CONFERENCE OPENING. PLENARY

Wednesday, January 29, 2025, 10.00
Room G-404

1. POTEMKIN F.V.[1,2], MAREEV E.I.[1,2], KULIKOV A.G.[1], PISAREVSKII Yu.V.[1], BLAGOV A.E.[1], KOVALCHUK M.V.[1]
   [1]*National Research Center «Kurchatov Institute», Moscow*
   [2]*Lomonosov Moscow State University*
   Laser-induced structural dynamics and nonstanionary processes, registered by optical methods
2. PROKHOROV A.V.[1,2], CHERNIKOV A.S.[1], SHESTERIKOV A.V.[1,2], GUBIN M.Yu.[1,2], SYUY A.V.[3,4], POPOV A.A.[5], SHALYGINA O.A.[6], KHORKOV K.S.[1], KOCHUEV D.A.[1], ARSENIN A.V.[3,4], TSELIKOV G.I.[3], VOLKOV V.S.[3]
   [1]*Vladimir State University named after Alexander and Nikolay Stoletovs*
   [2]*Moscow Center for Advanced Studies*
   [3]*Moscow Institute of Physics and Technology (National Research University), Dolgoprudny*
   [4]*Emerging Technologies Research Center XPANCEO, Dubai, United Arab Emirates*
   [5]*National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)*
   [6]*Lomonosov Moscow State University*
   Laser synthesis of quantum-sized structures from new optical materials: a test-tube laboratory
3. SHIPULIN A.V.
   Skolkovo Institute of Science and Technology
   Formation of an ecosystem in the field of production and application of photonic integrated circuits
4. TRIBELSKY M.I.
   Lomonosov Moscow State University
   Nanoparticles as multifunctional elements for subwavelength optics

POSTERS 1

Wednesday, January 29, 2025, 12.00
Room G-404

Meeting 1

Wednesday, January 29, 2025, 13.00
Room G-404

5. SHUR V.Ya., AKHMATKHANOV A.R., CHUVAKOVA M.A., LISJIKH B.I., KOSOBOKOV M.S., BOYKO A.A.[1]
   Ural State University, Ekaterinburg
   [1]*Novosibirsk State University*
   Nonlinear photonic crystals: ferroelectrics with periodical domain structure
6. DADENKOV I.G., TOLSTIK A.L., MIKSIUK Yu.I.[1], SAECHNIKOV K.A.[1]
   Belarusian State University, Minsk
   [1]*Belarusian State Pedagogical University, Minsk*
   Phase transformation of light fields in sillenite crystals
7. DOLGANOV P.V., BAKLANOVA K.D, DOLGANOV V.K.
   Institute of Solid State Physics named after Yu.A. Osipyan of the RAS, Chernogolovka
   Two-dimensional photonic crystals based on chiral liquid crystals
8. PANTSIALEYEVA Ye.P., MELNIKOVA E.A., GORBACH D.V., TOLSTIK A.L.
   Belarusian State University, Minsk
   Application of a twist-planar nematic liquid crystal element to determine the phase topology of optical vortices
9. ZHURAVLEV V.A.[1,2], KOZLOV A.A.[1,2], DEMIN V.A.[2], MOSKALEV D.N.[1,2], KRISHTOP V.V.[1,2,3]
   [1]*Perm Scientific-Industrial Instrument Making Company*
   [2]*Perm National Research State University*
   [3]*Perm National Research Polytechnic University*
   Experimental study of refractive index anisotropy of thin-film lithium niobate
10. ANISIMOV R.I., KOLMAKOV A.A., KOMOV E.V., SHANDAROV S.M.
    Tomsk State University of Control Systems and Radioelectronics
    Two-beam self-action on photorefractive holograms in the linbo3:cu diffusion structure
11. GORDEEVA A.I., KORNILICYN A.R.
    Perm State National Research University
    Thermogravitational convection to control proton exchange making planar waveguides on lithium niobate crystal
12. MOLCHANOVA A.D., ALLAHVERDIEV K.R.[1]
    Institute for Spectroscopy of the RAS, Troitsk
    [1]*National Aviation Academy, Baku, Azerbaijan*
    Phase transitions in two-dimensional ferroelectric crystals $TlGaSE_2$
13. PARAMONOV G.S., SYCHUGIN S.A., BAKUNOV M.I.
    Lobachevsky State University of Nizhny Novgorod
    Generation of terahertz radiation by a split laser beam
14. GAFUROVA L.V., GALYUK K.A., SIROTKIN A.A., BAGDASAROV V.Kh., OVCHARENKO B.D.
    Prokhorov General Physics Institute of the RAS, Moscow
    IR radiation generation in ZnSe:Fe crystal pumped by a nanosecond pulses train
15. RYZHOV A.S., SHCHERBININ D.P., ROMANOVA A.V., IVANOV A.V.
    ITMO University, Saint-Petersburg
    Investigation of stabilization modes of laser crystals $YAl_3(BO_3)_4$
16. ANIKEEVA V.E., BOLDYREV N.Yu., SEMENOVA O.I.[1], POPOVA M.N.
    [1]*Institute for Spectroscopy of the RAS, Troitsk*
    [2]*Rzhanov Institute of Semiconductor Physics of SB RAS, Novosibirsk*
    Spectroscopic study of a $CsPbBr_3$ perovskite single crystal

Meeting 2

Wednesday, January 29, 2025, 13.00
Room G-405

17. SHUKLOV I.A.
Moscow Institute of Physics and Technology (State University), Dolgoprudny
The synthesis of colloidal quantum dots with new reagents - chalcogens precursors
18. TARASEVICH E.A.[1,2,3], LOZING N.A.[1], GLADUSH M.G.[1,3]
[1]Moscow Pedagogical State University
[2]National Research University «Higher School of Economics», Moscow
[3]Lebedev Physical Institute of the RAS, Moscow
Cooperative photoluminescence of two impurity organic molecules
19. BELOV M.P., GLADKIKH A.Yu., POPOV V.V., FROLOV A.Yu., UTOCHNIKOVA V.V., FEDYANIN A.A.
Lomonosov Moscow State University
Enhancement of photoluminescence of lanthanide complexes using plasmonic crystals
20. MILENKOVICH T., SHUKLOV I.A., KHAKIMOV K.T., POPOV V.S.
Moscow Institute of Physics and Technology (State University), Dolgoprudny
Study of the ligand exchange and its effect on the photoelectric properties of thin films of mercury selenide colloidal quantum dots
21. KONONOV D.V., BORODINA L.N., KOCHAKOV A.V., PALEHOVA A.V., LEONOV N.B., FILATOV N.A.[1], BUKATIN A.S.[1], DADADZHANOV D.R., VARTANYAN T.A.
ITMO University, Saint-Petersburg
[1]Alferov University, Saint-Petersburg
Luminol chemiluminescence enhancement in the presence of a metal coating inside a microfluidic chip
22. KOROLEVA T.V., KHAKIMOV K.T., MILENKOVICH T., SHUKLOV I.A., POPOV V.S.
Moscow Institute of Physics and Technology (State University), Dolgoprudny
Synthesis of mercury telluride quantum dots with additional growth for MWIR band
23. MURATOV D.A., NIKOLAEV N.E., CHEKHLOVA T.K.
Peoples' Friendship University of Russia (RUDN University), Moscow
Comparison of optical properties of composite media containing a mixture of copper and gold nanoparticles
24. KOCHAKOV A.V., MITUSOVA A.A.[1], KONONOV D.V., DADADZHANOV D.R.
ITMO University, Saint-Petersburg
[1]Pavlov First Saint-Petersburg State Medical University
Spectroscopy of ablative gold nanoparticles in leukemia macrophages
25. SYUY A.V.[1,2], ZAVIDOVSKY I.A.[1], TSELIKOV D.I.[1,3], MARTYNOV I.V.[1], SIDOROV N.V.[4], PALATNIKOV M.N.[4], ARSENIN A.V[1,2], VOLKOV V.S.[2]
[1]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
[2]Emerging Technologies Research Center XPANCEO, Dubai, United Arab Emirates
[3]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[4]I.V. Tananaev Institute of Chemistry and Technology of Rare Elements and Mineral Raw Materials of FRC Kola Science Center of the RAS, Apatity, Murmansk region
Synthesis of amorphous lithium niobate nanoparticles
26. IZBASAROVA E.A., GAZIZOV A.R., PUDOVKIN M.S.
Kazan (Volga Region) Federal University
Biosensor based on $CeYTbF_3$ colloidal nanoparticles bound to plasmonic ligands
27. ROZENTAL S.R., KISLOV D.A., SHALIN A.S.
Moscow Institute of Physics and Technology (State University), Dolgoprudny
Optical tractor beam for superscattering nanoparticles
28. SOBOLEVA E.V., RUDYI S.S., SHCHERBININ D.P., IVANOV A.V.
ITMO University, Saint-Petersburg
Bistable dynamics of micro- and nanoparticles in a hybrid ion trap

Meeting 3

Wednesday, January 29, 2025, 16.00
Room G-405

29. MAKIN V.S., MAKIN R.S.[1]
Institute for Nuclear Energetic, Sosnovy Bor, Leningrad region
[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Coupled orthogonal gratings in Kerr waveguide induced by middle-IR ultrashort laser radiation
30. BURMISTROV E.R.[1,2,3], AVAKYANTS L.P.[1].
[1]Lomonosov Moscow State University
[2]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[3]Moscow State University of Civil Engineering
The effective mass of the main charge carriers in InGaN/GaN led's heterostructures with a grating coupler according to THz–TDS data
31. MAMIAN K.A., NETSVETAEV A.A., FROLOV A.Yu., FEDYANIN A.A.
Lomonosov Moscow State University
Coherent beam-steering with a trapezoidal diffraction grating
32. SHESTERIKOV A.V.[1,2], GUBIN M.Yu.[1,2], PROKHOROV A.V.[1,2]
[1]Vladimir State University named after Alexander and Nikolay Stoletovs
[2]Moscow Center for Advanced Studies
Frequency-tunable metamirror based on transition metal dichalcogenide nanoparticle trimers
33. NEROVNAYA A.A., FROLOV A.Yu., FEDYANIN A.A.
Lomonosov Moscow State University
Optical spatial differentiation by using plasmonic crystals

34. GOLODUKHINA A.N.[1,2], SHITIKOV A.E.[1], LOBANOV V.E.[1], CHERMOSHENTSEV D.A.[1,2,3], BILENKO I.A.[1,5]
[1]*Russian Quantum Centre, Skolkovo, Moscow region*
[2]*Lomonosov Moscow State University*
[3]*Skolkovo Institute of Science and Technology*
Raman microcomb in silicon nitride microresonator
35. GUBIN M.Yu.[1,2], SHESTERIKOV A.V.[1,2], ARSENIN A.V.[3,4], VOLKOV V.S.[4], PROKHOROV A.V.[1,2]
[1]*Vladimir State University named after Alexander and Nikolay Stoletovs*
[2]*Moscow Center for Advanced Studies*
[3]*Moscow Institute of Physics and Technology (National Research University), Dolgoprudny*
[4]*Emerging Technologies Research Center XPANCEO, Dubai, United Arab Emirates*
Control of spectral features of stretchable silicon metasurfaces with quasi-trapped mode
36. SHULYNDIN P.A., RUMIANTSEV B.V., MIGAL E.A., PUSHKIN A.V., POTEMKIN F.V.
Lomonosov Moscow State University
The role of stimulated plasma radiation during the process of second harmonic generation in the presence of a strong terahertz field
37. LEVUS M.V.[1,2], RIZAEV G.E.[1,2], PUSHKAREV D.V.[1,2], SELEZNEV L.V.[1,2]
[1]*Lomonosov Moscow State University*
[2]*Lebedev Physical Institute of the RAS, Moscow*
Energy characteristics of terahertz emission from single-color filament plasma
38. RUMIANTSEV B.V., MIGAL E.A., PUSHKIN A.V., POTEMKIN F.V.
Lomonosov Moscow State University
High-order harmonics generation under the excitation of a gaseous medium by femtosecond near-infrared laser radiation in the field of few-cycle intense terahertz radiation
39. FADEEV S.V., PLEKHANOV A.A., MOLKOV T.S., MARTYNOV I.L., CHISTYAKOV A.A.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Detection of organic compounds using terahertz metamaterials
40. MIGAL E.A., PUSHKIN A.V., POTEMKIN F.V.
Lomonosov Moscow State University
Efficient even harmonic generation in a semiconductor under symmetry breaking initiated by an intense terahertz field

Meeting 4

Wednesday, January 29, 2025, 16.00
Room G-404

41. NOVIKOV V.B.
Lomonosov Moscow State University
Chirp-mediated control of spatiotemporal optical vortices
42. VASHUKEVICH E.A., GOLUBEVA T.Yu.
Saint Petersburg State University
Parallel entangling operations on an ensemble of two-qubit systems based on multimode light-atomic interaction
43. DUSHANIN A.P.[1,2], DANILIN A.N.[1,3], YUNUSOV T.R.[1,2], MASALOV A.V.[1,4], CHERMOSHENTSEV D.A.[1,2,5], BILENKO I.A.[1,3]
[1]*Russian Quantum Center, Skolkovo*
[2]*Moscow Institute of Physics and Technology (State University), Dolgoprudny*
[3]*Lomonosov Moscow State University*
[4]*Lebedev Physical Institute of the RAS, Moscow*
[5]*Skolkovo Institute of Science and Technology*
Phase bistability and quantum noise squeezing of a degenerate optical parametric oscillator in an integrated resonator with cubic nonlinearity
44. DARINSKII A.N.
Shubnikov Institute of Crystallography of NRC «Kurchatov Institute», Moscow
Nonreciprocal propagation of surface electromagnetic waves in magneto-optical structures
45. BRYUKVINA D.A.[1,2], DMITRIEV N.Yu.[1], SHITIKOV A.E.[1], CHERMOSHENTSEV D.A.[1,2,3], LOBANOV V.E.[1], BILENKO I.A.[1,4]
[1]*Russian Quantum Center, Skolkovo*
[2]*Moscow Institute of Physics and Technology (National Research University), Dolgoprudny*
[3]*Skolkovo Institute of Science and Technology*
[4]*Lomonosov Moscow State University*
Analysis of soliton states probability in integrated high-q microring resonators
46. SILIN A.A., KOROLEV S.B.
Saint Petersburg State University
Universal generation of squeezed fock states in an n-dimensional interferometer in particle number measurement scheme
47. TSUKANOV A.V., KATEEV I.Yu.
Valiev Institute of Physics and Technology of NRC «Kurchatov Institute», Moscow
Nanophotonic beam-splitter based on quantum dots with Förster coupling
48. PETROV N.I.
Scientific and Technological Center of Unique Instrumentation of the RAS, Moscow
Lightning as a natural source of X-ray and gamma-ray photons
49. BAGROV A.R., BASHKIROV E.K.
Samara National Research University
Dynamics of thermal entanglement in the not-resonant three-qubit Tavis-Cummings model with Kerr nonlinearity via multiphoton processes
50. SHOUTOVA O.A., SADYROVA V.R.
Lomonosov Moscow State University
Relation of polarization and energy properties of vector vortex beams
51. GAZIZOV A.R., IZBASAROVA E.A., PUDOVKIN M.S.
Kazan (Volga Region) Federal University
Simulation of the Purcell effect of a single emitter in a heteroplasmonic nanogap
52. SINGH R.[1], TERETENKOV A.E.[2]
[1]*Self-employed researcher, Domodedovo*
[2]*Steklov Mathematical Institute of the RAS, Moscow*
The formation of schrodinger's cat-like states in a ppnc crystal

Meeting 5

Thursday, January 30, 2025, 10.00
Room G-406

53. VLADIMIROV A.P.[1,2], PAVLOV P.V.[3]
[1]Institute of Engineering Science of Ural Branch of the RAS, Yekaterinburg
[2]Ural State University, Ekaterinburg
[3]Air Force Academy named after prof. N.E. Zhukovsky and Yu.A Gagarin, Voronezh
To the question of creating new methods and devices for non-destructive testing and technical diagnostics
54. BULDAKOVA A.V., SHARIPOVA M.I., TOLMACHEVA V.V., FROLOV A.Yu., FEDYANIN A.A.
Lomonosov Moscow State University
Development of reconfigurable optical microdevices based on photopolymer with magnetic nanoparticles
55. BURTSEV A.A.[1], IONIN V.V.[1], KISELEV A.V.[1], ELISEEV N.N.[1], MIKHALEVSKY V.A.[1], NEVZOROV A.A.[1,2], GREBENEV V.V.[1], LOTIN A.A.[1,3]
[1]Institute on Laser and Information Technologies of NRC «Kurchatov Institute», Shatura
[2]National University of Science and Technology «MISIS», Moscow
[3]Mendeleev University of Chemical Technology of Russia, Moscow
High transparent phase-change materials based on selenium for reconfigurable photonics
56. KOLCHIN A.V., SHULEIKO D.V.[1], ZABOTNOV S.V.[1], GOLOVAN L.A.[1], KOZYUKHIN S.A., KASHKAROV P.K.[1]
Kurnakov Institute of General and Inorganic Chemistry of the RAS, Moscow
[1]Lomonosov Moscow State University
Optical anisotropy of phase-changed chalcogenide thin films, caused by femtosecond laser treatment
57. SUDAS D.P., KUZNETZOV P.I.
Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
Annealing of vanadium oxide nanocoatings with structural phase transition
58. MAKAROV P.A.
Institute of Physics and Mathematics FRC Komi SC of Ural Branch of the RAS, Syktyvkar
Calculation of optical characteristics of multicomponent inhomogeneous layered structures
59. ZHUKOVA M.O., NABILKOVA A.O., MELNICK M.V., ISMAGILOV A.O., GUSELNIKOV M.S., KOZLOV S.A., TCYPKIN A.N.
ITMO University, Saint-Petersburg
Experimental techniques for material nonlinearity estimations in the terahertz frequency range
60. URYUPINA V.K.[1,2], LOSEVSKY N.N.[2], MAYOROVA A.M.[2]
[1]Samara National Research University
[2]Samara Branch of the Lebedev Physical Institute of the RAS
The possibilities of optothermal traps for the uniform distribution of micro-objects on the surface
61. KRIVETSKAYA A.A.[1,2], KUSTOV D.M.[1], LEVKIN V.V.[3], KHARNAS S.S.[3], SAVELIEVA T.A.[1,2]
[1]Prokhorov General Physics Institute of the RAS, Moscow
[2]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[3]Sechenov First Moscow State Medical University
Investigation of intraoperative dynamics of the gastric blood supply level by diffuse scattering spectroscopy
62. SARAEVA I.N., TOLORDAVA E.R., KHMELNITSKY R.A., SHELYGINA S.N., POZDNYAKOVA D.S.[1], NASTULYAVICHUS A.N., KUDRYASHOV S.I.
Lebedev Physical Institute of the RAS, Moscow
[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Laser ablative fabrication of antibacterial nanopartilce-based gels: in vitro studies
63. MASLOVA V.A.[1], ERMOLAEV G.A.[2], ANDRIANOV E.S.[1,3], BARANOV D.G.[1]
[1]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
[2]Emerging Technologies Research Center XPANCEO, Dubai, United Arab Emirates
[3]N.L. Dukhov All-Russian Research Institute of Automatics, Moscow
Noises impact on the sensitivity of topological phase singularity-based biosensor
64. TSELOGORODTSEV K.A.[1,2], KOTOVA S.P.[1,2], LOSEVSKY N.N.[2], URYUPINA V.K.[1,2]
[1]Samara National Research University
[2]Samara Branch of the Lebedev Physical Institute
Hardware and software complex for optical manipulation of micro-objects of complex shape

PLENARY 2

Thursday, January 30, 2025, 13.00
Room G-406

65. FOFANOV D.A.
Scientific and Research Company «ARLI Spetstechnika», Moscow
Special needs in radio photonic technologies for modern electronic warfare systems: current status, prospects and necessary priority steps
66. PARFENOV M.V., VARLAMOV A.V., IL'ICHEV I.V., USIKOVA A.A., TRONEV A.V., AGRUZOV P.M., SHAMRAI A.V.
Ioffe Physical-Technical Institute of the RAS, Saint-Petersburg
Thin-film lithium niobate opens new horizons of ultra-wideband modulation and terahertz integrated photonics
67. PONOMAREV R.S., PANKOV A.S., ZHUKOV L.O.
Perm National Research State University
Photonic integrated chip assembling: why is it so hard to do what looks so easy
68. STARIKOV R.S.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Photonic integrated circuits for radioengeneering systems: a review

POSTERS 2

Thursday, January 30, 2025, 15.00
Room G-406

POSTERS 3

Thursday, January 30, 2025, 15.00
Room G-407

Meeting 6

Thursday, January 30, 2025, 16.00
Room G-407

69. POPOV S.M., BUTOV O.V.[1], RYBALTOVSKII A.A.[2], RYAKHOVSKIY D.V., LIPATOV D.S.[3], CHAMOROVSKIY Yu.K.
Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
[1]*Kotel'nikov Institute of Radioengineering and Electronics of RAS, Moscow*
[2]*Prokhorov General Physics Institute of the RAS, Moscow*
[3]*Devyatykh Institute of Chemistry of High-Purity Substances of the RAS, Nizhny Novgorod*
Tunable single frequency fiber random laser operating in the telecommunications wavelength range
70. GAFUROV E.M., KAMYNIN V.A., FILATOVA S.A.,TSVETKOV V.B.
Prokhorov General Physics Institute of the RAS, Moscow
Ultra-short pulse holmium-doped fiber laser tunable in the spectral range of 2070 - 2095 nm
71. CHIRKOV S.V.[1,2], SMOLYANINOV N.N.[1], EFREMOV V.D.[1], ANTROPOV A.A.[1], KHARENKO D.S.[1,2]
[1]*Institute of Automation and Electrometry SB RAS, Novosibirsk*
[2]*Novosibirsk State University*
Experimental study of the area of a stable mode-locking regime in a fiber laser based on the nonlinear polarization evolution
72. POPOV S.M., RYBALTOVSKII A.A.[1], RYAKHOVSKIY D.V., LIPATOV D.S.[2], EGOROVA O.N.[1], CHAMOROVSKIY Yu.K.
Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
[1]*Prokhorov General Physics Institute of the RAS, Moscow*
[2]*Devyatykh Institute of Chemistry of High-Purity Substances of the RAS, Nizhny Novgorod*
Single frequency fiber random laser operating in L-band range
73. GALYUK K.A., GAFUROVA L.V., SIROTKIN A.A., OVCHARENKO B.D., BAGDASAROV V.Kh.
Prokhorov General Physics Institute of the RAS, Moscow
Laser 3 μm sources with transverse diode pumping
74. TARVANEN D.A.
SC «LLS, Saint-Petersburg
Application of femtosecond lasers in quantum technologies, precision metrology and terahertz optics
75. DICK T.A.[1], RIZAEV G.E.[2,3], PUSHKAREV D.V.[2,3], KORIBUT A.V.[1,2], LEVUS M.V.[2,3], SELEZNEV L.V.[2,3]
[1]*Moscow Institute of Physics and Technology (State University), Dolgoprudny*
[2]*Lebedev Physical Institute of the RAS, Moscow*
[3]*Lomonosov Moscow State University*
Second harmonic generation during filamentation of femtosecond laser pulses
76. ERSHKOV M.N., SHEPELEV A.E.[1], SOLOKHIN S.A.
Kovrov State Technological Academy named after V.A. Degtyarev, Vladimir region
[1]*Vladimir State University named after Alexander and Nikolay Stoletovs*
Investigation of the generation of a compact laser with a composite Nd^{3+}:YAG / Cr^{4+}:YAG ceramic element
77. SINICHKINA Yu.A.[1,2], GORBUNKOV M.V.[1], ERMAKOV V.S.[2], MASLOVA Yu.Ya.[1]
[1]*Lebedev Physical Institute of the RAS, Moscow*
[2]*Bauman Moscow State Technical University*
Simulation of a light pulse generator based on a solid-state laser with multigigahertz repetition rate and a chaotic amplitude distribution
78. MOROZOV D.V.[1,2], VOROBYEV A.K.[1,2], PAVLOV V.I.[5], STEPANOV I.I.[1,2], CHERMOSHENTSEV D.A.[1,2,3], BILENKO I.A.[1,4]
[1]*Russian Quantum Center, Skolkovo*
[2]*Moscow Institute of Physics and Technology (State University), Dolgoprudny*
[3]*Skolkovo Institute of Science and Technology*
[4]*Lomonosov Moscow State University*
[5]*All-Russian Scientific Research Institute of Physical-Technical and Radiotechnical Measurements, Mendeleevo, Moscow region*
Measurement of optical nonlinearity coefficients of integrated microresonators
79. PATOLYATOV A.D.[1], KOLYMAGIN D.A.[1], VITUKHNOVSKY A.G.[1,2]
[1]*Moscow Institute of Physics and Technology (State University), Dolgoprudny*
[2]*Lebedev Physical Institute of the RAS, Moscow*
Polymer cylindrical refractive lenses for focusing synchrotron radiation
80. BORITKO S.V., NAUMOV A.F.
Scientific and Technological Center of Unique Instrumentation of the RAS, Moscow
One of the reasons leading to the Raman spectra blurring

Meeting 7

Thursday, January 30, 2025, 16.00
Room G-406

81. ZLOKAZOV E.Yu., KAZMIN M.I., NEBAVSKIY V.A., TRETYAKOV D.A., STARIKOV R.S.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Microwave photonic systems or baseband conversion

82. YUSHITSYNA V.V., KOLINKO T.I., TRIFONOVA E.V., PLJONKIN A.P.
Southern Federal University, Taganrog
Non-standard topology of a quantum-cryptographic network
83. FILIPOV I.M., CHISTYAKOV V.V.
ITMO University, Saint-Petersburg
Heterodyne detection scheme based on phase modulation in receiver side for subcarrier wave continuous variable quantum key distribution
84. BUCHKOV S.B., KOROLEV I.S., TIKHOMIROV S.V.
All-Russian Research Institute for Optical and Physical Measurements, Moscow
Key parameters of single-photon sources and detectors of optical radiation in quantum cryptographic systems
85. NASEDKIN B.A.[1], ISMAGILOV A.O.[1], OPARIN E.N.[1], GAIDASH A.A.[1,2], TCYPKIN A.N.[1], KOZUBOV A.V.[1,2]
[1]*ITMO University, Saint-Petersburg*
[2]*Steklov Mathematical Institute of the RAS, Moscow*
The impact of optical elements temperature on the feasibility of implementing «trojan horse» attack in quantum key distribution systems
86. GRISHACHEV V.V.
Russian State University of the Humanities, Moscow
A model of information security threats to fiber-optic transmission systems with protection based on quantum cryptography
87. KOVALEV E.E.[1,2], KAZAKOV I.A.[1,2], MALAKHOV K.M.[1,2], SHIPULIN A.V.[1], PANAYI A.[1], YEMELYANOV V.A.[1], RUMYANTSEV I.A.[1]
[1]*Skolkovo Institute of Science and Technology*
[2]*FIBER PIPE LLC, Moscow*
Interrogator based on arrayed waveguide grating for polling point optical sensors for use in aerospace vehicles
88. FILATOV A.L.
Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
Promising development areas for geostationary lightning detectors optical systems
89. PYATIBRATOV K.A.
Skolkovo Institute of Science and Technology
Navigation by gravitational potential using atomic clocks
90. PANIN G.N., KAPITANOVA O.O.[1,2]
Institute of Microelectronics Technology and High-Purity Materials of the RAS, Chernogolovka
[1]*Lomonosov Moscow State University*
[2]*Moscow Institute of Physics and Technology (National Research University), Dolgoprudny*
Optoelectronic memristor sensor based on low-dimensional crystals for optical information processing
91. PRZHIYALKOVSKIY Ya.V., STAROSTIN N.I., MORSHNEV S.K., SAZONOV A.I.
Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
Linearization of the output characteristic of a differential fiber-optic current sensor
92. EGOROV V.K.[1], EGOROV E.V. , AFANASIEV M.S.[2]
[1]*Institute of Microelectronics Technology and High-Purity Materials of the RAS, Chernogolovka*
[2]*Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS*
Optical fluxes propagation peculiarities in optical fibers

Meeting 8

Friday, January 31, 2025, 10.00
Room G-406

93. EROVENKO Z.A., MEZENTSEV M.E., MARKVART A.A., USHAKOV N.A.
Peter the Great Saint-Petersburg Polytechnic University
Spectral-domain optical coherence tomography with multiplexed sensing probes
94. KULIK D.D., LIOKUMOVICH L.B., USHAKOV N.A.
Peter the Great Saint-Petersburg Polytechnic University
Signal modeling for spectral-domain optical coherence tomography
95. SHIPKO V.V., TROSHIN O.S.
Air Force Academy named after prof. N.E. Zhukovsky and Yu.A Gagarin, Voronezh
Generalized mathematical model for the formation of spectral images by acousto-optic hyperspectral equipment under conditions of interference and distortion
96. KOTOV V.M., AVERIN S.V., VORONKO A.V.
Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
Rotation of the plane of the light polarization, controlled by the acoustic wave frequency
97. NEZHEVENKO S.S., EZHOVA K.V., KUKUSHKIN D.E.
ITMO University, Saint-Petersburg
Using singular value decomposition to calculate the retardance of polarized radiation
98. CHERNOUSOV D.A.
Lomonosov Moscow State University
Solving the problem of ghost polarimetry using machine learning algorithms
99. DAVLETSHIN N.N.[1,2], VYUNISHEV A.M.[1,2]
[1]*Kirensky Institute of Physics of SB RAS, Krasnoyarsk*
[2]*Siberian Federal University, Krasnoyarsk*
Application of ghost imaging for microscopic object visualization
100. BREUSOVA A.S.
Lomonosov Moscow State University
Application of ghost polarimetry method to the study of anisotropic objects
101. ISMAGILOV A.O., NASEDKIN B.A., OPARIN E.N., LAPPO-DANILEVSKAYA A.K., SHUMIGAY V.S., TCYPKIN A.N.
ITMO University, Saint-Petersburg
Development of single-pixel imaging approaches
102. BOREYSHO A.S.[1,2], SAVIN A.V.[1,2], STRAKHOV S.Yu.[1], SUKHANOV G.A.[1], DZHGAMADZE G.T.[1,2], SOTNIKOVA N.V.[1]
[1]*Baltic State Technical University «VOENMEH» named after D.F. Ustinov, Saint-Petersburg*
[2]*Laser systems Ltd, Saint-Petersburg*
Opto-information method for sub-diffraction angular measurements

103. NIKITIN N.V., KOZLOV A.V., CHEREMKHIN P.A., RODIN V.G., STARIKOV R.S., EVTIKHIEV N.N.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
DIgital camera noise compensation in Fourier ptychography for registration time reduction

104. KUZMIN V.G.[1], CHOUTRI K.[2], FAREH R.[3], DYLOV D.V.[1,4]
[1]*Skolkovo Institute of Science and Technology*
[2]*Aeronautical and Spatial Studies Institute, Blida, Algeria*
[3]*University of Sharja, UAE*
[4]*Artificial Intelligence Research Institute, Moscow*
Pattern recognition beyond optical resolution using Fourier ptychography and neural networks

PLENARY 3

Friday, January 31, 2025, 13.00
Room G-406

105. DOSKOLOVICH L.L.[1,2], SOSHNIKOV D.V.[1,2], MOTZ G.A.[1,2], BEZUS E.A.[1,2], SKIDANOV R.V. [1,2]
[1]*Image Processing Systems Institute of NRC «Kurchatov Institute», Samara*
[2]*Samara National Research University*
Design of cascaded does for optical image classification and beam shaping

106. STARIKOV R.S., SHIFRINA A.V.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Methods of implementing the nonlinear activation function in diffractive optical neural networks

107. KAYTUKOV Ch.B., ZAITSEV S.I.[1], SVINTSOV A.A.[1]
Scientific and Technical Centre «Atlas». Moscow
[1]*Institute of Microelectronics Technology and High-Purity Materials of the RAS, Chernogolovka*
Formation of twisted light beams in protective optical signs

108. SETEIKIN A.Yu.[1,2], KRASNIKOV I.V.[1]
[1]*Immanuel Kant Baltic Federal University, Kaliningrad*
[2]*Amur State University, Blagoveshchensk*
Approaches to applying mathematical modeling methods in biomedical optics

POSTERS 4

Friday, January 31, 2025, 15.00
Room G-406

Meeting 9

Friday, January 31, 2025, 17.00
Room G-406

109. PAVLOV A.V.
ITMO University, Saint-Petersburg
Correlation image restoration by nonlinear multiplex fourier holograms

110. BYKOVSKY A.Yu.
Lebedev Physical Institute of the RAS, Moscow
Coded vocabularies structure of the scene parametetrs for multiple-valued modelling of agents systems

111. KOROLENKO P.V.[1,2], KUBANOV R.T.[1], MISHIN M.Yu.[1]
[1]*Lomonosov Moscow State University*
[2]*Lebedev Physical Institute of the RAS, Moscow*
Spectral properties of images of fractal structures

112. PUTILIN A.N.[1,2], DUBYNIN S.E.[1], PUTILIN N.A.[1,2], KOPENKIN S.S.[1,2,3], BORODIN Yu.P. [1,2,3]
[1]*Lebedev Physical Institute of the RAS, Moscow*
[2]*Moscow State University of Geodesy and Cartography «MIIGAiK»*
[3]*MIREA – Russian Technological University, Moscow*
Working range of waveguide holographic periscopes in augmented reality display schemes

113. SHOYDIN S.A., PAZOEV A.L.
Siberian State University of Geosystems and Technologies, Novosibirsk
Lateral pattern of structured light and holography

114. CHERNYKH A.V.[1], REZTSOV T.V.[1], PETROV N.V.[1], ORLOVA T.N.[1,2]
[1]*ITMO University, Saint-Petersburg*
[2]*Yerevan State University, Armenia*
Singleshot polarization holographic microscope for studies of topological architectures in liquid crystals

115. KOZHEVNIKOVA A.M., ALEKSEENKO I.V., SHITZ D.V.
[1]*Immanuel Kant Baltic Federal University, Kaliningrad*
[2]*Institute for Laser Technology in Medicine and Measurement Technique, Ulm, Germany*
Digital holographic interferometry for apokamp discharge analysis

116. MANYAK A.P., KRETUSHEV A.V.
MIREA – Russian Technological University, Moscow
Modeling of phase reconstruction of dynamic objects in interference microscopy using a temporary Hilbert transform

117. BORODINA L.N., RABOSH E.V., MARGARYAN I.V., BARANOV M.A., PETROV N.V., VENIAMINOV A.V.
ITMO University, Saint-Petersburg
Confocal microscopy of a volume reflection-type hologram structure

118. MARKOV Z.S., MINIKHANOV T.Z., ZLOKAZOV E.Yu.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Measuring aberrations using a coherent computational method based on random phase masks

119. PROKHORENKOV N.O., VOLYNSKY M.A.
ITMO University, Saint-Petersburg
Hyperspectral digital holography with wavelenght-swept laser
120. RYMOV D.A., CHEREMKHIN P.A., SHIFRINA A.V., STARIKOV R.S.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Neural network training for 3D-hologram generation based of the parameters of the optical setup

Posters 1
Wednesday, January 29, 2025, 12.00

121. VOITSEKHOVSKII A.V.[1], DZYADUKH S.M.[1], GORN D.I.[1], DVORETSKY S.A.[1,2], MIKHAILOV N.N.[1,2], SIDOROV G.Yu.[2], YAKUSHEV M.V.[2]
[1]*National Research Tomsk State University*
[2]*Rzhanov Institute of Semiconductor Physics of SB RAS, Novosibirsk*
Electrical characteristics of nB(SL)n structures based on HgCdTe for the LWIR range
122. BARULINA E.Yu.[1,2], CHIGLINTSEV E.O.[1,2], SHEVYAKOVA K.V.[1,2], ABRAMOV A.N.[3], KRAVTSOV V.A.[3], CHERNOV A.I.[1,2]
[1]*Russian Quantum Center, Skolkovo*
[2]*Moscow Institute of Physics and Technology (National Research University), Dolgoprudny*
[3]*ITMO University, Saint-Petersburg*
Fabrication and investigation of moirè superlattices based on tungsten dichalcogenides layers
123. MARTYANOV A.K.[1], TIAZHELOV I.A. A.P.[1,2], RALCHENKO V.G.[1], SEDOV V.S.[1]
Prokhorov General Physics Institute of the RAS, Moscow
[1]*National Research University «Higher School of Economics», Moscow*
Colour centers in tin-doped CVD diamond microcrystals
124. BUKHAROV D.N.
Vladimir State University named after Alexander and Nikolay Stoletovs
Modeling absorptivity for implementation of artificial diamond graphitization models
125. DIRKO V.V., PLOTNIKOV N.V.
National Research Tomsk State University
Epitaxial synthesis of silicon and germanium on graphite
126. KUKENOV O.I., MAIER X.A., BURNASHOV A.A.
National Research Tomsk State University
Kinetics of 2xN superstructure formation during epitaxial growth of Ge on Si(100)
127. ILIN S.P.[1], ZELENKOV L.E.[1,2]
[1]*ITMO University, Saint-Petersburg*
[2]*Harbin Engineering University, Qingdao, China*
Synthesis of optically resonant microcrystals of germanium perovskites for up-conversion of infrared light
128. BEREZOVSKAYA A.A., LEBENKOVA S.K., MILSHINA L.D.
Petrovsky Bryansk State University
Investigation of the up-conversion properties of alkaline earth fluorides MeF_2 - ErF_3 (where are the metals – Ca, Sr) under laser excitation of 802 nm
129. KUCHERENKO M.G., NALBANDYAN V.M., RUSINOV A.P.
Orenburg State University
The effect of a magnetic field on the generation of a colloidal solution of rhodamine 6J with metal nanoparticles
130. GRESKO V.R., DOLGOPOLOV A.D., SERGEEV M.M.
ITMO University, Saint-Petersburg
Study of the effect of laser-induced dichroism in zinc oxide films with silver nanoparticles
131. USHKOV A.A.[1], KAZANTSEV I.S.[2], YAKUBOVSKY D.I.[1], SYUY A.V.[1,2], TSELIKOV G.I.[2]
Moscow Institute of Physics and Technology (State University), Dolgoprudny
[2]*Emerging Technologies Research Center XPANCEO, Dubai, United Arab Emirates*
Formation of nanoparticles from layered van der Waals materials via femtosecond ablation and hybrid microstructures based on them
132. GLADSKIKH A.A., DADADZHANOV D.R., GLADSKIKH I.A.
ITMO University, Saint-Petersburg
Laser-induced anisotropy in silver nanoparticle arrays for anti-counterfeiting
133. AIMUKHANOV A.K., ZEINIDENOV A.K., ILYASSOV B.R.[1], AKHATOVA Zh.Zh.[1], ABEUOV D.R., DOSMAGANBET E.S.
Buketov Karaganda University, Kazakhstan
[1]*Astana IT University, Kazakhstan*
The effect of MoS_2 nanoparticles on the volt-ampere characteristics of solar cells
134. MIRUSCHENKO M.D., KOSOLAPOVA K.D., CHEREVKOV S.A., USHAKOVA E.V.
ITMO University, Saint-Petersburg
Investigation of the morphology, energy structure and optical properties of carbon nanoparticles treated with polymers
135. KRUCHININ N.Yu., KUCHERENKO M.G.
Orenburg State University
Conformational structure of a block copolymer consistent of two oppositely charged fragments adsorbed on a polarized spherical metal nanoparticle
136. OTPUSHCHENNIKOV L.A.[1], GETS D.S.[1], ZELENKOV L.E.[1,2]
[1]*ITMO University, Saint-Petersburg*
[2]*Harbin Engineering University, Qingdao, China*
Doping of lead-halide perovskite nanocrystals and quantum dots with rubidium cations for nanophotonics and optoelectronics
137. BEISEMBEKOV M.K., OMARBEKOVA G.I., AIMUKHANOV A.K., ZEINIDENOV A.K.
Buketov Karaganda University, Kazakhstan
The effect of the annealing medium on the morphological properties of NiO_x films
138. ILYINSKY A.V., CASTRO R.A.[1], KLIMOV V.A., KONONOV A.A.[1], PROVOTOROV P.S.[1], TIMOFEEVA I.O.[1], SHADRIN E.B., BERDNIKOVA A.D.[1]
Ioffe Physical-Technical Institute of the RAS, Saint-Petersburg
[1]*Herzen State Pedagogical University of Russia, Saint-Petersburg*
Spectrometry of AgI films doped Cu
139. SIGAEV A.P., FILIPPOV I.A., PRONIN I.A., KARMANOV A.A., YAKUSHOVA N.D.
Penza State University
Investigation of the qualitative composition of multilayer ferroelectric $BiFeO_3$ films by iR Fourier spectroscopy

140. ZHURAVLYOV D.A., KORNEEVA A.A., BYKOV A.A., ZININ P.V.
Scientific and Technological Center of Unique Instrumentation of the RAS, Moscow
Study of conductivity properties of diamond-like films by van der Pauw method
141. KHUDAYBERGANOV T.A.
Vladimir State University named after Alexander and Nikolay Stoletovs
Calculation of the thermal conductivity of the diamond lattice
142. SEKTAROV E.S.[1,2], KNIAZEVA M.A.[2,3], EREMCHEV I.Yu.[1,3]
[1]*Institute for Spectroscopy of the RAS, Troitsk*
[2]*National Research University «Higher School of Economics», Moscow*
[3]*Prokhorov General Physics Institute of the RAS, Moscow*
Study of optically stimulated luminescence in diamond with nitrogen color centers
143. ZAKHARCHUK I.A.[1,2], DANILKIN M.I.[2], VOLYNETS N.I.[1], SAFIULLINA P.A.[1], OSADCHENKO A.V.[1,2,5], AMBROZEVICH S.A.[1,2], DAIBAGYA D.S.[1,2,4], BEZVERKHNYAYA D.M.[3], SELYUKOV A.S.[1,2,4,5]
[1]*Bauman Moscow State Technical University*
[2]*Lebedev Physical Institute of the RAS, Moscow*
[3]*National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)*
[4]*Moscow Polytechnic University*
[5]*All-Russian Institute for Scientific and Technical Information of the RAS, Moscow*
Terbium doping of magnesium tetraborate to create optically stimulated ionizing radiation detectors
144. LEBENKOVA S.K., MILSHINA L.D.
Petrovsky Bryansk State University
Definition of the area of existence solid solution based on strontium, barium tungstates with Er and Yb substitution
145. MILSHINA L.D., LEBENKOVA S.K.
Petrovsky Bryansk State University
Synthesis and determination of the region of existence of solid solutions based on strontium and calcium tungstates
146. MIKHAREV E.A.[1], LUNEV A.Yu.[1], SIDOROV A.I.[1,2], KOSTIN P.A.[1]
[1]*Saint-Petersburg State Electrotechnical University "LETI"*
[2]*ITMO University, Saint-Petersburg*
Development of an experimental installation for measurement of optical characteristics in wgm cavities with molecular silver clusters
147. LUNEV A.Yu.[1], MIKHAREV E.A.[1], SIDOROV A.I.[1,2], KOSTIN P.A.[1]
[1]*Saint-Petersburg State Electrotechnical University "LETI"*
[2]*ITMO University, Saint-Petersburg*
Calculation of radiation spectra of a phosphate glass microspheric resonator doped with Er^{3+}
148. BARINOVA O.P., KNYAZKIN D.D., RUNINA K.I.
Mendeleev University of Chemical Technology of Russia, Moscow
Synthesis and spectral characteristics of lithium aluminates structured as $LiAlO_2$ and $LiAl_5O_8$
149. SAMSONOVA L.G., GADIROV R.M., KAZIN N.A.[1], RUSINOV G.L.[1]
Tomsk State University of Control Systems and Radioelectronics
[1]*Postovsky Institute of Organic Synthesis of Ural Branch of the RAS, Yekaterinburg*
Photoacid generation from substituted benzo(b)thiophen-2-carboxamide
150. GORYAEV M.A.
Herzen State Pedagogical University of Russia, Saint-Petersburg
Kinetics of the dye sensitized photoprocesses in the n- and p-type silicon
151. DOMAREV S.N., RIDER M.A., BOLTENKO A.V., MOISEYEVA E.O.[1], TSYURKO D.E.[1], ORLOVA A.O.
ITMO University, Saint-Petersburg
[1]*Skolkovo Institute of Science and Technology*
Dynamics of phododissolution process of the superparamagnetic iron oxide nanoparticles
152. LANTUKH Yu.D.
Orenburg State University
Study of the kinetics of bacteriorhodopsin original form regeneration during optical recording
153. SOKOLOVA D.A., SIDOROV A.I.[1,2], PODSVIROV O.A., SHESTAKOV S.A.
Peter the Great Saint-Petersburg Polytechnic University
[1]*ITMO University, Saint-Petersburg*
[2]*Saint-Petersburg State Electrotechnical University «LETI»*
Recording optical information in silver containing glasses with an electron beam
154. GAVRILOVA D.A.[1,2], GAVRILOVA M.A.[1], EVSTROPIEV S.K.[1,2,3]
[1]*Saint-Petersburg State Technological Institute (Technical University)*
[2]*S.I. Vavilov State Optical Institute, Saint-Petersburg*
[3]*ITMO University, Saint-Petersburg*
Photoactive materials of ZnO-$ZnCr_2O_4$ system for environmental applications
155. BELOV K.N.[1], BERDNIKOV A.S.[1], KIREEV V.B.[2], KUNDIKOVA N.D.[1,3], SHESHIN E.P.[2]
[1]*South Ural State University, Chelyabinsk*
[2]*Moscow Institute of Physics and Technology (National Research University), Dolgoprudny*
[3]*Institute of Electrophysics, UB RAN, Yekaterinburg*
Raman light scattering for stress estimation in carbon-containing cathodes
156. KARPACH P.V., VASILYUK G.T., MASKEVICH A.A., GLEBOVICH T.S., AYT A.O.[1], GORELIK A.M.[1], MASKEVICH S.A.[2]
Janka Kupala State University, Grodno, Belarus
[1]*Photochemistry Center of NRC «Kurchatov Institute», Moscow*
[2]*International Sakharov Environmental Institute of Belarusian State University, Minsk*
Surface enhanced raman scattering in photochromic nanostructures based on Ag nanoparticles and chromene molecules
157. PONYAEV A.I.
Saint-Petersburg State Technological Institute (Technical University)
Organic photochromes for photonics, solar energy storage systems and medicine
158. KUZMENKO N.K.[1], KOLOBKOVA E.V.[1,2], SERGEEV M.M.[1], NIKONOROV N.V.[1]
[1]*ITMO University, Saint-Petersburg*
[2]*Saint-Petersburg State Technological Institute (Technical University)*
Study of the modification process of a fluorophosphate glass matrix containing perovskite precursors by ultrashort laser pulses

159. GEINTS Yu.E., PANINA E.K.
V.E. Zuev Institute of Atmospheric Optics, SB RAS, Tomsk
Effect of size and composition of mesoporous shell of TiO_2 based microcapsule on UV absorption efficiency

160. KLIMENKO D.I., CHEREVKOV S.A., BABAEV A.A., SKURLOV I.D.
ITMO University, Saint-Petersburg
Semiconductor quantum two-dimensional near-infrared heterostructures with perovskite passivated surface

161. SIDOROVA M.N.[1], YAKUBOVSKY D.I.[1], ZAVIDOVSKIY I.A.[1], ARSENIN A.V.[1,2]
[1]*Moscow Institute of Physics and Technology (National Research University), Dolgoprudny*
[2]*Emerging Technologies Research Center XPANCEO, Dubai, United Arab Emirates*
Fabrication and characterization of ultrathin gold clusters obtained on MoS_2 crystals

162. SIDOROV A.I.[1,2], ELANSKAIA K.G.[1], NAZAROV A.N.[1]
[1]*Saint-Petersburg State Electrotechnical University "LETI"*
[2]*ITMO University, Saint-Petersburg*
Simulation of a high-quality temperature sensor based on two-dimensional photonic crystal

163. BURDULENKO O.V.[1], TATARINOV D.A.[1], ZELENKOV L.E.[1,2]
[1]*ITMO University, Saint-Petersburg*
[2]*Harbin Engineering University, Qingdao, China*
Research of optical properties of lead-free double perovskite microcrystals Cs_2TeCl_6 obtained by pressure-assisted crystallization

164. VOLYNETS N.I.[1], DAIBAGYA D.S.[1,2,4], BEZVERKHNYAYA D.M.[3], OSADCHENKO A.V.[1,2,5], ZAKHARCHUK I.A.[1,2], AMBROZEVICH S.A.[1,2], SAFIULLINA P.A.[1], SELYUKOV A.S.[1,2,4,5]
[1]*Bauman Moscow State Technical University*
[2]*Lebedev Physical Institute of the RAS, Moscow*
[3]*National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)*
[4]*Moscow Polytechnic University*
[5]*All-Russian Institute for Scientific and Technical Information of the RAS, Moscow*
Optics of nanocrystals in an external electric field

165. HOPERSKY A.N., NADOLINSKY A.M., KONEEV R.V.
Rostov State Transport University, Rostov-on-Don
Two-photon ionization of the K-shell of an atomic ion

166. BEZUS J.A., FEDOROV S.A., RUMYANTSEV V.V.
Galkin Donetsk Institute for Physics and Engineering
Features of exciton-like excitations in non-ideal hexagonal lattices

167. KULAGINA M.A., CHEBAKOVA S.A., SHUMILKINA Yu.R., FILATOV V.V.
Bauman Moscow State Technical University
Chiral symmetry of polaritons and its breaking in a crystalline medium

168. KHUDAYBERGANOV T.A.
Vladimir State University named after Alexander and Nikolay Stoletovs
Quantum "slave-principle" in a polariton dimer

169. VOLKOVA V.V., FILATOV V.V.
Bauman Moscow State Technical University
Optical superconductivity at room temperatures caused by bipolariton states in a photonic crystal

170. VASILIEVA O.F.
Transnistrian State University named after T.G. Shevchenko, Tiraspol
Self-trapping in the exciton-polariton system

171. ALEKSEENKO P.O., VOLKOVA V.V., GAVRILOVETS D.A., KOTOVA A.D., FILATOV V.V.
Bauman Moscow State Technical University
Dispersion, refraction and chirality of electromagnetic waves in a photonic crystal

172. ASTASHKEVICH S.A.
Saint-Petersburg State University
Modeling of an alkali-containing resonance photoplasma in plane-parallel gas cell

173. ASTASHKEVICH S.A., KUDRYAVTSEV A.A.[1]
Saint-Petersburg State University
[1]*Harbin Institute of Technology, China*
Determination of photo-EMF in a plane-parallel Na–Ar gas cell

174. TIMKINA Yu.A., ALEINIK I.A., MIRUSCHENKO M.D., USHAKOVA E.V.
ITMO University, Saint-Petersburg
Development of a photoactive layer based on quasi-2D chiral perovskite for detecting circularly polarized light

175. AVDEEV P.Yu., LEBEDEVA E.D., ALFERYEV A.L., KLIMOV A.A., KARASHTIN E.A.[1], GUSEV N.S.[1], SAPOZHNIKOV M.V.[1], BURYAKOV A.M.
MIREA – Russian Technological University, Moscow
[1]*Institute of Microstructure Physics of the RAS, Nizhny Novgorod*
Magnitoelectric control of terahertz emission generation in W/FeGa/Pt structure on PMN-PT substrate

176. TRINH N.H.[1], SHCHUKO A.V., PATAPOVICH M.P.
Belarusian Academy of Communications, Minsk
[1]*Vinh University, Hanoi, Vietnam*
Application of the method of dual laser pulses to determine the content of macro- and microelements in the composition of various samples studied

177. BORODINA L.N., KONONOV D.V., PALEHOVA A.V., DADADZHANOV D.R., VENIAMINOV A.V., VARTANYAN T.A.
ITMO University, Saint-Petersburg
Confocal visualization of luminol luminescence enhancement in the vicinity of plasmonic metasurface in a microfluidic chip

178. TRINH N.H.[1], SHCHUKO A.V., LUKYANAU V.K., PATAPOVICH M.P.
Belarusian Academy of Communications, Minsk
[1]*Vinh University, Hanoi, Vietnam*
Creation of tin-containing nanostructures on different surfaces by laser atomic emission spectrometry method

Posters 2
Thursday, January 30, 2025, 15.00

179. MAKOVETSKII A.A., POPOV S.M., RYAKHOVSKIY D.V., ZAMYATIN A.A.
Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
Excitation of a hybrid mode of a multimode optical fiber with the highest azimuth number (with the highest caustic)
180. ASTASHKEVICH S.A., VINOGRADOV I.A.[1], MASHEK I.C., ROGALEV S.D.[1], SVATIKOVA P.D.[1]
Saint-Petersburg State University
[1]GosNIIPP, Saint-Petersburg
Interforometric binding of laser to resonance transitions of alkali metals
181. KOZLOV A.V.[1,2], ZAGORULKO K.A.[1], KHATYREV N.P.[1]
[1]All-Russian Scientific Research Institute of Physical-Technical and Radiotechnical Measurements, Mendeleevo, Moscow region
[2]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Numerical comparison of RIN laser measurement from beating signal by optical heterodyning and classical method
182. ASTASHKEVICH S.A., VINOGRADOV I.A.[1], MASHEK I.C., ROGALEV S.D.[1], SVATIKOVA P.D.[1]
Saint-Petersburg State University
[1]GosNIIPP, Saint-Petersburg
Modelling of sodiym layer of the earth ionosphere for lidar applications
183. SENCHUROVA A.V.[1,2], SIROTKIN A.A.[1], KALACHEV Yu.L.[1]
[1]Prokhorov General Physics Institute of the RAS, Moscow
[2]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
Sensitization and deactivation effect of Nd^{3+} on the Ho^{3+} : 3.9 μm emission
184. TERPITSKIY A.N., RESHETOV I.V., SCHERBAK S.A., KAASIK V.P., LIPOVSKII A.A.
Alferov University, Saint-Petersburg
Second harmonic generation on one-dimensional periodic structures in silicate glass
185. VOROPAY E.S., KOVALENKO M.N., ALEKSEENKO N.A.[1], ZAJOGIN A.P.
Belarusian State University, Minsk
[1]Powder Metallurgy Institute, Minsk, Belarus
Study of processes in the deposition of nanofilm resistors from copper oxides doped with iron by laser sputtering of copper and iron in air atmosphere
186. ERMALITSKAIA K.F., VOROPAY E.S., KRASNOPEROV N.N., ZAJOGIN A.P.
Belarusian State University, Minsk
Study of the processes of deposition of gas-sensitive nanofilm resistors from iron oxides by laser sputtering of iron in the air atmosphere
187. KOVALENKO A.F.
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[1]Secondary School No. 24, Minsk, Belarus
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[1]Powder Metallurgy Institute, Minsk, Belarus
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[2]Institute of Photonic Technologies of NRC «Kurchatov Institute», Troitsk
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[1]Samara National Research University
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[1]Sarov Branch of Lomonosov Moscow State University, Nizhny Novgorod region
[2]All-Russian Research Institute of Experimental Physics, Sarov, Nizhny Novgorod region
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[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
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[1]Samara National Research University
[2]Samara State Medical University
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[2]IRE-Polus Corporation, Fryazino
[3]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
[4]Sechenov First Moscow State Medical University
[5]Lomonosov Moscow State University
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[1]Samara National Research University
[2]Samara State Medical University
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ITMO University, Saint-Petersburg
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207. RUDI P.A.[1,2], ROGOZHNIKOV G.S.[2]
[1]Sarov Branch of Lomonosov Moscow State University, Nizhny Novgorod region
[2]All-Russian Research Institute of Experimental Physics, Sarov, Nizhny Novgorod region
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[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[2]Prokhorov General Physics Institute of the RAS, Moscow
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[1]Sarov Branch of Lomonosov Moscow State University, Nizhny Novgorod region
[2]Lomonosov Moscow State University
[3]All-Russian Research Institute of Experimental Physics, Sarov, Nizhny Novgorod region
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[1]All-Russian Scientific Research Institute of Physical-Technical and Radiotechnical Measurements, Mendeleevo, Moscow region
[2]Moscow State University of Geodesy and Cartography «MIIGAiK»
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Moscow Technical University of Communications and Informatics
[1]North-West University, Potchefstroom, South Africa
[2]The South African Nuclear Energy Corporation SOC Ltd, Pelindaba, South Africa
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[1]MIREA – Russian Technological University, Moscow
[2]T8 Ltd, Moscow
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[2]*Sadovsky Institute of Geospheres Dynamics of the RAS, Moscow*
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All-Russian Research Institute for Optical and Physical Measurements, Moscow
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[2]*Sadovsky Institute of Geospheres Dynamics of the RAS, Moscow*
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[1]*ITMO University, Saint-Petersburg*
[2]*Steklov Mathematical Institute of the RAS, Moscow*
[3]*Peter the Great Saint-Petersburg Polytechnic University*
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[1]*Moscow Technical University of Communications and Informatics*
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[1]*T8 Ltd, Moscow*
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[1]*Lomonosov Moscow State University*
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235. MALYSHKINA O.V., KAPLUNOV I.A., ROGALIN V.E.[1], KROPOTOV G.I.[2]
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[1]*Institute for Electrophysics and Electric Power of the RAS, Saint-Petersburg*
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[1]National Research Center «Kurchatov Institute» Moscow
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[1]Pskov State University
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[3]Pskov State University branch, Velikiye Luki, Pskov region
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[1]Kirensky Institute of Physics SB RAS, Krasnoyarsk
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[2]I.V. Tananaev Institute of Chemistry and Technology of Rare Elements and Mineral Raw Materials of FRC Kola Science Center of the RAS, Apatity, Murmansk region
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[2]Petrozavodsk State University
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[1]Lebedev Physical Institute of the RAS, Moscow
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[2]Institute of Geology of Ore Deposits, Petrography, Mineralogy and Geochemistry of the RAS, Moscow
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[1]Mining and Metallurgical Institute of Tajikistan, Buston, Tajikistan
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Shubnikov Institute of Crystallography of NRC «Kurchatov Institute»,, Moscow
[1]National University of Science and Technology «MISIS», Moscow
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Mozyr State Pedagogical University named after I.P. Shamyakin, Belarus
[1]Institute of Telecommunications and Informatics of Turkmenistan, Ashgabat, Turkmenistan
[2]Tomsk State University of Control Systems and Radioelectronics
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[1]Perm National Research State University
[2]Perm National Research Polytechnic University
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256. PAVLOV V.I.
All-Russian Scientific Research Institute of Physical-Technical and Radiotechnical Measurements, Mendeleevo, Moscow region
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257. OVCHINNIKOV K.A.[1,2], GILEV D.G.[1,2], KRISHTOP V.V.[1,2,3]
[1]Perm National Research Polytechnic University
[2]Perm Scientific-Industrial Instrument Making Company
[3]Perm National Research State University
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[1]Ural State University, Ekaterinburg
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[1]Yu.E. Sedakov Research Institute – branch of All-Russian Research Institute of Experimental Physics, Nizhny Novgorod
[2]Lobachevsky State University of Nizhny Novgorod
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[1]Perm National Research Polytechnic University
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National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
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Samara National Research University
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278. MININ O.V.[1], MININ I.V.[1,2]
[1]Siberian State University of Geosystems and Technologies, Novosibirsk
[2]Technological Design Institute of Applied Microelectronics –Branch of Rzhanov Institute of Semiconductor Physics of SB RAS, Novosibirsk
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Scientific and Technological Center of Unique Instrumentation of the RAS, Moscow[1]Lomonosov Moscow State University
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[2]Prokhorov General Physics Institute of the RAS, Moscow
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280. MININ O.V., MININ I.V.
[1]Siberian State University of Geosystems and Technologies, Novosibirsk
[2]Technological Design Institute of Applied Microelectronics –Branch of Rzhanov Institute of Semiconductor Physics of SB RAS, Novosibirsk
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Moscow Institute of Physics and Technology (State University), Dolgoprudny
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282. MININ I.V.[1,2], MININ O.V.[1]
[1]Technological Design Institute of Applied Microelectronics –Branch of Rzhanov Institute of Semiconductor Physics of SB RAS, Novosibirsk
[2]Siberian State University of Geosystems and Technologies, Novosibirsk
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Optical and Mechanical Design Bureau «ASTRON», Lytkarino
[1]S.I. Vavilov State Optical Institute, Saint-Petersburg
[2]Moscow State University of Geodesy and Cartography «MIIGAiK»
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POLYUS Research Institute of M.F. Stelmah, Moscow
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[1]Lytkarino Optical Glass Factory, Moscow region
[2]Moscow State University of Technology (Stankin)
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293. VOLCOV V.G., GINDIN P.D., KARPOV V.V., KUZNETSOV S.A.
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294. BRAZHNIKOV M.K.[1,2], BEZDIDKO S.N.[1]
[1]Moscow State University of Geodesy and Cartography «MIIGAiK»
[2]All-Russian Scientific Research Institute of Physical-Technical and Radiotechnical Measurements, Mendeleevo, Moscow region
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ITMO University, Saint-Petersburg
[1]JSC LOMO, Saint-Petersburg
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Moscow Aviation Institute (National Research University)
[1]State Research Institute of Instrument Making, Moscow
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[1]*Moscow Technical University of Communications and Informatics*
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[1]*Samara Branch of the Lebedev Physical Institute*
[2]*Samara National Research University*
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[1]*Moscow Technical University of Communications and Informatics*
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V.I. Vernadsky Crimean Federal University, Simferopol
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[1]*MIREA – Russian Technological University, Moscow*
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Institute of Physics of NAS KR, Bishkek, Kyrgyz republic
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Belarusian State University, Minsk
[1]Scientific and Technical Center «LEMT» of the BelOMO, Minsk, Belarus
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324. ISMANOV Yu.H.[1], TYNYSHOVA T.D.
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[1]Institute of Physics of NAS KR, Bishkek, Kyrgyz republic
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Ioffe Physical-Technical Institute of the RAS, Saint-Petersburg
[1]Institute of Cytology of the RAS, Saint-Petersburg
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[1]ITMO University, Saint-Petersburg
[2]Yerevan State University, Armenia
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329. BELASHOV M.V. [2], ZHIKHOREVA A.A., BELASHOV A.V., BELYAEVA T.N. [1], SALOVA A.V.[1], LITVINOV I.K.[1], KORNILOVA E.S.[1], SEMENOVA I.V., VASUTINSKII O.S.
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[1]Institute of Precision Mechanics and Control of the RAS, Saratov
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[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[2]Institute of Agriculture and Agrotechnologies of Karakalpakstan, Nukus, Uzbekistan
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344. VOLKOV A.A., ZLOKAZOV E.Yu., PAVLENKO D.V., PETROVA E.K., FAZLIEV T.Sh., STARIKOV R.S.
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345. OSICHEVA A.Yu., SHAKHMATOV A.Yu., SYCH D.V.[1]
Moscow Institute of Physics and Technology (State University), Dolgoprudny
[1]Lebedev Physical Institute of the RAS, Moscow
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