Conference Schedule

May 24, 2022 (Tuesday)

The whole day **Arrival, free time**

May 25, 2022 (Wednesday)

09:00 - 10:00 **On-site registration (Higher School of Economics - St. Petersburg, site on Kantemirovskaya 3)**

10:00 - 10:10 **Opening ceremony**

Alexey Zhukov *(Higher School of Economics - St. Petersburg, Russia)*

10:10 - 10:40 **High-Q resonances in photonic crystals from the viewpoint of multipole analysis**

Andrei Bogdanov *(ITMO University, Russia)*

10:40 - 11:10 **Integrated optical transceiver based on III-V microdisk laser and photodiode**

Natalia Kryzhanovskaya *(Higher School of Economics - St. Petersburg, Russia)*

11:10 - 11:40 **MBE growth and properties of InGaN nanostructures for visible range**

George Cirlin *(Alferov University RAS, Russia)*

11:40 - 12:00 **Coffee Break**

12:00 - 12:30 **Plasmonic structures for sensors**

Valentina Zhurikhina *(Peter the Great St. Petersburg Polytechnic University, Russia)*

12:30 - 12:50 **Технология создания флуоресцентных зондов на основе перовскитных соединений переменного химического состава для сканирующего ближнепольного оптического микроскопа**

Белорус Антон Орестович *(NT-MDT» Limited Liability company, Russia)*

12:50 - 13:20 **Azimut Photonics**

(Russia)

13:20 - 14:00 **Elevator speech session I**

(Young scientists explain key idea of their posters in 1 minute presentation using 1-2 slides)

14:00 - 15:30 **Lunch**

15:30 - 18:00 **Poster Session I**

1. Nanophotonics, Spectroscopy, Microcavities, Optics, Plasmonics, Spintronics, Electro- and Magnetooptics

2. Lasers, solar cells and other optoelectronic devices

3. Nanobiotechnology, Biophysics and Biophotonics

May 26, 2022 (Thursday)

09:00 - 10:00 **On-site registration**

10:00 - 10:30 **Novel approaches to droplet epitaxy of III-V nanostructures**

Maxim Solodovnik *(Southern Federal University, Russia)*

10:30 - 11:00 **Intelligent laser machining system for new material processing**

Yong Wang *(Laser Institute, China)*

11:00 - 11:30 **Physics-informed machine learning**

Alexei Shpilman *(Higher School of Economics - St. Petersburg, Russia)*

11:30 - 12:00 **Coffee Break**

12:00 - 12:30 **High-Q optical microcavities for physical measurements and technical applications**

Igor Bilenko *(Lomonosov Moscow State University, Russia)*

12:30 - 13:00 **Nanophotonics for ultrafast magnetism**

Vladimir Belotelov *(Crimean Federal University/Lomonosov Moscow State University, Russia)*

13:00 - 14:00 **Elevator speech session II**

(young scientists explain key idea of their posters in 1 minute presentation using 1-2 slides

14:00 - 15:30 **Lunch**

15:30 - 18:00 **Poster Session II**

4. Electric, Magnetic and Microwave Devices
5. Other Aspects of Nanotechnology

6. Crystal growth and structural properties of semiconductor materials and nanostructures

18:00 - 18:30 **Closing remarks and award ceremony**

Alexey Zhukov *(Higher School of Economics - St. Petersburg, Russia)*

May 27, 2022 (Friday)

The whole day **Departure, free time**

Optional: Guided tour at the Int. Lab. of Quantum Optoelectronics, HSE – St Petersburg (11.00-12.00)

1. Nanophotonics, Spectroscopy, Microcavities, Optics, Plasmonics

May 25, 2022

15:30 - 18:00 Poster Session I

1-1	Адам	Юрий	Александрович	Modulation and demodulation process of the vortex beam under the condition of additional phase modulation
1-2	Ашарчук	Илья	Михайлович	Up-conversional luminescence particles based on NaYF4 matched with passive optical devices
1-3	Бабич	Екатерина	Сергеевна	Optical absorption and Raman scattering mapping of nanoparticles patterns formed in glass by nanosecond laser in UV, VIS and IR
1-4	Бабухин	Данила	Валерьевич	Adaptive eavesdropping on the BB84 quantum key distribution protocol with distinguishable photons
1-5	Бакина	Ксения	Андреевна	X-ray spectral studies of doped bismuth-magnesium and bismuth-zinc tantalates
1-6	Барышникова	Ксения	Владимировна	Silicon nanoantenna for efficient control of single-photon source emission
1-7	Бастракова	Марина	Валерьевна	Generation of correlated photons and single photon detection processes in an array of qubits in a microwave transmission line
1-8	Бондарева	Полина	Игоревна	Investigation of graphene photodetectors for next generation communication systems
1-9	Бородина	Любовь	Николаевна	Laser microscopy of periodic holographic structures with quantum dots
1-10	Бузин	Даниил	Сергеевич	Hybrid Tamm-microcavity optical modes with tunable Q-factor
1-11	Ведерникова	Анна	Александровна	Luminescent properties of carbon dots from o-phenylenediamine under excitation at 800 nm
1-12	Венедиктов	Илия	Олегович	Fabrication of diffraction gratings for generation of OAM light
1-13	Викторов	Евгений	Александрович	Modulation of quantum beat signals under photoionization of Xe isotopes
1-14	Гаврилович	Арина	Альбертовна	State preparation intensity fluctuations in QKD
1-15	Галкин	Максим	Леонидович	On whispering gallery mode crystalline microresonators polishing techniques
1-16	Глебов	Никита	Вячеславович	Atomic force lithography for fabrication of high-Q planar perovskite polaritonic cavities
1-17	Гольдберг	Артемий	Александрович	Исследование характера распространения лазерного излучения в дифференциальной кювете Андерсона
1-18	Гречанинова	Евгения	Вадимовна	Photoluminescence from lead halide perovskite superlattices
1-19	Давыдов	Максим	Николаевич	Development of compact NMR relaxometer for express control of the state of liquid media
1-20	Дорогов	Александр	Евгеньевич	Application of a broadband Josephson parametric amplifier
1-21	Дрязгов	Михаил	Александрович	New design of a waveguide integrated photon number resolving superconducting detector with micron-wide strips
1-22	Ершов	Александр	Александрович	Investigation of optical waveguide properties of SOI integrated circuits
1-23	Ибрагимов	Алишер	Ахмад Угли	Light modulation by semiconductor metasurfaces upon electric injection of free carriers.
1-24	Кашапов	Артем	Ильясович	Broadband light absorber based on a multilayer metal-insulator-metal structure
1-25	Кондратьев	Валерий	Игоревич	Experimental study of all-van-der-Waals waveguide

				polaritons at room temperature
1-26	Константинова	Ирина	Юрьевна	
1-27	Кошелев	Александр	Владимирович	Enhancement of luminescent efficiency of a-NaREF4:Er3+ (RE= Y, Yb, Lu) nanocrystals through multi-doping strategy
1-28	Красников	Виктор	Викторович	Neuromorphic photoelectric synapses based on metal oxides nanocrystallites
1-29	Краснов	Алексей	Ильдарович	All-dielectric photonic crystal microcavity with electrically tunable Q-factor
1-30	Кузин	Алексей	Юрьевич	Thermo-optical effect in a Mach-Zehnder interferometer on a silicon nitride platform for quantum photonic applications
1-31	Курилова	Анастасия	Владимировна	Synthesis and properties of nanostructure composites based on barium titanate and 3d metal
1-32	Лебедева	Елизавета	Сергеевна	Detection of orbital angular momentum by forked diffraction method
1-33	Лосев	Антон	Вадимович	Optimization of gating signal parameters of sine-gated single-photon detector based on InGaAs/InP single-photon avalanche diodes
1-34	Макеев	Сергей	Сергеевич	Method for constructing NMR signal spectra using the discrete Fourier transform
1-35	Малеева	Ксения	Андреевна	Chemical Stability of the SERS Substrate Based on Gold Nanoparticles Self-Assembling Films
1-36	Мало	Дана	.	Aluminum nanostructures produced by aerosol dry printing for ultraviolet photoluminescence enhancement
1-37	Махлуф	Мазен	Мамдух	FPGA-Based Time-to-Digital Converter for Time-of-Flight Photon Counting LiDAR measurement
1-38	Машарин	Михаил	Алексеевич	Temperature-dependent exciton-polaritons in perovskite photonic crystal slab
1-39	Медведева	Светлана	Сергеевна	Dynamics of the uncertainty value of quadratures for bosonic quantum states
1-40	Миропольцев	Максим	Андреевич	Fabrication of SERS-Active Structures via Electrostatic Deposition of Colloidal Gold Nanoparticles on Polymer Microspheres
1-41	Михайловский	Михаил	Сергеевич	Collective states with high quality factors in chains of dielectric resonators
1-42	Мязин	Никита	Сергеевич	On improvements of nuclear magnetic resonance magnetometer to study magnetic mid-fields variations
1-43	Набиуллина	Резида	Даниловна	Optical properties of nanoporous alumina activated by pseudoisocyanine molecular nanoclusters
1-44	Наболь	Степан	Васильевич	Fabry-Perot type bound state in the continuum in an anisotropic photonic crystal
1-45	Наумова	Виктория	Викторовна	A new method of processing measurement results of tissue oxygen saturation abnormalities.
1-46	Никитина	Анастасия	Дмитриевна	Nonlinear circular dichroism in dielectric nanoparticle dimers and trimers
1-47	Певцов	Дмитрий	Николаевич	Förster resonance energy transfer in thin layers of indium phosphide quantum dots
1-48	Перетокин	Артём	Викторович	Experimental Study of Luminescent Properties and Band Structure of Two-Dimensional Photonic Crystals with Ordered Ge(Si) Nanoislands
1-49	Петров	Иван	Витальевич	Phase-time-encoding MDI QKD tolerant to detector imperfections
1-50	Пономарев	Роман	Сергеевич	Lensed optical fiber production technology using optical

				glue (Технология производства линзованного оптического волокна с использованием оптического клея)
1-51	Проводин	Даниил	Сергеевич	Новая методика контроля состояния жидких сред оптическим методом в экспресс-режиме
1-52	Проскурин	Алексей	Алексеевич	Perfect absorption of a focused beam by a single nanoparticle
1-53	Рахманова	Гульназ	Раифовна	Electron-spectrum and transport phenomena in two-dimensional Dirac Semimetals
1-54	Романенко	Гавриил	Александрович	Metal-dielectric optical microcavity with tunable Q-factor.
1-55	Рябцев	Илья	Александрович	Towards Passive Silicon Micro-Ring Memories Using Nonlinear Free Carrier Dispersion Effect
1-56	Савельев	Дмитрий	Андреевич	The investigation of the optical vortices diffraction on silicon ring gratings with variable height using high-performance computer systems
1-57	Сахно	Денис	Игоревич	Describing topological transitions in subwavelength metamaterials via effective material parameters
1-58	Седых	Ксения	Олеговна	Generation of different orbital angular momentum modes via array of computer-generated holograms.
1-59	Сектаров	Эдуард	Саитович	Control of color centers charge states in crystals by using X-Ray radiation
1-60	Селиверстов	Сергей	Валерьевич	Simulation of terahertz photonic integrated antenna
1-61	Серая	Олеся	Валерьевна	Synthesis of silver nanoparticles by spark discharge
1-62	Слюсаренко	Нина	Викторовна	Förster Resonance Energy Transfer from colloidal quantum dots to xanthene dye in polymer film
1-63	Смолина	Екатерина	Олеговна	Edge states and modulation instability in nonlinear photonic topological lattices
1-64	Студзинский	Виталий	Михайлович	Ion-beam-induced formation of gold nanostructures on polymethyl methacrylate film.
1-65	Терещенко	Иван	Борисович	Исследование устойчивости серебряных зеркал с защитными покрытиями к условиям высокой влажности и термоциклирования
1-66	Титова	Надежда	Андреевна	Thermal relaxation mechanisms in CVD monocrystalline boron-doped diamond microstructures
1-67	Толкач	Никита	Михайлович	Investigation of crystallinity degree for Ge2Sb2Te5 films by reflection and transmission photometry
1-68	Тонкаев	Павел	Андреевич	Photoluminescence from lead halide perovskite superlattices
1-69	Трофимов	Павел	Игоревич	Phase-change periodic surface structures for engineering of excitonic photoluminescence in WS2 monolayers
1-70	Фоминых	Никита	Андреевич	The Investigation of Optical Coupling of Microlasers with Tapered Fiber
1-71	Харисова	Руфина	Даниловна	Luminescent properties of mixed CsPb(BrxI1-x)3 perovskite nanocrystals in borogermanate glass
1-72	Цимоха	Мария	Александровна	Classification and multipolar content of the eigenmodes of acoustic resonators with different symmetries
1-73	Цыкарева	Юлиана	Витальевна	Simple expressions for the quantum entanglement of non-monochromatic photons on a waveguide beam splitter
1-74	Шеин	Кирилл	Вячеславович	Terahertz response in superconducting niobium diselenide
1-75	Щербак	Сергей	Александрович	Optical second-harmonic response of an axially-symmetric medium under radially polarized excitation
1-76	Эннс	Яков	Борисович	Modification of the optical and electrical properties of NiO

				films by thermal annealing
1-77	Mikhailova	Tatiana	Vladislavovna	Investigation of interference patterns by scanning near-field optical microscopy
1-78	Shkoldin	Vitaliy	Alekseevich	Precision formation of hybrid Au/Si nanoantennas by STM lithorgaphy
1-79	Макарова	Ксения	Алексеевна	Nanoscale waveguide beam splitter in quantum technologies

2. Lasers, solar cells and other optoelectronic devices

May 25, 2022

15:30 - 18:00 Poster Session I

2-1	Альхалил	Джордж	-	Polarization entanglement-enhanced optical gyroscope
2-2	Ачева	Полина	Павловна	Automated setup for testing Single-Photon Detectors countermeasures with bright-light attacks
2-3	Бадильо	Пабло Даниэль	-	New challenges for 3D scanning over flat surfaces applied in Cultural Heritage: The tombstone of the bishop Vasilije Petrović (Negosh) in Saint Petersburg
2-4	Богданова	Милана	Владимировна	Optimization of the contact grid for the GaP/Si solar cells
2-5	Ведь	Михаил	Владиславович	Spin light-emitting diode with intensity modulation
2-6	Вовк	Николай	Александрович	Development of technological methods for fabrication high-density luminescent structures based on up-conversion NaYF4:Yb3+,Er3+ particles.
2-7	Гафуров	Эльдар	Маратович	Reliability of 808nm QCW Laser Diode Arrays
2-8	Герасин	Илья	Сергеевич	Simple method for preparing highly-indistinguishable coherent states
2-9	Голтаев	Александр	Сергеевич	Epitaxial lift-off GaAs/AlGaAs solar cells for flexible devices
2-10	Грязнова	Екатерина	Михайловна	Application of a fiber-optic communication line for transmitting RF-signal in system formeasuring parameters of active phased antenna arrays
2-11	Дмитриева	Диана	Сергеевна	Development of the radiation situation monitoring system based on fiber-optic sensors for pools of nuclear power plants
2-12	Драгунова	Анна	Сергеевна	Analysis of characteristics of InGaAs/GaAs microdisk lasers bonded onto silicon board.
2-13	Дуплинский	Алексей	Валерьевич	
2-14	Еремеев	Андрей	Игоревич	Modelling of electromagnetic wave spectra of integrated optical waveguides
2-15	Заводиленко	Владимир	Владимирович	Evaluation of the operational parameters of single-photons detectors in quantum key distribution devices
2-16	Иванов	Антон	Евгеньевич	A comprehensive study of electroluminescence and temperature distribution of UX:3 AlInGaN LED
2-18	Казакин	Алексей	Николаевич	Fabrication and investigation of UV photodiode based on n-GaN/p-NiO heterojunction
2-19	Калентьева	Ирина	Леонидовна	Effect of ion radiation on the characteristics of InGaAs/GaAs/Al2O3/CoPt spin light-emitting diodes.
2-20	Корепанова	Анна	Георгиевна	Radiometric performance model of the near-infrared spectrometer for hydrocarbon analysis
2-21	Куркова	Александра	Дмитриевна	Veracity a method of detecting scattered laser radiation for

				content measuring of particulate matter in the air.
2-22	Логунов	Семён	Эдуардович	Development of a fiber-optic system for monitoring the state of oxygen activity in the current flow of the coolant
2-23	Макаров	Михаил	Эрнстович	Optimization of optical signal routing in the photonic tensor processor
2-24	Максимова	Елизавета	Игоревна	Quantum noise extraction from polarization swapping in a gain-switched VCSEL
2-25	Мерзлинкин	Виталий	Евгеньевич	Polarization compensation design for free-space quantum communication transmitter
2-26	Мехтиев	Эл	Эльчин	Posterior laser-locking technique for MDI-QKD
2-27	Можайко	Анна	Анатольевна	Laser surface treatment of aluminium: Correlation between thermal modeling and experimental study
2-28	Моисеев	Эдуард	Ильмирович	Investigation of the far-field emission pattern of microdisk lasers
2-29	Нестеров	Дмитрий	Андреевич	Structures of porous silicon doped with erbium for optoelectronics
2-30	Поповский	Никита	Игоревич	Features of the construction of fiber-optic communication lines with orthogonal frequency-division multiplexing
2-31	Пчелкин	Григорий	Александрович	Study of the characteristics of few-mode microstructured optical fibers with 6 cores made of highly doped GeO2 silica, step profile and induced chirality
2-32	Реутов	Алексей	Алексеевич	QKD and phase modulator imperfections
2-33	Родин	Сергей	Алексеевич	Optical communication channel for multifunctional ecological monitoring complex
2-34	Рудавин	Никита	Владимирович	Synchronization protocol for MDI-QKD systems
2-35	Самарцев	Илья	Владимирович	Metamorphic InGaAs photodiode with low dark current grown on GaAs substrate
2-36	Сёмкин	Валентин	Андреевич	Gate- and polarization-dependent graphene-metal junction for polarization resolution
2-37	Синицкая	Олеся	Алексеевна	Development of ultraviolet photodetectors based on ultrathin GaN epitaxial layers grown on c-Al2O3
2-38	Таценко	Иван	Юрьевич	Investigation of optoelectronic oscillator without microwave and optical amplifiers
2-39	Тишин	Павел	Дмитриевич	Investigation of the degradation of the characteristics of photosensitive structures with porous silicon
2-40	Тойкка	Андрей	Сергеевич	The development of ITO-based orienting coatings for Nematic Liquid Crystal Devices
2-41	Уваров	Александр	Вячеславович	Study of recombination and transport properties of a-Si:H(i)/a-Si:H(n) contact system for crystalline silicon solar cells
2-42	Филоненко	Елена	Михайловна	The effect of mesa-stripe design parameters on the 975 nm laser diode output characteristics
2-43	Филяев	Александр	Александрович	Afterpulse effects simulation of InGaAs/InP single-photon avalanche diodes for applying in quantum key distribution systems
2-44	Фролов	Илья	Владимирович	Measurement of the internal quantum efficiency of emission in the local region of the LED chip
2-45	Харламова	Анастасия	Александровна	Peculiarity of electron density calculation during interaction of ultrashort laser pulse with nitrogenous base of DNA molecule adenine
2-46	Хыдырова	Селби	-	Temperature rate equations for a semiconductor laser

2-47	Шурупов	Дмитрий	Николаевич	Hollow-core antiresonant optical fiber activated with YAG:Yb3+
2-48	Boudjemila	Linda	Linda	Electrical Characteristics of CsPbI3 and CsPbBr3 Lead Halide Perovskite Nanocrystal Films Deposited on Si-C Solar Cells for High Efficiency
2-49	Ignatev	Andrey	Nikolaevich	Wavelength stabilized laser module for pumping high-power fiber lasers

3. Nanobiotechnology, Biophysics and Biophotonics

May 25, 2022

15:30 - 18:00 Poster Session I

3-1	Абелит	Анна	Андреевна	Adaptive filtering revealed a new way for single living cells high-resolution electro- and optical research
3-2	Аникина	Виктория	Алексеевна	Исследование ранозаживляющих свойств нанокомпозита на основе диоксида церия в модели протон-индуцированного радиационного дерматита на мышах
3-3	Антипенко	Владимир	Викторович	Development of a bioimpedance instrument and study of the interaction of electrodes with a biological object in bioimpedance diagnostics
3-4	Волков	Денис	Андреевич	The study of NADH conformations in water-ethanol solutions using molecular dynamics simulations.
3-5	Голощапов	Дмитрий	Леонидович	Study of biomimetic composite dental materials based on nanocrystalline hydroxyapatite and light-curing adhesive.
3-6	Градусов	Илья	Андреевич	Fluorescence kinetics of biological coenzyme FAD in water-propylene glycol solutions excited by picosecond laser pulses
3-7	Григорьев	Виталий	Владимирович	Long-term storage of freeze-dried qPCR reagents in microfluidic devices
3-8	Гулин	Александр	Андреевич	Oxidative destruction of human RPE cells melanosomes induced by superoxide radicals leads to the formation of reactive aldehydes and ketones
3-9	Гуреева	Ирэна	Михайловна	A new technique for researching the absorption signal fronts of laser radiation on blood vessels
3-10	Демина	Полина	Андреевна	Nanobioreagents based on upconversion nanoparticles and hyaluronic acid for bioimaging
3-11	Добрецов	Родион	Кириллович	Creation of a device for detecting fluorescence from microfluidic chips
3-12	Емельянова	Анна	Андреевна	Microramanspectroscopy and laser-induced contrast visualisation for analysing incipient and clinically unrecorded enamel fissure caries
3-13	Замятина	Елизавета	Александровна	Effect of controlling the synthesis parameters by the Stöber method on the physicochemical characteristics of mesoporous silica nanoparticles
3-14	Зубик	Александра	Николаевна	Applicability of domestic production glues for adhesive bonding microfluidic chips for polymerase chain reaction
3-15	Иванов	Александр	Сергеевич	Computer analysis of erythrocyte deformability in microfluidic devices
3-16	Калганова	Анастасия	Игоревна	Evaluation of different viability assays for studying the course of multidrug resistant infections in C. elegans

3-17	Камалов	Алмаз	Маратович	Activation of polylactide films by cold plasma dielectric barrier discharge to improve the interaction of fibroblasts
3-18	Клименко	Дарья	Юрьевна	Processing of qPCR signals obtained on microfluidic chips in the measurement sequence disorder event
3-19	Кубенко	Варвара	Георгиевна	Tetrahydrobiopterin and 5,10 –Methenyltetrahydrofolate Excited States Dynamics
3-20	Кулагина	София	Юрьевна	Investigation of solubility of porous silicon nanocomposite with hydroxyapatite
3-21	Минаева	Екатерина	Дмитриевна	Laser-induced forward transfer method adaptation for cell spheroids
3-22	Михайлова	Олеся	Александровна	Development of a device for picoampere currents measuring
3-23	Можаева	Вера	Александровна	Surface-enhanced Raman spectroscopy to distinguish between similar peptides
3-24	Насиров	Павел	Денисович	Исследование процесса конъюгации антител с квантовыми точками для создания иммунохроматографических тест-систем на их основе
3-25	Осыченко	Алина	Анатольевна	Oocyte enucleation by 795 nm femtosecond laser is a precise and effective method of recipient cytoplast preparation
3-26	Перепелица	Елизавета	Сергеевна	Colloidal stability of iron oxide nanoparticle clusters in biologically relevant fluids
3-27	Плешаков	Павел	Сергеевич	Study of hydrogel microparticles with cells in microfluidic chips for 3D bioprinting
3-28	Рудных	Сергей	Константинович	
3-29	Сенотрусова	Софья	Андреевна	Microsphere optical microscopy for biological objects
3-30	Серов	Егор	Денисович	Development of a control algorithm for a fluid flow monitoring system in a microfluidic system
3-31	Сырчина	Мария	Сергеевна	Comparison of femtosecond laser, hydrothermal and microwave synthesis of fluorescent products from L-lysine
3-32	Терешенкова	Ольга	Алексеевна	Research of the method of optical spectral real-time laser ablation estimation during endoscopic surgeries
3-33	Точило	Ульяна	Алексеевна	Фемтосекундный лазер - эффективный инструмент в энуклеации зигот
3-34	Трифанова	Екатерина	Максимовна	Photoluminescent nanoparticles β-NaYF4:Yb3+Er3+Ce3+ for multipurpose bioimaging
3-35	Хакимова	Анастасия	Алексеевна	TEM use for the study of chitosan microspheres and nanospheres obtained from its salts with several acids
3-36	Чуйко	Яна	Владимировна	Colorimetric detection of tyrosine with silver nanoparticles and tyrosinase
3-37	Шиповская	Анна	Борисовна	Comparative analysis of nanosized structures in thin hydrogel plates of chitosan L- and D-ascorbate–hydrochloride
3-38	Шишкина	Дарья	Александровна	Porous silicon nanocontainers for targeted drug delivery
3-39	Яшков	Дмитрий	Владимирович	Исследование флуоресцентных свойств NADH-ADH в смеси естественных ферментативных комплексов методом флуоресцентной поляризационной спектроскопии с высоким временным разрешением
3-40	Васин	Александр	Александрович	Physicochemical analysis of bisretinoid A2E photooxidative destruction products

4. Electric, Magnetic and Microwave Devices

May 26, 2022

15:30 - 18:00 Poster Session II

4-1	Аринушкина	Ксения	Геннадьевна	Improving the electrical characteristics of a frequency standard based on cesium atoms
4-2	Багров	Александр	Романович	Magnetic field in a magneto-optical system of solenoids and magnetic quadrupole lenses
4-3	Белозеров	Игорь	Александрович	Оптимизация рабочих характеристик МЭМС-переключателя на основе кантилевера
4-4	Брюшинин	Анатолий	Алексеевич	Synchronization systems of time scales and frequencies in polar latitudes by meteor radio channel
4-5	Булатов	Никита	Олегович	RFID-based sensor for insect detection
4-6	Бурмистров	Олег	Ильич	Wireless power transfer using higher-order eigenmode a birdcage coil in MRI-bore
4-7	Бурцев	Владимир	Денисович	Additive Manufacturing of An Antenna Array
4-8	Ван	Дин		
4-9	Васильев	Илья	Владимирович	Modelling of ion transfer processes in ion-plasma generator with discrete flow compaction
4-10	Герасименко	Владислав	Сергеевич	Higher spectral harmonics generation in an unamplified fiber ring resonator with electro-optical phase modulator
4-11	Дмитриев	Роман	Алексеевич	Features of the formation of the frequency of the microwave excitation signal in the quantum frequency standard
4-12	Елисов	Максим	Вячеславович	Lithium ions with energy 250-360 keV in the system of solenoidal and quadrupole magnetic fields
4-13	Исаева	Алина	Сергеевна	Rail condition monitoring using LSTM recurrent neural networks
4-14	Исупова	Екатерина	Васильевна	Improvement of the characteristics of the frequency synthesizer in the quantum frequency standard on caesium atoms
4-15	Кенесбай	Рамазан	-	Low-induction integral heater for temperature control of MEMS vapor cell
4-16	Кожевников	Василий	Юрьевич	The kinetic simulation in vacuum electronics: uncovering the fundamental nature of non-Maxwellian distribution function effects
4-17	Листюхин	Владислав	Аександрович	Monitoring of overhead power lines parameters in real time
4-18	Литвинов	Кирилл	Андреевич	Algorithm and installation for measuring the current lacing voltage in high-power RF and microwave bipolar and heterojunction bipolar transistors
4-19	Лукашев	Никита	Александрович	New optic system for low mass 199Hg ion clock
4-20	Любчак	Анастасия	Николаевна	A mmWave Rod Antenna Array Compatible with a PCB Prototyping Technology
4-21	Макаров	Павел	Андреевич	Transmission of Electromagnetic Waves Through Disordered Multiphase Composite Media
4-22	Пермякова	Ольга	Олеговна	Analysis of STDP characteristics of HfO2-based memristor
4-23	Приходько	Анатолий	Николаевич	Millimeter Wave Photonic Crystal Waveguides Fabricated via Direct Machining
4-24	Рыжова	Дарья	Александровна	Monitoring of radioactive contamination in the atmosphere using radar systems
4-25	Савин	Данила	Дмитриевич	Generator of highly stable SHF signals with low phase noise
4-26	Солдатенкова	Мария	Дмитриевна	Voltage noise and fluctuation mechanisms in ultrathin NbN

				nanowires.
4-27	Стручков	Николай	Сергеевич	On the mechanism of CNT network resistive response to NH3
4-28	Ткаченко	Алексей	Вячеславович	Manufacturing of the RF MEMS switch for 5G mobile network transceivers
4-29	Тризнова	Александра	Даниловна	
4-30	Уваров	Илья	Владимирович	A seesaw-type MEMS switch with Pt and Ru contacts
4-31	Усачев	Антон	Сергеевич	Non-mechanical steering of GHz waves by diffraction grating
4-32	Чижиков	Сергей	Владимирович	Optimization of heterostructural transistor parameters for the MIC of the amplifying path of a medical radiothermograph
4-33	Чуканова	Ольга	Борисовна	GaN IC E-mode p-channel and n-channel transistors simulation
4-34	Шавшин	Артём	Владимирович	Development of automatic gain control for the rubidium-87 frequency standard
4-35	Шлепаков	Павел	Сергеевич	Fabrication of a micropump based on the fast electrochemical actuator with the PDMS membrane
4-36	Шугуров	Константин	Юрьевич	Microwave Schottky diodes based on single GaN nanowires
4-37	Rudyk	Nikolay	Nikolaevich	Resistive type gas sensor based on carbon nanotubes
4-38	Shlepakov	Pavel	Sergeevich	Ruthenium as an electrode material for the fast electrochemical actuator

5. Other Aspects of Nanotechnology

May 26, 2022

15:30 - 18:00 Poster Session II

5-1	Алымов	Георгий	Вадимович	Impact of the current pulse width on the speed of metal-insulator transition in VO2 nanobeams
5-2	Аль Алвани	Аммар	Жабер	Self-organization of quantum dots and porphyrin Langmuir monolayers on the surface of water subphase
5-3	Денисенко	Марк	Анатольевич	Design of the Two-Axis MEMS Gyroscope-Accelerometer
5-4	Дронова	Мария	Александровна	Electrical conductivity and optical properties of water-based graphene/AgNWs hybrid inks for flexible electronics
5-5	Еуров	Даниил	Александрович	TEM contrast enhancement by adsorption of erbium ions on the inner surface of micro-mesoporous silica particles
5-6	Журина	Ангелина	Евгеньевна	STUDY OF PIEZOCERAMIC MATERIALS POLARIZATION
5-7	Захаров	Родион	Константинович	Entanglement between isolated atom and Jaynes-Cummings atom in a cavity with Kerr media
5-8	Исокжанов	Шахбоз	Шокиржон угли	Features of the formation Super C45-RuO2 based planar supercapacitor structures
5-9	Кесслер	Илария	Олеговна	Investigation of the use of combined plasma to create nanostructures on the surface of semiconductor wafers
5-10	Козловский	Александр	Валерьевич	Dependence of light-addressable potentiometric sensor sensitivity on photo-induced processes in Si
5-11	Комаров	Иван	Александрович	Multicomponent graphene oxide suspensions for spin-coated thin films

5-12	Кондратьев	Валерий	Михайлович	Study of quasi 1-D silicon nanostructures adsorption properties
5-13	Леоненко	Екатерина	Сергеевна	Study of the Al/CuOx thermite material combustion initiation process using a thin film Ni/Cr heating element
5-14	Лепаев	Александр	Николаевич	Transformation of dispersed particles in a pyrotechnical flame
5-15	Литовченко	Наталья	Александровна	Features of electrophoretic deposition of nanostructured cathode material based on NCA and Super C45.
5-16	Ломакин	Андрей	Игоревич	Inelastic scattering in ultra-thin Nb films
5-17	Мастюкова	Алена	Сергеевна	Quantum convolutional neural networks for multiclass classification
5-18	Миронюк	Владислав	Николаевич	Investigation of Langmuir floating layers by capacitive methods
5-19	Мирошниченко	Анна	Сергеевна	Low-adhesive functionalized silicone rubbers for flexible light-emitting devices
5-20	Морозова	Екатерина	Владимировна	Modeling of thermoelectric properties of graphenylene nanotubes encapsulated with fullerenes
5-21	Мурашко	Альбина	Максимовна	Resorbable materials of complex shape based on calcium pyrophosphate for bone tissue regeneration
5-22	Науменко	Данил	Валерьевич	Characterization of MEMS gyroscope sensor by nanoindentation
5-23	Николаева	Анастасия	Сергеевна	Multi-qubit gate decomposition using photonic qutrits
5-24	Нугманова	Алсу	Галимовна	Size-selective hybrid photocatalysts based on porphyrin SURMOFs and graphene oxide
5-25	Полякова	Кристина	Александровна	On the compression modulus of floating Langmuir layers
5-26	Романов	Никита	Сергеевич	
5-27	Ромашкин	Алексей	Валентинович	Thin WO3/Pt layer with top spray deposited carbon nanotubes to form structure with heterojunctions for selective gas sensor
5-28	Семенов	Александр	Алексеевич	Local elastic moduli of amorphous nanostructures (Локальные упругие модули аморфных наноструктур)
5-29	Смирнова	Мария	Александровна	Influence of the initial surface state on the ripple formation induced by O2+ sputtering of Si
5-30	Соболева	Ольга	Игоревна	Investigation of the Stability of Current Generation in Nitrogen-Doped Carbon Nanotubes
5-31	Соколов	Максим	Римович	Self-assembly of porphyrin-based symbimetic hybrid material on layered europium hydroxide
5-32	Старовойтов	Сергей	Олегович	Effect of the ratio of intensities of the reference and object beams on the performance of computer-generated holograms designed for extreme ultraviolet lithography
5-33	Терещенко	Иван	Борисович	Durability silver coating for Second Mirrors optical diagnostic ITER to high humidity and thermal cycling
5-34	Федоров	Алексей	Константинович	Probing non-Markovian dynamics of noisy intermediate-scale quantum (NISQ) systems
5-35	Харитонова	Полина	Геннадьевна	Langmuir-Blodgett technology to obtain semi-magnetic photosensitive materials
5-36	Шамин	Евгений	Сергеевич	Sidewall roughness model for optical losses calculation in photonic integrated circuits
5-37	Ширяев	Максим	Евгеньевич	Features of the combustion initiation process of Al-CuOx multilayer thermite structures

6. Crystal growth and structural properties of semiconductor materials and nanostructures

May 26, 2022

15:30 - 18:00 Poster Session II

6-1	Авилов	Вадим	Игоревич	Cross-bar memristor nanostructures array for neural network layout
6-2	Арефина	Ирина	Александровна	Optical properties of carbon dots covalently bonded with plasmonic nanoparticles
6-3	Белов	Ярослав	Дмитриевич	Formation of Pb-Sn Janus particles on the surface of lead-tin telluride films during ion-plasma sputtering
6-4	Бесполудин	Владислав	Валерьевич	Gas-sensitive properties of cobalt oxide films formed by RTA
6-5	Большин	Даниил	Сергеевич	Influence of the applied voltage on electrophysical properties of conductive hydrogel studied by Raman spectroscopy
6-6	Бондаренко	Дарья	Николаевна	Design of LEDs based on GaN/InGaN nanowires on Si substrates
6-7	Вакулов	Захар	Евгеньевич	Ferroelectric films for renewable energy
6-8	Васин	Сергей	Вячеславович	Шумовые характеристики пленок поливинилового спирта с магнито-чувствительными многостенными углеродными нанотрубками
6-9	Вовк	Илья	Александрович	Lattice reconstruction in finite-size MoSe2-WSe2 heterostructures
6-10	Волкова	Мария	Геннадьевна	The effect of the seed layer on the TiO2 nanotubes coatings quality grown on the glass substrates by hydrothermal synthesis
6-11	Горелов	Илья	Кириллович	Research of microresonator characteristics with carbon nanotubes
6-12	Гридчин	Владислав	Олегович	InGaN nanostructures on Si substrate: PA-MBE growth and properties
6-13	Грушевский	Егор	Алексеевич	The plasma assistant cathodic electro-chemical exfoliation of graphite.
6-14	Гуляева	Ирина	Александровна	Investigation of the surface properties of thin nanocomposite films of TiO2-SnO2 composition
6-15	Дададжанова	Антонина	Ивановна	The properties of magneto-luminescent nanocomposites in a liquid flow
6-16	Данилина	Элеонора	Михайловна	The effects of epitaxial strain on the thermodynamic parameters of III-V bismuth-containing alloys
6-17	Ерёменко	Михаил	Михайлович	Effect of pregrowth annealing temperature on the subsequent epitaxial growth of GaAs on Si
6-18	Звягина	Александра	Игоревна	Self-assembly of recyclable semiconductor nanowires from lutetium bis-phthalocyanine on solids
6-19	Золотухин	Дмитрий	Сергеевич	AlGaN/GaN heterostructures grown on hybrid SiC/porSi substrates
6-20	Иванов	Андрей	Юрьевич	Heteroepitaxial growth of κ-Ga2O3 films by halide vapor phase epitaxy
6-21	Кадинская	Светлана	Алексеевна	Study of hydrothermal zinc oxide nanostructures photovoltaic properties

6-22	Киндюшов	Иван	Константинович	Study of narrow-band UV radiation sources based on zinc oxide
6-23	Кириченко	Данил	Владимирович	Multistage droplet epitaxy for the fabrication of InAs/GaAs quantum dots with ultra-low density
6-24	Комаревцев	Иван	Михайлович	Effect of noble metal nanoparticles in transition metal oxide magnetron sputtering
6-25	Кондратьева	Анастасия	Сергеевна	Surface modification of magnetron sputtered metal oxide films with plasmonic nanoparticles
6-26	Косолапова	Ксения	Дмитриевна	Control of optical properties by change in surface chemistry of carbon dots based on citric acid and ethylenediamine
6-27	Краснов	Алексей	Галинурович	New bismuth titanates heterostructures as Vis-photocatalysts: DFT and experimental insight
6-28	Крюков	Руслан	Николаевич	Efficiency of GaOx nanoclusters formation in SiO2 and Al2O3 dielectric layers subjected to O+ and Ga+ ion implantation
6-29	Кудряшов	Игорь	Сергеевич	SIMLAD: A General Simulation Program For Semiconductor Laser Dynamics
6-30	Кузнецов	Юрий	Михайлович	Method of GexSi1-x doping with phosphorus in the spark plasma sintering process
6-31	Кутепов	Максим	Евгеньевич	Optimizing deposition regimes to fabricate vanadium dioxide film for active metasurfaces
6-32	Лахина	Екатерина	Александровна	Independent control of size and shape of GaAs nanostructures during droplet epitaxy using ultra-low arsenic flux
6-33	Лендяшова	Вера	Вадимовна	InAs quantum dots in Si: MBE growth and optical properties
6-34	Максимова	Алина	Андреевна	Plasma Deposited Indium Phosphide and its Electrophysical Properties
6-35	Мартынова	Ирина	Константиновна	Effect of thermal annealing on catalytic properties of Ge-Co nanostructure obtained by electrochemical deposition
6-36	Махмуд-Ахунов	Марат	Юсупович	Titanium oxide nanotubes for high capacity systems
6-37	Мельниченко	Иван	Алексеевич	Optical studies of InP nanostructures monolithically integrated in Si (100)
6-38	Морозова	Юлия	Викторовна	Creation of a sensitive element of a gas sensor based on a graphene-like film
6-39	Низамеева	Гулия	Ривалевна	Cetyltrimethylammonium bromide as a soft template for the synthesis conductometric gas sensor active substance
6-40	Никитина	Лариса	Сергеевна	Study of FIB-modified silicon areas by AFM
6-41	Османов	Себастьян	Вадимович	Topological features of nanoplasmonic structures based on Bi-substituted iron garnets
6-42	Резник	Родион	Романович	III-V hybrid nanostructures on silicon: molecular-beam epitaxy growth and physical properties
6-43	Рыбин	Владислав	Витальевич	Thermal and mechanical properties of a metal-matrix composite with ceramic inclusions
6-44	Трошкина	Наталья	Николаевна	Investigation of the properties of quantum dots depending on the nature and number of additional semiconductor layers
6-45	Фаттахов	Илья	Сергеевич	

6-46	Федотов	Артем	Владимирович	Grain structure of LPCVD polycrystalline silicon
6-47	Харин	Никита	Юрьевич	"Development of the design of a THz radiation source based on tunnel-coupled quantum wells"
6-48	Черненко	Наталия	Евгеньевна	Experimental study of nanoholes formation using local droplet etching of FIB-modified GaAs (001) surface
6-49	Чистиков	Илья	Евгеньевич	The development of the method for temperature-resolved measuring of local Raman and photoelectric response
6-50	Шандыба	Никита	Андреевич	Effect of FIB-modification of Si(111) surface on GaAs nanowire growth
6-51	Шишкин	Иван	Александрович	Formation of porous silicon layers in a «universal» type electrochemical cell
6-52	Шугабаев	Талгат	Маратович	
6-53	Юшков	Вячеслав	Владиславович	Semiconductor metasurfaces for Fourier filtering of an optical signal