferromagnetic microwires in a glass shell	On-site
A-22	Lupitskaya Yuliya	Magnetoelectric materials based on lead zirconate titanate and cobalt ferrite	Online
A-23	Makaryin Rodion	Frequency bending properties of layered composite based on magnetoactive elastomer and PVDF substrate	On-site
A-24	Mikelashvili Vladimir	Synthesis and characterization Citric acid-modified Iron oxide nanoparticles for biomedical application	Online
A-25	Morozova Elizaveta	Biosensor based on Ag nanoparticles for microbial contamination detection	On-site
A-26	Moryachkov Roman	The role of small-angle X-ray scattering and molecular simulations in 3D structure elucidation of a DNA aptamer - cancer cells magnetic separation agent	On-site
A-27	Motorzhina Anna	Cobalt zinc ferrite/gold-arginine nanocomposite as promising tool for leukemia treatment	On-site
A-28	Musatova Veronika	Magnetoactive metallopolymer nanomaterials containing cobalt, nickel and iron: synthesis, properties, application	On-site
A-29	Mustafa Abu Hasnat Mustafa	Immobilization of cellulase enzyme onto iron oxide nanoparticles to improve thermal and pH stability	Online
A-30	Nematov Maqsud	Excellent soft magnetic properties in Co-based alloys after heat treatment at temperatures near the crystallization onset	On-site
A-31	Nematov Maqsud	Tuning the Curie temperature in amorphous alloys by current annealing for biomedical applications	On-site
A-32	Nikolaeva Elena	Magnetic Nanoparticles for Prevention and Treatment against Bacterial Films	On-site
A-33	Norkin Igor	10-year stability of magnetite nanopowder prepared via an exploding wire method	On-site
A-34	Pavlova Kseniya	Synthesis of Ferritic Ceramics $\text{BaFe}_{(11.9-x)}\text{Mn}_{0.1}\text{Ti}_x\text{O}_{19}$ by Solid-Phase Reaction	On-site
A-35	Pavlukhina Oksana	Properties and segregation tendency of Fe-Rh-Z (Z=Pt, Pd) alloys	Online

A-36	Pershina Khristina	The voltage response of a structure comprising a magnetoactive-elastomer cylinder and a piezoelectric material to magnetic field step excitations	Online
A-37	Peshkov Yaroslav	Microstructure and electrical transport properties of nanoscale $[(\text{Co}_{40}\text{Fe}_{40}\text{B}_{20})_{34}(\text{SiO}_2)_{66}/\text{In}_2\text{O}_3/\text{C}]_{46}$ multilayers	Online
A-38	Politova Galina	Magnetocaloric effect and magnetostriction of GdH0.15 single crystal in the vicinity of the magnetic phase transitions	Online
A-39	Savin Valeriy	Investigation of accelerated motion of domain wall in a bistable ferromagnetic microwire	On-site
A-40	Semenova Elena	Angular dependences of magnetization and coercivity in nanoheterogeneous magnetic materials SmCoCuFeZr	Online
A-41	Shah Syed Zuhair Abbas	Indium-Silver and Thallium-Silver Based Double-Perovskites for Photovoltaic & Thermoelectric Applications: A DFT Study	Online
A-42	Smoliarova Tatiana	Magneto-optical biosensor based on $\text{Au}_3\text{Fe}_{1-x}$ hybrid nanocrystals for lung cancer detection	On-site
A-43	Stepanov Gennady	Magnetoactive elastomer as a multifunctional material	On-site
A-44	Taaev Taa	Investigation of FeRh alloy by wide-field Kerr microscopy	On-site
A-45	Taaev Taa	Hard/soft magnetic bilayer and trilayers. Monte Carlo study	On-site
A-46	Tyutrina Ekaterina	Aminated magnetic nanoparticles for epithelial cell separation	On-site
A-47	Valdés Daniela P.	<i>In situ</i> formation and thermographical analysis of nanoparticle chain-like arrangements in polyacrylamide phantom during hyperthermia experiments	Online
A-48	Ved Mikhail	Room temperature circularly polarized electroluminescence in heterostructures based on a diluted magnetic semiconductor	On-site
A-49	Vereshchagin Mikhail	Estimation of parameters of domain wall by EMF signal generated while its movement in glass-coated cylindrical amorphous ferromagnetic microwires	On-site
A-50	Vikhrova Olga	Diode heterostructures with a ferromagnetic (Ga,Mn)As layer	Online
A-51	Vinnik Denis	Synthesis of high-entropy ceramics with a perovskite structure	On-site
A-52	Yaroslavtsev Roman	Magnetic coatings of transition metals synthesized using arabinogalactan	On-site

## Aug 31, Tuesday

B-1	Akischeva Anna	Microstructure and macroscopic properties of the magnetic ellipsoidal nanoparticles system	On-site
B-2	Balaev Dmitry	Superparamagnetic effect on the dynamic remagnetization of $\text{CoFe}_2\text{O}_4$ nanoparticles in a pulse field	On-site
B-3	Belyaev Victor	Magnetisation reversal of roughness modulated chemically homogeneous iron thin film	On-site
B-4	Belykh Sergey	Features of the magneto-optical effect in magnetic emulsions with low interfacial tension	On-site
B-5	Bezus Aleksey	Spontaneous Phase Transitions in the hard Domain Structure of Ferrite-garnet film	On-site
B-6	Chernoukhov Ivan	Automated search for low-dimensional magnets and its implementation: triangular magnetic clusters in $\text{K}_5\text{Fe}_3\text{O}(\text{SO}_4)_6 \cdot 10\text{H}_2\text{O}$	On-site
B-7	Demin Gleb	Model of perceptron based on spin-torque diodes with a ferroelectric/ferromagnetic bilayer controlled by a THz pulse of an electromagnetic field	On-site
B-8	Demin Gleb	Simulation of anisotropic magnetoresistive sensor as a sensitive element of a smart glove for post-stroke neurorehabilitation	On-site
B-9	Demina Polina	Circularly polarized luminescence of GaAs/InGaAs spin light-emitting diodes with $\text{CoPt}/\text{Al}_2\text{O}_3/\text{C}$ injector	On-site
B-10	Denisova Elena	Green Synthesis and Magnetic Properties of Nanostructured FeCo-C and FeNi-C Films	On-site
B-11	Dokukin Sergei	Dendritic growth in Co/Cu(111) surface alloy	Online
B-12	Gan'shina Elena	Effect of phase transformations of a metal component on the magneto-optical properties of nanocomposites	Online
B-13	Gomide Guilherme	Effect of size distribution and surface roughness on the thermal dependence of coercivity and magnetic anisotropy in cobalt ferrite based nanoparticle assemblies	Online
B-14	Gritsenko Christina	Fabrication of 2D magnetoplasmonic crystals $\text{NiFe}/\text{Si}_3\text{N}_4$	On-site
B-15	Iusipova Iuliia	Characteristics of the magnetization-vector precession and switching in the spin-valve free layer with perpendicular anisotropy	On-site
B-16	Kalentyeva Irina	Effect of pulsed laser annealing on the properties of (Ga,Mn)As layers	On-site
B-17	Khairtdinova	Features of magnetization processes in	On-site

	Dinara; Lukkareva Snezhana	nanowires based on Fe-Co and Fe-Ni alloys	
B-18	Klavsyuk Andrey	Magnetism and Structure of Oxide Chains of Binary Alloys of Co and Ni on Ir(100)	On-site
B-19	Kostenko Olesya	Magnetic, Mossbauer and Raman spectroscopy study of iron-yttrium garnet nanostructured particles with functional heat generation ability	Online
B-20	Kurbanova Dzhuma	Critical behavior of the frustrated four-state Potts model on a triangular lattice	On-site
B-21	Kuznetsov Andrey	Magnetostatic equilibrium in concentrated ferrofluids	On-site
B-22	Liu Nannan	Magnetothermal properties of ZnMn ferrite nanoparticles	On-site
B-23	Matveev Oleg	Propagation of gap solitons in magnonic crystal – semiconductor structure	Online
B-24	Melnikova Polina	Electrodeposition of multilayered NiCu/Cu and CoCu/Cu nanowires, and investigation of their magnetic properties	On-site
B-25	Menelaou Melita	Spinel Nickel Ferrite Nanosystems	Online
B-26	Mikhailova Tatyana; Vysokikh Yuriy	Double Layer Magneto-Active Films for Magnetophotonics and Optomagnonics	On-site
B-27	Mironovich Andrey	Deposition of BaFe <sub>2</sub> O <sub>19</sub> thin films with perpendicular magnetic anisotropy on Al <sub>2</sub> O <sub>3</sub> (102) substrate	Online
B-28	Odintsov Sergey	Spin-wave transport in lateral waveguides with vertical coupled ring resonator	On-site
B-29	Omelyanchik Alexander	Magnetic properties of CoFe <sub>2</sub> O <sub>4</sub> /NiFe <sub>2</sub> O <sub>4</sub> and CoFe <sub>2</sub> O <sub>4</sub> /NiO core/shell nanoparticles: the case of ultrathin shells	On-site
B-30	Polulyakh Sergey; Semuk Yevgeny	Optically driven ferromagnetic resonance in easy-plane iron ferrite garnet films	On-site
B-31	Ryzhkov Aleksandr	Simulation of sequential magnetization and demagnetization of magnetosensitive vesicles	On-site
B-32	Shepeta Natalya	Comparison of the microstructure and magnetic properties of films and composite powders based on 3-d metal	On-site
B-33	Sokolov Aleksey	Surface Modification of Magnetite Nanoparticles for Their Applications	On-site
B-34	Stolbova Olga	Modeling and simulation of the magnetic domains evolution in Heusler alloys	On-site
B-35	Timofeev Andrey	Influence of substitution with aluminum on the	Online

		structure and properties of nanosized particles of hexagonal strontium ferrite obtained by the method of wet chemistry	
B-36	Tyatyushkin Alexander	Deformation of a Magnetic Liquid Drop in a Uniform Non-stationary Magnetic Field at High Reynolds Numbers	Online
B-37	Ustyugov Vladimir	Granulometry Of Nanocomposite Films Using Atomic Force Microscopy Images	Online
B-38	Varga Michal	FORC and TFORC Analysis of Electrodeposited Ni-Fe-Ga Ferromagnetic Shape Memory Nanowires	Online
B-39	Yambulatonov Dmitriy	Cobalt(II) carboxylate complexes with redox-active ligands as a platform for the synthesis of bistable systems	On-site
B-40	Aronov Mikhail	Model of smart composite based on thermosensitive polymer for biomedical applications	On-site
B-41	Grigoreva Zoia	Development of a method for diagnostic Crohn's disease using hybrid nanoparticles Fe <sub>3</sub> O <sub>4</sub> -Au	On-site
B-42	Khutchieva Anna	Spin-wave beams formation in 3D magnonic arrays	On-site



## Sept 2, Thursday

C-1	Cherkasova Natalya; Zhivulin Vladimir	M-type hexaferrites $\text{BaFe}_{12-x-y}\text{Ti}_x\text{Al}_y\text{O}_{19}$ и $\text{SrFe}_{12-x-y}\text{Ti}_x\text{Al}_y\text{O}_{19}$ single crystals growth	On-site
C-2	Dormidontov Nikolay	Base Structural Components of Alloys for $(\text{Sm,Zr})(\text{Co,Cu,Fe})_2$ Permanent Magnets	Online
C-3	Glazkova Daria	Determination of the direction of 4f magnetic moments in the near-surface atomic layers of rare earth compounds using photoemission	On-site
C-4	Grachev Andrey	Tunable spin-wave propagation in planar YIG/PZT Mach-Zehnder interferometer	On-site
C-5	Knyazev Yuriy	Effect of Electron Delocalization on the "Recoil-Free" Absorption of $\gamma$ -Quants in $\text{Fe}_{1.75}\text{V}_{0.25}\text{BO}_4$ Warwickite	On-site
C-6	Kolchugina Natalia	Simulation of the Hysteretic Characteristics of Hard Magnetic Materials Based on $\text{Nd}_2\text{Fe}_{14}\text{B}$ and $\text{Ce}_2\text{Fe}_{14}\text{B}$ Intermetallics	Online
C-7	Kolesnikov Sergey	An improved kinetic Monte Carlo model for computational and analytical investigations of the magnetic properties of finite-size atomic chains	On-site
C-8	Kozhina Elizaveta	Template synthesis of 1D magneto-optical nanostructures	Online
C-9	Kozlyakova Ekaterina	Magnetic properties of $S = 1$ spin chain in $\text{Sr}_2\text{Ni}(\text{SeO}_3)_2\text{Cl}_2$ : XY-antiferromagnet at Sakai-Takahashi phase diagram	Online
C-10	Kuznetsov Iurii	Obtaining of the diluted magnetic semiconductor phase by thermal diffusion during pulsed laser deposition process	On-site
C-11	Magnitskaya Maria	Hyperfine interactions in the noncentrosymmetric high-pressure phase $\text{B20-RhGe}$ doped with Cd or Ta	On-site
C-12	Makarov Pavel	FDTD simulation of electromagnetic wave propagation in magnetic randomly inhomogeneous media	Online
C-13	Martyskhin Alexander	Magnetic field switchable T-shape magnonic nonreciprocal power splitter	On-site
C-14	Mazurek Paweł	Novel diagnostic of steel wire rope with passive magnetic methods	Online
C-15	Molchanova Anastasia	Spectroscopic study and analysis of d-d transitions in Ni ions in nickel orthoborate $(\text{Cu, Ni})\text{B}_2\text{O}_4$	On-site
C-16	Morozov Dmitry	Terbium substitution effects in $\text{CeFe}_2$ : structure and magnetic properties	On-site
C-17	Murzin Dmitry	Magnetic field mapping with magnetoplasmonic crystal-based sensor	On-site
C-18	Nikolaev	Saddle point anomaly of Landau levels in	Online

	Alexander	graphenelike structures	
C-19	Reznikov Iakov	Critical parameters of 2 <sup>nd</sup> generation HTSC tape during deformation	On-site
C-20	Rudakov Alexander	Binder jet 3d printing templates for smart composites with pattern structures	On-site
C-21	Safoklov Boris	Comparative analysis of PCM obtained by vacuum infusion and contact molding	On-site
C-22	Samardak Vadim	Magnetic properties of the sintered hard magnet Nd <sub>2</sub> Fe <sub>14</sub> B with amorphous and crystalline structures	Online
C-23	Sapronova Ekaterina	An estimation of magnetic properties of existing and prospective atomic chains in the framework of the Heisenberg Model	On-site
C-24	Sarnavskiy Nikita	Extended dispersive stiffness model of creep of domain walls	On-site
C-25	Sherstyuk Darya	Correlation of chemical composition and magnetic properties in the (Ni-Zn-Co)Fe <sub>2</sub> O <sub>4</sub> system	On-site
C-26	Shestakov Aleksey	ESR studies of the magnetic properties Mn <sub>0.325</sub> Hg <sub>0.675</sub> Te	Online
C-27	Solizoda Ibrokhimi	Impact of Al <sup>3+</sup> ions on magnetic and microwave properties of BaM:Ti hexaferrites	On-site
C-28	Starikov Andrey	Investigation of the Properties of Titanium Substituted Barium Hexaferrite	On-site
C-29	Tatarinova Alisa	Application of the Rutherford Backscattering Method in Powder Nanotechnology	On-site



## Smart Composites International School

### Sept 2, Thursday

SCIS-1	Polina Zhukova	Polymer composite materials with shape memory effect based on polylactide for adaptable medical structures
SCIS-2	Dmitry Panov	Obtaining of calibrated nickel nanoparticles for local drug delivery
SCIS-3	Danil Borov	Force sensors for miniature actuators
SCIS-4	Iuliia Alekhina	Layered polymer-based structure for multiferroic applications
SCIS-5	Kirill Sobolev	Scanning probe microscopy as a multifunctional tool to study polymer-based composites
SCIS-6	Valentina Antipova	Effect of magnetoelectric polymer composites on the activity of bNCSCs
SCIS-7	Valeria Kolesnikova	FORC-approach for magnetoactive polymer-based composites
SCIS-8	Karim Amirov	On the prospects of magnetoelectric composites for biomedical applications
SCIS-9	Julia Filippova	Application of the energy criterion of point agglomeration to Ni and Fe nanowires synthesized in the pores of track membranes.
SCIS-10	Maqsudsho Nematov	Stress and temperature sensitivity of magnetization process of magnetic microwires for structural health monitoring
SCIS-11	Alexander Omelyanchik	Magnetic properties of $\text{CoFe}_2\text{O}_4/\text{SiO}_2$ nanocomposites
SCIS-12	Isaev Danil	Numerical modelling of FORCs of magnetoactive elastomers based on ferromagnetic and ferroelectric particles