CONFERENCE OPENING. PLENARY

Wednesday, January 28, 2026, 10.00
Room G-407

1. DYSHLYUK A.V., PROSKURIN A.A.[1], BOGDANOV A.A.[1,2], VITRIK O.B.
   Institute of Automation and Control Processes of Far Eastern Branch of the RAS, Vladivostok
   [1]ITMO University, Saint-Petersburg
   [2]Harbin Engineering University, China
   Analytical modeling of surface plasmon polariton excitation in nanostructures based on the reciprocity theorem
2. TCYPKIN A.N., MELNICK M.V., NABILKOVA A.O., ISMAGILOV A.O., MOUSSAOUI A., GUSELNIKOV M.S., ARTSER I.R., ZHUKOVA M.O., KOZLOV S.A.
   ITMO University, Saint Petersburg
   Nonlinear response of materials in the terahertz frequency range
3. PROKHOROV A.V.[1,2], SHESTERIKOV A.V.[1,2], GUBIN M.Yu.[1,2], NOVIKOV S.M. [2], KIRTAEV R.V.[3], TITOVA E.I.[2], TOKSUMAKOV A.N.[3], YAKUBOVSKY D.I. [2], ARSENIN A.V.[2,3], VOLKOV V.S.[3]
   [1]Vladimir State University named after Alexander and Nikolay Stoletovs
   [2]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
   [3]Emerging Technologies Research Center XPANCEO, Dubai, United Arab Emirates
   Anisotropic metasurfaces based on conventional and novel optical materials
4. NOVIKOV V.B., SMIRNOV K.A., DOTSENKO A.A., ROSLYAKOV I.V., SOTNICHUK E.O., NAPOLSKII K.S., MAYDYKOVSKIY A.I., MURZINA T.V.
   Lomonosov Moscow State University
   Pendulum effect in two-dimensional hexagonal photonic crystals

POSTERS 1

Wednesday, January 28, 2026, 12.00
Room G-406

Meeting 1

Wednesday, January 28, 2026, 13.00
Room G-407

5. MUTILIN S.V., MILEKHIN A.G., MAKAROV Yu.S., SELEZNEV V.A., TUMASHEV V.S., BAGOCHUS E.K., MANTSUROV N.D., RECHKUNOV S.N., GAYDUK A.E., KOMONOV A.I., AZAROV I.A., KREMIS I.I., TURBIN A.V., GLADKOV R.A., VASILIEV V.V., MOISEEV A.A., SUTORMIN V.S.[1], KRAKHALEV M.N.[1], BARANNIK A.V.[1], FEISER K.A.[1], ABDULLAYEV A.S.[1], KOSTIKOV D.A.[1], LESNOY M.A.[1], PRISHCHEPA O.O.[1], ZYRYANOV V.Ya.[1], RUDAKOV S.D.[2], SURODIN S.I.[2], SHOBOLOVA T.A.[2], SHOBOLOV E.L.[2], LINNIK D.M.[3], YURIN V.A.[3], SHAGALIEV R.M.[3], LATYSHEV A.V.
   Rzhanov Institute of Semiconductor Physics of SB RAS, Novosibirsk
   [1]Kirensky Institute of Physics of SB RAS, Krasnoyarsk
   [2]Yu.E. Sedakov Research Institute – branch of All-Russian Research Institute of Experimental Physics, Nizhny Novgorod
   [3]All-Russian Research Institute of Experimental Physics, Sarov, Nizhny Novgorod region
   Development of a high-resolution liquid crystal spatial phase light modulator
6. REZTSOV T.V., CHERNYKH A.V., STEPANOV I.G., ORLOVA T.N.[1], PETROV N.V.
   ITMO University, Saint-Petersburg
   [1]Yerevan State University, Armenia
   Study of dynamic behavior of a dual-frequency nematic liquid crystal for laser beam homogenization
7. SHISHKOV G.M., GRIGORIEV K.S., MAKAROV V.A.
   Lomonosov Moscow State University
   Generation of vectorial spatiotemporal optical vortices during self-action of a light pulse in the isotropic phase of a nematic liquid crystal close to nematic-isotropic transition temperature
8. DOLGANOV P.V., MAKSIMOV E.A., BALENKO N.V.[1], DOLGANOV V.K.
   Institute of Solid State Physics named after Yu.A. Osipyan of the RAS, Chernogolovka
   [1]Lomonosov Moscow State University
   Three-dimensional liquid-crystalline photonic crystals with controllable characteristics
9. ALEINIKAVA H.P., DADENKOV I.G., TOLSTIK A.L.
   Belarusian State University, Minsk
   Diffractional optical elements in photorefractive crystals
10. BURTSEV A.A.[1], IONIN V.V.[1], KISELEV A.V.[1], MIKHALEVSKY V.A.[1], NEVZOROV A.A.[1,2], 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
    Adaptive phase-shifting filter cells with optical control based on phase-change materials thin films
11. ZLOBIN A.O., SHMIDT A.A., KOLESNIKOV D.S., BURIMOV N.I., SHANDAROV S.M.
    Tomsk State University of Control Systems and Radioelectronics
    Interaction of circular pump wave with elliptically polarized signal wave on transmitting hologram in bismuth silicate crystal
12. ZHURAVLEV V.A.[1,2], KOZLOV A.A.[1,2], NOROVA A.A.[1], PETUKHOV I.V.[2], DEMIN V.A.[2]
    [1]Perm Scientific-Industrial Instrument Making Company
    [2]Perm National Research State University
    Features of refractive index change in thin film lithium niobate after proton exchange modification
13. SARAFANOVA M.V., SHUGUROV A.I., BAKUNOV M.I.
    Lobachevsky State University of Nizhny Novgorod
    Forward generation of multicycle terahertz radiation by femtosecond laser pulse in lithium niobate crystal

14. MOLCHANOVA A.D., KLIMIN S.A., KUZMIN N.N., YIN L.H.[1], POPOVA M.N.
Institute for Spectroscopy of the RAS, Troitsk
[1]Institute of Solid State Physics of Chinese Academy of Sciences, Hefei, China
Investigation of magnetic ordering of multiferroic *h*-$YbMnO_3$ by high-resolution spectroscopy
15. KULIKOVA D.P.[1], SHELAEV A.V.[1], LOTKOV E.S.[1,2], BABURIN A.S.[1,2], RODIONOV I.A.[1,2], BARYSHEV A.V.[1]
[1]N.L. Dukhov All-Russian Research Institute of Automatics, Moscow
[2]Bauman Moscow State Technical University
Gasochromic properties of amorhous and crystallized tungsten trioxide
16. KHARISOVA R.D., RATOVA A.D., ZYRYANOVA K.S., MIRONOV L.Yu.
ITMO University, Saint-Petersburg
Mechanically-induced formation of $CsPbBr_3$ perovskite nanocrystals on the surface of borogermanate glass

Meeting 2

Wednesday, January 28, 2026, 13.00
Room G-406

17. SYUY A.V., ZAVIDOVSKY I.A., MARTYNOV I.V., POZOV B.E.
Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
Defect engineering versus amorphization: different photocatalytic mechanisms in laser-synthesized niobium oxides
18. MELNIKOVA A.M., TSORIEVA A.V.[1], KORSHUNOV V.M.[1], CHMOVZH T.N.[2], TAIDAKOV I.V.[1]
Bauman Moscow State Technical University
[1]Lebedev Physical Institute of the RAS, Moscow
[2]Zelinsky Institute of Organic Chemistry of the RAS, Moscow
Control of photophysical properties of donor-acceptor molecules based on a tricyclic acceptor
19. ASHIKHMIN D.I., ASHARCHUK N.M., SEDOVA Yu.K., ROVENKO V.V., ZHIGARKOV V.S., MINAEV N.V., MAREEV E.I., YUSUPOV V.I.
Institute of Photonic Technologies of NRC «Kurchatov Institute», Troitsk
Dynamics of laser-induced shock waves and cavitation bubbles in hydrogel at femtosecond breakdown
20. FERULEV A.I. [1,2], KORSHUNOV V.M.[2], TAIDAKOV I.V.[2]
[1]Bauman Moscow State Technical University
[2]Lebedev Physical Institute of the RAS, Moscow
Lumisecsence of europium (III) complexes with perfluorinated ligand moiety
21. MAKARKIN G.L.[1,2], KESAEV V.V.[2], LOBANOV A.N.[2], AMBROZEVICH S.A.[1,2]
[1]Bauman Moscow State Technical University
[2]Lebedev Physical Institute of the RAS, Moscow
Polarized luminescence of a deformed polymer matrix with an incorporated organic dye
22. KOROLEVA T.V.[1], KHAKIMOV K.T.[1], VERSHININA O.V.[1], SAPTSOVA O.A. [1], YAKOVLEV V.O.[1], MEDVEDEV A.G.[1], POPOV V.S.[1,2]
[1]Moscow Institute of Physics and Technology (State University), Dolgoprudny
[2]State Research Center «Orion», Moscow
Mercury thiocyanate complex as a precursor for the synthesis of HgTe colloidal quantum dots for IR photosensors
23. MISNIKOVA T.S., LEBEDEV V.F.
Saint-Petersburg State University of Aerospace Instrumentation
Diagnostics of C, NV-: HPHT diamond as a new laser material
24. MARTYANOV A.K.[1], TIAZHELOV I.A.[1], ROMASHCHENKO R.V.[1,2], SEDOV V.S.[1], POPOVICH A.F.[1]
[1]Prokhorov General Physics Institute of the RAS, Moscow
[2]MIREA – Russian Technological University, Moscow
Reducing the roughness of thick polycrystalline diamond films directly during the CVD deposition process
25. POMAZKIN D.A., DANILOV P.A., VINS V.G., SKORIKOV M.L., KUDRYASHOV S.I., VYATKIN S.V.[1], DUONG P.V.[2], MINH P.H.[2]
Lebedev Physical Institute of the RAS, Moscow
[1]Lomonosov Moscow State University
[2]Institute of Physics of Vietnamese Academy of Science and Technology, HaNoi, Vietnam
Research of photophysical characteristics of H3 centers in diamond
26. ESEEV M.K., MAKAROV D.N., YASHIN S.V., KOSTIN A.A.
Northern Arctic Federal University named after M.V. Lomonosov, Arkhangelsk
Investigation of photoluminescence processes in a compact wide-range magnetic field meter based on multi-crystalline diamond plates with nitrogen vacancy centers
27. LEBEDEV V.F., MISNIKOVA T.S., RYVKINA Ya.A.
Saint-Petersburg State University of Aerospace Instrumentation
Spectral-temporal properties of superluminescence of C, NV-: HPHT diamond
28. TIAZHELOV I.A., MARTYANOV A.K., SEDOV V.S., KUZNETSOV S.V., ZAV'YALOV P.S.[1], MAKAROV S.N.[1], KARPOV D.V.[1], KUPER K.E.[2]
Prokhorov General Physics Institute of the RAS, Moscow
[1]Tecnological Design Institute of Scientific Instrument Engineering of the Siberian Branch of the RAS, Novosibirsk
[2]Budker Institute of Nuclear Physics of the Siberian Branch of the RAS, Novosibirsk
Diamond luminescent beam monitors of synchrotron radiation: synthesis and testing

Meeting 3

Wednesday, January 28, 2026, 16.00
Room G-406

29. EFREMENKO V.G., MARTYNOV I.V.[1], ANTONYCHEVA E.A., USHKOV A.A.[1], VYSHNEVYY A.A.[1], TSELIKOV G.I.[1], ARSENIN A.V.[1,2], SYUY A.V.[1]
Far Eastern State Transport University, Khabarovsk
[1]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
[2]Emerging Technologies Research Center XPANCEO, Dubai, United Arab Emirates
Photothermal conversion of sunlight on TiN, Ti_3C_2 and Au nanoparticles

30. MURATOVA E.N., MAKSIMOV A.I., RYABKO A.A.[1], GAGARINA A.Yu., VRUBLEVSKY I.A.[2], ALESHIN A.N.[1], MOSHNIKOV V.A.
Saint-Petersburg State Electrotechnical University "LETI"
[1]Ioffe Physical-Technical Institute of the RAS, Saint-Petersburg
[2]Belarusian State University of Informatics and Radioelectronics, Minsk
Architectonics of solar cells based on doped perovskite cells
31. SOKOLOVA D.A., PODSVIROV O.A., IESHKIN A.E.[1], TATARINTSEV A.A.[1], LIHACHEV A.I.[2], NASHEKIN A.V.[2], MYASOEDOV A.V.[2]
Peter the Great Saint-Petersburg Polytechnic University
[1]Lomonosov Moscow State University
[2]Ioffe Physical-Technical Institute of the RAS, Saint-Petersburg
Formation of a layer of silver nanoparticles in the near-surface region of silicate glass using electron irradiation
32. URMURZIN D.D., BOBKOV A.A.
Saint-Petersburg State Electrotechnical University «LETI»
Analysis of plasmonic properties of sintered silver structures on fractal tracks of electrical breakdown using combined AFM-Raman spectroscopy
33. BURMISTROV E.R., AVAKYANTS L.P.
Lomonosov Moscow State University
Energy scaling in the terahertz range. optimization by controlling the grating gate period
34. DICK T.A.[1,2], NIKOLAEVA I.A.[1,3], SHIPILO D.E.[1,3], RIZAEV G.E.[1,3], KORIBUT A.V.[1,2], PANOV N.A.[1,3], VRUBLEVSKAYA N.R.[1,3], LEVUS M.V.[1,3], SELEZNEV L.V.[1,3], KOSAREVA O.G.[1,3]
[1]Lebedev Physical Institute of the RAS, Moscow
[2]Moscow Institute of Physics and Technology (State University), Dolgoprudny
[3]Lomonosov Moscow State University
Features of second harmonic generation during femtosecond filamentation in air under loose focusing conditions
35. MARAKULIN A.S.[1], PAUKOV M.I.[1], YAKUBOVSKY D.I.[1], BURDANOVA M.G.[1,2], ARSENIN A.V.[1,3]
[1]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
[2]Prokhorov General Physics Institute of the RAS, Moscow
[3]Emerging Technologies Research Center XPANCEO, Dubai, United Arab Emirates
Investigation of optical properties of ultrathin gold films in a wide spectral range
36. SAMYSHKIN V.D., OSIPOV A.V., ABRAMOV A.S., KUZNETSOV A.A., BODUNOV D.A., KUCHERIK A.O.
Vladimir State University named after Alexander and Nikolay Stoletovs
Optoelectric properties linear carbon chains deposited as quasi-ordered films
37. SMIRNOV K.A., BATUEV I.O., MAYDYKOVSKIY A.I., MURZINA T.V.
Lomonosov Moscow State University
Optical nonlinear and resonant properties of perylene microcrystals
38. SHULYNDIN P.A., RUMIANTSEV B.V., PUSHKIN A.V., MIGAL E.A., POTEMKIN F.V.
Lomonosov Moscow State University
High-order harmonic spectrum extension driven by the two-color intense femtosecond laser field of the near-IR and mid-IR regions in gaseous medium
39. LEVUS M.V.[1,2], RIZAEV G.E.[1,2], DICK T.A.[2,3], SELEZNEV L.V.[1,2], GEINTS I.Yu.[4]
[1]Lomonosov Moscow State University
[2]Lebedev Physical Institute of the RAS, Moscow
[3]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
[4]V.E. Zuev Institute of Atmospheric Optics, SB RAS, Tomsk
Extending the propagation distance of an intense laser pulse using a cascade of Kerr lenses
40. MOLKOV T.S., MARTYNOV I.L., FADEEV S.V., PLEKHANOV A.A., CHISTYAKOV A.A.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Metal-mesh bandpass filters for harmonics of a terahertz IMPATT diode fabricated by laser ablation

Meeting 4

Wednesday, January 28, 2026, 16.00
Room G-407

41. VASHUKEVICH E.A., SURMAY R., LEONOV V.A.
Saint Petersburg State University
Entanglement of two qudits of arbitrary dimensionality via Faraday light-atomic interaction
42. DERGACHEV A.A., SHLENOV S.A.
Lomonosov Moscow State University
Self-action of an optical vortex formed by a spiral phase plate from an elliptical Gaussian beam
43. TIMOSCHENKO E.V., YUREVICH V.A.
Mogilev State A. Kuleshov University, Belarus
[1]Belarussian State University of Food and Chemical Technologies, Mogilev, Belarus
Superradiance in a cavity under quadratic Stark effect conditions
44. MAKAROV D.N., ARKHIPOV M.Yu.
Northern Arctic Federal University named after M.V. Lomonosov, Arkhangelsk
Nonperturbative cross section of Thomson scattering of single-mode radiation on a free electron
45. SOLODOVNIKOV A.A., KAZAKOV I.I., KOZLOV S.A.
ITMO University, Saint-Petersburg
Optical transistor amplification range based on a mirrorless nonlinear Fabry–Perot interferometer in the terahertz spectral range
46. PETROV N.I., SOKOLOV Yu.M., STOIAKIN V.V., DANILOV V.A., POPOV V.V.[1], USIEVICH B.A.[2]
Scientific and Technological Center of Unique Instrumentation of the RAS, Moscow
[1]Lomonosov Moscow State University
[2]Prokhorov General Physics Institute of the RAS, Moscow
Surface plasmon resonance in subwavelength diffraction gratings
47. GEINTS Yu.E., MININA O.V.[1]
V.E. Zuev Institute of Atmospheric Optics, SB RAS, Tomsk
[1]Russian University of Transport (MIIT), Moscow
Barometric control of filamentation of high power femtosecond laser pulses in air

48. GERASIMOV N.M.[1], TERETENKOV A.E [1,2]
[1]Lomonosov Moscow State University
[2]Steklov Mathematical Institute of the RAS, Moscow
Repeated measurements and invasiveness in quantum thermometry
49. KOLOSOV G.A., SHOROKHOV A.S., FEDYANIN A.A.
Lomonosov Moscow State University
Numerical modeling of optical memory elements leveraging phase-change materials
50. KVITKO A.S., KOLOSOV G.A., SHOROKHOV A.S., FEDYANIN A.A.
Lomonosov Moscow State University
Numerical modeling of integrated high-Q resonators leveraging phase-change materials
51. SINGH R.[1], TERETENKOV A.E.[2,3]
[1]Self-employed researcher, Domodedovo
[2]Steklov Mathematical Institute of the RAS, Moscow
[3]Lomonosov Moscow State University
Crystal length optimization for spontaneous parametric down-conversion generated photonic entangled cat-like states
52. EGOROV V.K.[1], EGOROV E.V.[1,2], 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
Direct proof of light waveguide-resonance propagation in fibers

Meeting 5

Thursday, January 29, 2026, 10.00
Room G-407

53. TSAREV V.S., MILOVICH F.[1], PRYAMIKOV A.D., ALAGASHEV G.K., OKHRIMCHUK A.G.
Dianov Fiber Optic Research Center of the GPI RAS, Moscow
[1]National University of Science and Technology «MISIS», Moscow
Direct laser writing of anisotropic nanostructures in fused silica with single femtosecond pulses
54. BATUEV I.O., SMIRNOV K.A., MURZINA T.V., MAYDYKOVSKIY A.I.
Lomonosov Moscow State University
The role of substrate in functioning of waveguide structures manufactured by two-photon laser lithography
55. CHETVERIN R.S., SHARIPOVA M.I., FEDYANIN A.A.
Lomonosov Moscow State University
Manufacturing achromatic diffractive lenses by two-photon laser lithography
56. LYUBOSHENKO V.A.[1], ELKHIMOV D.A.[1,2], ZAYAKIN O.A.[2], KOTOVA S.P.[2,3], MAMZIKOV M.N.[1], PONOMAREV A.I.[2,3], SAPTSINA T.N.[2]
[1]Sarov Branch of Lomonosov Moscow State University, Nizhny Novgorod region
[2]Samara Branch of the Lebedev Physical Institute of the RAS
[3]Samara National Research University
Restoration of the characteristics of clusters of optical inhomogeneities in distilled water by small-angle light scattering methods
57. FILOKHIN G.A.[1,2], KOVALENKO N.V.[1,2]
[1]Moscow Institute of Physics and Technology (State University), Dolgoprudny
[2]Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
Building a predictive model of the morphology of laser ablation columns in biological tissues based on machine learning
58. KRIVETSKAYA A.A.[1,2,3], SAVELIEVA T.A.[1,2], KUSTOV D.M.[1], LEVKIN V.V.[4], ROMANISHKIN I.D.[1], KHARNAS S.S.[4], LOSCHENOV V.B.[1,2]
[1]Prokhorov General Physics Institute of the RAS, Moscow
[2]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[3]S.S. Yudin City Clinical Hospital, Moscow
[4]Sechenov First Moscow State Medical University
Development of the method for the determination of the biological tissues optical properties EX VIVO based on the inverse adding-doubling technique
59. URYUPINA V.K.[1,2], GORBUNOV N.A.[1,3], KOTOVA S.P.[1,2], LOSEVSKY N.N.[1], MAYOROVA A.M.[1]
[1]Samara Branch of the Lebedev Physical Institute of the RAS
[2]Samara National Research University
[3]Reaviz Medical University, Samara
Optothermal manipulation of polystyrene microspheres with kidney cells at low temperature
60. BELOV K.N.[1], GULM A.D.[1], IVANOV M.G.[2], KUNDIKOVA N.D.[1,2]
[1]South Ural State University, Chelyabinsk
[2]Institute of Electrophysics, UB RAN, Yekaterinburg
Visualization of ceramics structure by Raman scattering
61. MURATOV D.A., NIKOLAEV N.E., CHEKHLOVA T.K.
Peoples' Friendship University of Russia (RUDN University), Moscow
Additional possibilities of combining methods for calculation of spectral properties of composite media
62. PROSOVSKIY Yu.O., PROSOVSKIY O.F., ISAMOV A.N., SMOL'YANINOV V.A., SOLOPOV G.V.
Obninsk Research and Production Enterprise Technologiya, Kaluga Region
High uniformity optical coatings production using the PARMS perspective magnetron sputtering method
63. FANDIENKO I.Yu.[1,2], VISHNYAKOV G.N.[1], MINAEV V.L.[1], SHUMSKIY E.V.[1]
All-Russian Research Institute for Optical and Physical Measurements, Moscow
[1]Elektrosteklo LLC, Moscow
Experience of using reference mirrors to correct aberrations in the optical system of an interference microscope
64. SMOL'YANINOV V.A., PROSOVSKIY O.F., ISAMOV A.N., PROSOVSKIY Yu.O., PETRACHKOV D.N.
Obninsk Research and Production Enterprise Technologiya, Kaluga Region
Optical coatings with a specified thikness gradient production for aviation glazing products

Meeting 6

Thursday, January 29, 2026, 13.00
Room G-407

65. TEREKHIN V.V.[1,2], GRIGORIEV O.V.[2], OGURTSOVA K.M.[3]
[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[2]LLC «IPK «Electron-Mash», Zelenograd
[3]LLC «MW KIT», Moscow
Promising directions for the development of «SVCH KIT» systems in radiophotonics
66. LASKAVYI N.S.[1,2]
[1]Perm National Research Polytechnic University
[2]Perm Scientific-Industrial Instrument Making Company
Photonic radio frequency memory using a recirculating delay line
67. KAZMIN M.I., NEBAVSKIY V.A., STARIKOV R.S.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Formation of optical spectra in standard Mach–Zehnder modulators
68. KABAK E.V.[1,2], KOLOSOV G.A.[1], SHOROKHOV A.S.[1], FEDYANIN A.A.[1]
[1]Lomonosov Moscow State University
[2]Sarov Branch of Lomonosov Moscow State University, Nizhny Novgorod region
Optical mode spliters based on nitride silicon foundation
69. KUNETS M.A.[1,2], ASHURKOVA A.A.[1,2], SHITIKOV A.E.[1], CHERMOSHENTSEV D.A.[1,2]
[1]Russian Quantum Center, Skolkovo
[2]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
Efficient encoding of arbitrary spin ising systems on spatial photonic Ising machine
70. SOBOLEVA E.V., RUDYI S.S., IVANOV A.V.
ITMO University, Saint-Petersburg
Optomechanical platform for analog information processing based on controllable spatial bifurcation
71. SAMODELKIN D.A.[1,2], KUNETS M.A.[1,2], SHITIKOV A.E.[1], CHERMOSHENTSEV D.A.[1,2]
[1]Russian Quantum Center, Skolkovo
[2]Moscow Institute of Physics and Technology (State University), Dolgoprudny
Statistical analysis of states in polarization selective nonlinear ring resonator
72. AVDEEV V.V., IRSHKO O.A., PLJONKIN A.P.
Southern Federal University, Taganrog
Experimental studies of losses in an atmospheric optical communication channel

POSTERS 2

Thursday, January 29, 2026, 15.00
Room G-406

POSTERS 3

Thursday, January 29, 2026, 15.00
Room G-407

Meeting 7

Thursday, January 29, 2026, 16.00
Room G-406

73. POPOV S.M., RYBALTOVSKII A.A.[1], RYAKHOVSKIY D.V., SHIKIN A.S.[2], LIPATOV D.S.[3], 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]Kotel'nikov Institute of Radioengineering and Electronics of RAS, Moscow
[3]Devyatykh Institute of Chemistry of High-Purity Substances of the RAS, Nizhny Novgorod
Tunable itterbium fiber random laser operating in the 1070 nm wavelength range
74. OSTRIKOV S.A., KHARAKHORDIN A.V., FIRSTOV S.V.
Dianov Fiber Optic Research Center of the GPI RAS, Moscow
Bismuth-doped fiber laser emitting at 1256 nm with output power over 10 W
75. SUDIN A.V.[1], VOLKOV I.A.[1,2], USHAKOV S.N.[1,3], NISHCHEV K.N.[1]
[1]National Research Mordovian State University named after N.P. Ogarev, Saransk
[2]Ulyanovsk State University
[3]Prokhorov General Physics Institute of the RAS, Moscow
Generation of synchronized dual-wavelength noise-like pulses in a passively mode-locked fiber laser
76. IVANOV V.N.[1], BULYGA D.V.[1], SANDULENKO A.V.[1], MAKAROV K.N.[3], POLISHCHUK G.S.[1], DUKELSKY K.V.[1], EVSTROPIEV S.K.[1,2], BULYCHOV I.A.[3]
[1]S.I. Vavilov State Optical Institute, Saint-Petersburg
[2]Saint-Petersburg State Technological Institute (Technical University)
[3]Troitsk Institute of Innovative and Thermonuclear Research
Development of cladding for powerful solid-state laser system
77. RESHETOVA M.V.[1,2], GARMATINA A.A.[1], KRIMAN N.M.R.[3], KONOVKO A.A.[3], ASADCHIKOV V.E.[1], BEREZKIN V.V.[1], MINAEV N.V.[1]
[1]Institute of Photonic Technologies of NRC «Kurchatov Institute», Troitsk
[2]Skolkovo Institute of Science and Technology
[3]Lomonosov Moscow State University
Quasi-phase-matched second-harmonic generation in photonic crystal fibers filled with iodic acid

78. VINOKUROV M.V., KHABIBULLIN R.A.
Moscow Institute of Physics and Technology (State University), Dolgoprudny
Impact of the ridge width on the spectral properties of a terahertz distributed-feedback quantum-cascade laser
79. BELIAEVA V.S.[1,2], CHERMOSHENTSEV D.A.[1,3]
[1]Russian Quantum Center, Skolkovo
[2]Lomonosov Moscow State University
[3]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
Features of self-injection locking in integrated microresonator rings considering waveguide facet reflections
80. VINOGRADOV D.V.[1], BELOV D.A.[1,2], IKONNIKOV A.V.[1,2], KHABIBULLIN R.A.[1]
[1]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
[2]Lomonosov Moscow State University
Microdisk terahertz quantum cascade lasers based on whispering gallery modes
81. GOLODUKHINA A.N.[1,2], BELIAEVA V.S.[1,2], SHITIKOV A.E.[1], CHERMOSHENTSEV D.A.[1,3], DMITRIEV N.Yu.[1]
[1]Russian Quantum Centre, Skolkovo, Moscow region
[2]Lomonosov Moscow State University
[3]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
Dynamics of laser diode in sil regime in a system with two optical microresonators
82. BORMINTSEV A.A.[1], SHAIDULLIN R.I.[1,2]
[1]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
[2]Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
Investigation of thermal changes in multimode radiation transfer coefficients in side-pumped optical fibers
83. BORODYNKIN I.I., BUCHKOV S.B.[1], ZAYATS K.V.[1], ISHTEEV A.R.[2], KONDRATENKO V.S., TIKHOMIROV S.V.[1]
MIREA – Russian Technological University, Moscow
[1]All-Russian Research Institute for Optical and Physical Measurements, Moscow
[2]National University of Science and Technology «MISIS», Moscow
High sensitive laser power meter based on thermal sensor with absorber carbon nanotubes on silicon substrate
84. MOROZOV D.V.[1,2], VOROBYEV A.K.[1,2], DMITRIEV N.Yu.[1], SHITIKOV A.E.[1], CHERMOSHENTSEV D.A.[1,2], 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
Low-noise microcomb generation in integrated silicon nitride optical microresonators

Meeting 8

Thursday, January 29, 2026, 16.00
Room G-407

85. MAKOVETSKAYA T.A., HONGQUN Y., ZAVALISHINA L.D., MARKVART A.A., USHAKOV N.A.
Peter the Great Saint-Petersburg Polytechnic University
Application of quantum-inspired interferometry for interrogation of distributed fiber-optic vibration sensors
86. GRISHACHEV V.V.
Russian State University of the Humanities, Moscow
Application of quantum-inspired interferometry for interrogation of distributed fiber-optic vibration sensors
87. ZYKINA A.A., PLYASTSOV S.A.
ITMO University, Saint-Petersburg
Refractive fiber-optic fuel quality sensor based on surface plasmon resonance and MMF-SMF-MMF fiber structure
88. TUROV A.T.[1,2], KRISHTOP V.V,[1,3], KONSTANTINOV Yu.A.[2]
[1]Perm National Research Polytechnic University
[2]Perm Federal Research Center of UB RAS
[3]Perm Scientific-Industrial Instrument Making Company
FIber optic distributed acoustic sensor hardware and software adaptation for biological applications
89. ZAVALISHINA L.D., MARKVART A.A., BOBYLEVA O.G., GRAZHDIAN A.L., FILONOV V.D., LIOKUMOVICH L.B., USHAKOV N.A.
Peter the Great Saint-Petersburg Polytechnic University
Response of a intermode fiber-optic interferometer based on an SNS-structure to changes in external environment parameters
90. VLASOV S.V.[1,2], IVANOV A.D.[1], MALYSHEV I.V.[1], POPOV M.V.[1], CHERMOSHENTSEV D.A.[1,3]
[1]Russian Quantum Center, Skolkovo
[2]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[3]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
Tapered optical fiber tactile sensors
91. GALAKTIONOV I.V.[1,2], TOPOROVSKY V.V.[1], KOLESNIKOV O.V.[1]
[1]Moscow Technical University of Communications and Informatics
[2]Moscow Polytechnic University
Methods for laser beam focusing to a fiber for wireless optics communications
92. EROVENKO Z.A., PETROV A.V., MARKVART A.A., USHAKOV N.A.
Peter the Great Saint-Petersburg Polytechnic University
Improving the spatial resolution of optical coherence tomography for visualizing the internal structure of special optical fibers
93. MAKOVETSKII A.A., POPOV S.M., RYAKHOVSKIY D.V., ZAMYATIN A.A.
Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
3D-simulation and experimental study of «resonant» oblique rays in highly multimode optical fiber
94. KALYAZINA D.V., VOLNOVA D.A., VARZHEL S.V., YAKIMUK V.A., YANDYBAEVA Yu.I., MAGOMEDOVA A.A., DMITRIEV A.A.
ITMO University, Saint-Petersburg
Investigation of the apodization method of fiber Bragg gratings by laser beam translation
95. SUDAS D.P., KUZNETZOV P.I.
Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
Application of nanocoating to the surface of optical fiber with a tilted Bragg grating
96. OTROKHOV S.Yu.
Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
Wave parameters and refractiv index profile in planar W-optical fibers

Meeting 9

Friday, January 30, 2026, 10.00
Room G-407

97. BYKOVSKY A.Yu.
Lebedev Physical Institute of the RAS, Moscow
Purpose network of subagents, based on multiple-valued logic dialog model of agents communications
98. VASILYEV S.V., STYRKIN I.S.
Air Force Academy named after prof. N.E. Zhukovsky and Yu.A Gagarin, Voronezh
Searching for objects on the circulation field of the phase-energy spectrum of an image
99. KRUGLOV S.K., LUPIN A.V.
Peter the Great Saint-Petersburg Polytechnic University
Optoelectronic measuring system with extended dynamic range
100. ROGOV S.A., VLASOVA I.V.
Bonch-Bruevich Saint-Petersburg State University of Telecommunications
Dynamic range of multi-channel Fourier signal processors
101. KOTOV V.M., AVERIN S.V., BULYUK A.N., KARACHEVTSEVA M.V.
Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
Controlled rotation of the polarization plane using multiphonon Bragg diffraction
102. BORITKO S.V.
Scientific and Technological Center of Unique Instrumentation of the RAS, Moscow
Increasing the spectral resolution of an acousto-optical monochromator
103. BULGAKOV V.A., TELESHEVSKI V.I.
Moscow State University of Technology (Stankin)
Advantages of using the phase shift method in interferometric control
104. BOREYSHO A.S., SAVIN A.V.
[1]Baltic State Technical University «VOENMEH» named after D.F. Ustinov, Saint-Petersburg
Influence of non-ideal optical elements on the operation of a sub-diffractive laser beam angular deviation meter
105. TSELOGORODTSEV K.A.[1,2], ANTONOV I.O.[1,2], KOTOVA S.P.[1,2], LOSEVSKY N.N.[1]
[1]Samara Branch of the Lebedev Physical Institute
[2]Samara National Research University
Slowly rotating polarized light fields for controlling levitated micro-objects
106. NIKITIN N.V.[1,2], KHARASOV D.R.[2], BENGALSKII D.M.[2], GOSTILOVICH S.O. P.N.[2], TRESHIKOV V.N.[2]
[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[2]T8 Ltd, Moscow
Analysis of the application of various types of neural networks for the integration of data from distributed temperature sensors based on Rayleigh and Raman reflectometers
107. PYATIBRATOV K.A.
Skolkovo Institute of Science and Technology
Development and study of the properties of an optical storage-accumulation cell
108. KEROV A.A., KOZLOV A.V., CHEREMKHIN P.A., RODIN V.G.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Analysis of metrics and filtering methods for camera identification using spatial noise portraits

PLENARY 2

Friday, January 30, 2026, 13.00
Room G-407

109. POTATURKIN O.I., ORLOV S.I., UZILOV S.B.
Institute of Automation and Electrometry SB RAS, Novosibirsk
Investigation of effectiveness of multi- and hyperspectral feature systems in real scene object classification
110. SKIDANOV R.V., DOSKOLOVICH L.L., KHANENKO Yu.V., PRONIN A.S., MOROZOV A.E., SOROKIN D.M.
Samara National Research University
Diffraction neural network with software-defined nonlinearity in a 4F system
111. POGODA A.P., SEMENTIN V.V., BOREYSHO A.S.
Baltic State Technical University «VOENMEH» named after D.F. Ustinov, Saint-Petersburg
Visualization of the surface profile of micrometer standards using digital dual-wavelength holography
112. DENISOV D.G.
Bauman Moscow State Technical University
The complex of optoelectronic equipment for diagnosing the quality of angstrom-level surfaces of astronomical mirrors, laser and optical products

POSTERS 4

Friday, January 30, 2026, 15.00
Room G-407

Meeting 10

Friday, January 30, 2026, 17.00
Room G-407

113. MANUCHAROV D.R., PAVLOV P.V.
Air Force Academy named after prof. N.E. Zhukovsky and Yu.A Gagarin, Voronezh
Laser method for rapid diagnostics of biocontamination in aviation fuel
114. KOHANOV A.V.[1,2], NOVIKOV I.N.[1], EROFEEVA A.A.[1], BELOTELOV G.S.[1], SUTYRIN D.V.[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)
Measurement of wavelengths in the optical range using speckle patterns formed on an integrating sphere
115. AKHMEDZHANOV I.M., BARANOV D.V., TIKHONEVICH O.V., USIEVICH B.A.
Prokhorov General Physics Institute of the RAS, Moscow
Phenomenon of spectral switch in optical scheme with variable aperture
116. PUTILIN N.A.[1,2], KOPENKIN S.S.[1,2], PUTILIN A.N.[1,2], BORODIN Yu.P.[1,2], DUBYNIN S.E.[2]
[1]Moscow State University of Geodesy and Cartography «MIIGAiK»
[2]Lebedev Physical Institute of the RAS, Moscow
Waveguide multiplication of beams in schemes with superimposed and double-sided diffraction gratings
117. GATATDINOV T.A., RYMOV D.A., ZLOKAZOV E.Yu.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Analysis of holographic image formation methods in a system with a holographic waveguide
118. KASHAPOVA D.I.[1,2], PROKOPOVA D.V.[1], KOTOVA S.P.[1,2]
[1]Samara Branch of the Lebedev Physical Institute
[2]Samara National Research University
The quality of the formation of spiral beams of light by the holographic method
119. CHERNYKH A.V., GRESKO V.R., REZTSOV T.V., SERGEEV M.M., PETROV N.V.
ITMO University, Saint-Petersburg
Development of a polarization holographic microscope for studying the anisotropy of ZnO:Ag films
120. IVANOV P.A.
Yaroslavl State Technical University
Some types of invariant correlation filters in problems of images recognition for different distortions
121. PAVLENKO D.V., STARIKOV R.S., USHAKOV F.A.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Neural network classification of images based on convolution signals formed by an opto-digital spatial filtering system
122. VYAZOVYKH M.V., KOZYREV V.D., KOVTUN A.B., VERNIGOR N.A., KLYUEV V.A.
Bauman Moscow State Technical University
Neural network algorithm for increasing the probability of recognizing moving objects in lidar systems
123. VOLKOV A.A., KOZLOV A.V., CHEREMKHIN P.A.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
A study of neural network approaches for the extraction of matrix photosensors noise parameters
124. SAGATELYAN H.R., PISKUNOVA E.R., KUZNETSOV A.S.
Bauman Moscow State Technical University
Comparision of RGB and XYZ image color estimation methods

Posters 1
Wednesday, January 28, 2026, 12.00

125. MUTILIN S.V., KAPOGUZOV K.E., MANTSUROV N.D., YAKOVKINA L.V.[1], KICHAI V.N.[1], GAYDUK A.E., VOLOSHIN B.V., TUMASHEV V.S., SELEZNEV V.A.
Rzhanov Institute of Semiconductor Physics of SB RAS, Novosibirsk
[1]Nikolaev Institute of Inorganic Chemistry of SB RAS, Novosibirsk
Vanadium dioxide nanocrystals with a semiconductor-metal phase transition for dynamic optical control
126. VASILYUK Ya.D., MEDVEDEVA E.A., BARANOV M.A.
Peter the Great Saint-Petersburg Polytechnic University
Phase delay of light in thin alanine films deposited by ultrasonic deposition from different distances
127. BUKHAROV D.N., KHUDAYBERGANOV T.A.
Vladimir State University named after Alexander and Nikolay Stoletovs
Artificial diamond optic properties modeling in the approximation of a photonic crystal with NV centers
128. FEDOROVA I.A., YUROV V.Yu., BOL'SHAKOV A.P., POPOV M.Yu., RYZHKOV S.G., PIVOVAROV P.A., RALCHENKO V.G.
Prokhorov General Physics Institute of the RAS, Moscow
Use of Raman spectroscopy to monitor the temperature of diamond single crystals during synthesis in a microwave plasma CVD reactor
129. KUCHERENKO M.G., RUSINOV A.P.
Orenburg State University
Influence of nanoparticle charge on cross-annihilation of singlet oxygen molecules with triplet centers in its polymer crown
130. KABDIYEVA A.U., ROZHKOVA X.S., MENDIBAYEVA A.Zh., ZHUBAT A.S., BEKZHAN N.A.
Buketov Karaganda University, Kazakhstan
Impact of MoS_2 nanoparticles on current distribution and efficiency of PEDOT:PS-based perovskite solar cells
131. SHUTKIN G.A., PAVLOVA M.D., LAMKIN I.A., TARASOV S.A.
Saint-Petersburg State Electrotechnical University "LETI"
Investigation of spectral charachetristics of an organic photosensitive structure based on a P3HT:EH-IDTBR
132. MUSSABEKOVA A.K., AIMUKHANOV A.K., RUSTEMOVA A., RASHIDKYZY M., BAKIYEV D.K., MURATOVA K.K.
Buketov Karaganda University, Kazakhstan
Influence of different alcohol solvents on the morphology and structure of SnO_2 films

133. NALBANDYAN V.M., KUCHERENKO M.G.
Orenburg State University
Generation characteristics of a molecule–metallic nanoparticle system with a layer of J-aggregates
134. AYMAGAMBETOVA A.A., IBRAYEV N.Kh.
Buketov Karaganda University, Kazakhstan
Comparative analysis of plasmonic enhancement of xanthene dyes by silver and gold nanoparticles
135. YAKUSHOVA N.D., SITNIKOVA M.G., KARMANOV A.A.
Penza State University
Investigation of the optical properties of dye-sensitized ZnO:Fe:Bi photocatalytic films
136. ZIYAT A.Z., BEISEMBEKOV M.K., ZEINIDENOV A.K., SYDYH B., RAKHIM A.
Buketov Karaganda University, Kazakhstan
Research of the optical properties of NiO_x/phthalocyanine bilayer films
137. AVERIN S.V., LUZANOV V.A., ZHITOV V.A., ZAKHAROV L.Yu., KOTOV V.M.
Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
Optical properties of nanometer epitaxial nickel oxide films
138. PAUKOV M.I.[1], YAKUBOVSKY D.I.[1], MARAKULIN A.S.[1], SUN S.[2], ZANG Y.[2], BURDANOVA M.G.[1,3]
[1]*Moscow Institute of Physics and Technology (State University), Dolgoprudny*
[2]*Capital Normal University, Beijing, China*
[3]*Prokhorov General Physics Institute of the RAS, Moscow*
The dependence of modulation depth and speed of the terahertz radiation for ultrathin smooth gold films
139. ABEUOV D.R., AIMUKHANOV A.K., ZEINIDENOV A.K., RUSTEM A.Zh.
Buketov Karaganda University, Kazakhstan
Enhancement of electron-photon interaction at the silicon-gold interface
140. GORYAEV M.A.
Herzen State Pedagogical University of Russia, Saint-Petersburg
Dye influence on the photovoltaic effect of the silicon *p* - *n* structure
141. LEBENKOVA S.K., MILSHINA L.D.
Petrovsky Bryansk State University
Effect of ree element alloying on the structure and oscillation characteristics of alkali-earth tungramates
142. MILSHINA L.D., LEBENKOVA S.K.
Petrovsky Bryansk State University
Investigation of the structural characteristics of solid solutions based on strontium and calcium tungstates
143. BARINOVA O.P., KNYAZKIN D.D., RUNINA K.I.
Mendeleev University of Chemical Technology of Russia, Moscow
Synthesis and luminescent properties of lithium pentaaluminate activated by iron ions (111)
144. DOMAREV S.N., OSKOLKOVA T.O., MOISEYEVA E.O.[1], ORLOVA A.O.
ITMO University, Saint-Petersburg
[1]*Skolkovo Institute of Science and Technology*
Photoinduced changes in the magnetic circular dichroism spectra of iron oxide nanoparticles
145. BELOUSOVA P.O.[1,2], KUZMIN N.N.[1], MALTSEV V.V.[3], YIN L.H.[4], MOROZOV I.A.[5]
[1]*Institute for Spectroscopy of the RAS, Troitsk*
[2]*National Research University «Higher School of Economics», Moscow*
[3]*Lomonosov Moscow State University*
[4]*Institute of Solid State Physics of Chinese Academy of Sciences, Hefei, China*
[5]*Institute of Geology of Ore Deposits, Petrography, Mineralogy and Geochemistry of the RAS, Moscow*
Spectroscopic study of $DyCr_3(BO_3)_4$ borate
146. IZMAILOVA N.V.[1,2], SAMSONOVA L.G.[2], GADIROV R.M.[2]
[1]*National Research Tomsk State University*
[2]*Tomsk State University of Control Systems and Radioelectronics*
Photogeneration of acid by XeCl excimer lamp (308 nm)
147. GLUKHOEDOVA M.A.[1], EVSTROPIEV S.K.[1,2]
[1]*Saint-Petersburg State Technological Institute (Technical University)*
[2]*S.I. Vavilov State Optical Institute, Saint-Petersburg*
Structure and photocatalytic properties of the ZnO-Cr system
148. KARPACH P.V., VASILYUK G.T.[1], MASKEVICH A.A.[1], GLEBOVICH T.S.[1], AYT A.O.[2], MASKEVICH S.A.[3]
Grodno Center for Standardization, Metrology, and Certification, Belarus
[1]*Janka Kupala State University, Grodno, Belarus*
[2]*Photochemistry Center of NRC «Kurchatov Institute», Moscow*
[3]*International Sakharov Environmental Institute of Belarusian State University, Minsk*
Photochromic nanocomposites based on Ag nanoparticles and diarylethene molecules in polymer films
149. LANTUKH Yu.D.
Orenburg State University
Sensitized discoloration of Biochrom film
150. GEINTS Yu.E., PANINA E.K.
V.E. Zuev Institute of Atmospheric Optics, SB RAS, Tomsk
Numerical study of anti-reflective properties of nanostructured TiO_2 coatings applied to solar cells
151. KOLISNICHENKO V.V.[1], DAIBAGYA D.S.[1,2,4], DAIBAGYA D.M.[5], OSADCHENKO A.V.[1,2], ZAKHARCHUK I.A.[1], AMBROZEVICH S.A.[1,3], SELYUKOV A.S.[1,2,3]
[1]*Bauman Moscow State Technical University*
[2]*MIREA – Russian Technological University, Moscow*
[3]*Lebedev Physical Institute of the RAS, Moscow*
[4]*Moscow Polytechnic University*
[5]*National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)*
Modeling temperature-dependent luminescence of nanomaterials
152. BOLTENKO A.V., NAZARENKO E.S., RIDER M.A., ORLOVA A.O.
ITMO University, Saint-Petersburg
Luminescent properties of two-dimensional cadmium selenide nanocrystals at cryogenic temperatures

153. IVANOVA V.S.[1], OSADCHENKO A.V.[1,2], RYZHOV A.V.[3], DAIBAGYA D.S.[1,2,4], ZAKHARCHUK I.A.[1], DAIBAGYA D.M.[5]
[1]Bauman Moscow State Technical University
[2]MIREA – Russian Technological University, Moscow
[3]LLC «Khimtekh», Moscow
[4]Moscow Polytechnic University
[5]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Influence of environment on the luminescence properties of Eu^{3+} complexes: determination of Judd–Ofelt parameters

154. KROL I.M.[1,2], BOROVIKOV V.N.[1], SMAKOTINA V.V.[3], KARIMOVA O.V.[1]
[1]Institute of Geology of Ore Deposits, Petrography, Mineralogy and Geochemistry of the RAS, Moscow
[2]Moscow State University of Technology (Stankin)
[3]Center for Additive Technologies, Moscow
Synthesis of α-Zn_2SiO_4:Mn^{2+} by the MSS method and its luminescent properties

155. FATEEV A.D., DEVITSKIY O.V.[1]
North Caucasus Federal University, Stavropol
[1]Federal Research Center Southern Scientific Center of the RAS, Rostov-on-Don
New semiconductor materials based on III-V-Bi compounds for IR devices

156. SHATROV K.D., ANDREADI A.V., MARTYNOV I.L., CHISTYAKOV A.A.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Fabrication and characterization of porous silicon edge filters

157. CHMEREVA T.M., SHIKHAVTSOV M.A.
Orenburg State University
The effect of a plasmonic hemispherical nanoparticle on the deactivation of a quantum emitter

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

159. KOROVAI O.V.
Transnistrian State University named after T.G. Shevchenko, Tiraspol
The influence of multiphoton transitions on the dispersion law of a four-level atom with an equidistant energy spectrum

160. GAVRILOVETS V.A., GAVRILOVETS D.A., KULAGINA M.A., SURINA M.A., CHEBAKOVA S.A., FILATOV V.V.
Bauman Moscow State Technical University
Spontaneous symmetry breaking when polariton condensate collapses in photonic crystal

161. VASILIEVA O.F.
Transnistrian State University named after T.G. Shevchenko, Tiraspol
Temporal evolution of the density of dipolaritons in the case when all quasiparticles are present in the system at the initial moment of time

162. RYZHOV I.V., IVANOV G.A.
Herzen State Pedagogical University of Russia, Saint-Petersburg
Attosecond superluminescence of three-level Pr^{3+} ions synthesized into perovskite quantum dots

163. SEMENOVA L.E.
Prokhorov General Physics Institute of the RAS, Moscow
Resonant hyper-Raman scattering by LO phonons in a ZnS crystal

164. KOTOVA A.D.[1], ISMAEEL A.[1,2], OREKHOV I.O.[1], SAZONKIN S.G.[1], FEDORENKO A.Yu.[1], DVORETSKIY D.A.[1], KARASSIK V.E.[1]
[1]Bauman Moscow State Technical University
[2]Moscow Institute of Physics and Technology (State University), Dolgoprudny
Coherent supercontinuum generation by the high-order soliton molecules

165. SEMENOVA L.E.
Prokhorov General Physics Institute of the RAS, Moscow
Two-phonon resonant Raman scattering of light in a CdSe crystal

166. WU J., LI C., SMIRNOV A.M., YIN Y.[1]
Lomonosov Moscow State University
[1]Polytechnic Institute of Paris, Palaiseau, France
Self-consistent third-order nonlinearity in CdSe/ZnS–MOF composites

167. BAGROV A.R.
Samara National Research University
Dynamics of entanglement of three Jaynes–Cummings atoms

168. ASTASHKEVICH S.A.
Saint-Petersburg State University
Dependence of ionic composition of cesium containing photoplasma on its conditions

169. ASTASHKEVICH S.A.
Saint-Petersburg State University
Investigation of spatial non-homogeneity of photoplasma in alkali metal vapors

170. LI C.[1,2], TEBENEVA T.C.[1], LOBANOV V.E.[1], CHERMOSHENTSEV D.A.[1,3], BILENKO I.A.[1,2], SHITIKOV A.E.[1]
[1]Russian Quantum Center, Skolkovo
[2]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny
[3]Lomonosov Moscow State University
Platicon state switching in high-Q Si_3N_4 microresonator in self-injection locking regime

171. MININ I.V., MININ O.V.
National Research Tomsk Polytechnic University
Photonic hook based on purposefully violated spatial symmetries of the Mukhaling particle

172. KUZNETSOV I.O., KARTSEV P.F.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Model of superconducting state relaxation after optical pulse excitation taking into account nonequilibrium phonons

Posters 2
Thursday, January 29, 2026, 15.00

173. KOZHEVNIKOV V.A., AMMOSOV A.P.
Peter the Great Saint-Petersburg Polytechnic University
Analysis of the positive column of a direct current discharge in a variable diameter laser tube for a two-component gas mixture

174. GAVRISH S.V., POTAPENKO A.O., CHILIKINA P.A.
Scientific and Production Enterprise «Melitta», Moscow
Creating effective pulse lamps based on short-arc and capillary discharge for UV installations
175. MESHKOV M.N., SIDORYUK O.E., DOROFEEV A.A.[1]
POLYUS Research Institute of M.F. Stelmah, Moscow
[1]Dinoptech LLC, Moscow
Application of laser cutting in technologies for forming precision ceramic springs
176. TRINH N.H.[1], BELIANAVA K.Yu., MILTO H.Yu., PATAPOVICH M.P.
Belarusian Academy of Communications, Minsk
[1]Vinh University, Hanoi, Vietnam
Features of the interaction of laser radiation with the surface of a multicomponent alloy
177. NIKOLAEVA I.N.[1,2], ROGOZHNIKOV G.S.[1]
[1]All-Russian Research Institute of Experimental Physics, Sarov, Nizhny Novgorod region
[2]Sarov Branch of Lomonosov Moscow State University, Nizhny Novgorod region
Signature analysis of terahertz radiation generated in ultrathin spintronic Pt/Fe heterostructures
178. NAZAROVA T.A., 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
Intracavity frequency doubling of a composite ceramic YAG: Nd^{3+} / YAG: Cr^{4+} laser generation
179. KORSHUNOV A.A.[1,2], MOZHAEVA M.D.[1,2], GARMATINA A.A.[1], ASADCHIKOV V.E.[1], MAREEV E.I.[1], MINAEV N.V.[1]
[1]Institute of Photonic Technologies of NRC «Kurchatov Institute», Troitsk
[2]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Influence of the femtosecond pre-pulse in the creation of a microfocus laser-plasma X-ray source based on regenerative femtosecond amplifier
180. ASTASHKEVICH S.A., GORDEEV S.V., MASHEK I.C., KHORONZUK R.S., CHEKUNOV I.V.[1]
Saint-Petersburg State University
[1]Bauman Moscow State Technical University
Investigation of effectiveness of lamp sources for multichannel pumping in frequency standards
181. ASTASHKEVICH S.A., GORDEEV S.V., MASHEK I.C., KHORONZUK R.S., CHEKUNOV I.V.[1]
Saint-Petersburg State University
[1]Bauman Moscow State Technical University
Using Fabry–Perot interferometer for laser pumping of frequency standard
182. SHCHEKIN A.S.[1,2], GURSKIY D.S.[1], ISHKINYAEV I.D.[1,2], PETROVSKIY V.N.[1]
[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[2]LLC «NPP LASSARD», Moscow
Evaluation of thermokapillary movement and plasma shielding effects in numerical simulation of nanosecond laser ablation of monocrystalline silicon
183. TRINH N.H.[1], SHCHUKO A.V., TSITKO K.D., PATAPOVICH M.P.
Belarusian Academy of Communications, Minsk
[1]Vinh University, Hanoi, Vietnam
Determination of the composition of synthetic materials by laser atomic emission spectrometry
184. KOVALENKO A.F.[1,2]
[1]N.L. Dukhov All-Russian Research Institute of Automatics, Moscow
[2]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Criterion of thermal strength of a plate during impulse laser annealing, taking into account reflection from the rear surface
185. EGOROV A.N.[1,2], DERIMEDVED D.K.[1,2], EPIFANOV E.O.[2], MINAEV N.V.[2]
[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[2]Institute of Photonic Technologies of NRC «Kurchatov Institute»,, Troitsk
Development of methods for femtosecond laser formation of metal nanoparticles in optical transparent materials and its implementation
186. FEDOTKIN M.G., TEL'MINOV E.N., SOLODOVA T.A., BERDYBAEVA S.T., GADIROV R.M.[1]
National Research Tomsk State University
[1]Tomsk State University of Control Systems and Radioelectronics
Lasing in an organic active waveguide
187. LEBEDEV N.R.[1,2], EPIFANOV E.O. [2], MINAEV N.V.[2]
[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[2]Institute of Photonic Technologies of FSRC «Crystallography and Photonics» of the RAS, Troitsk
Increasing the performance of two-photon polymerization technology and its hardware implementation based on domestic components
188. CHABURKIN D.A.[1,2], KOTOVA S.P.[1,2], SOFIN A.S.[3], NEUPOKOEEVA A.V.[3]
[1]Samara National Research University
[2]Samara Branch of the Lebedev Physical Institute
[3]Samara State Medical University
Phase delay of dehydrated blood plasma samples for diagnostics of neurodegenerative diseases
189. TRINH N.H.[1], ULASEVICH V.D., PATAPOVICH M.P.
Belarusian Academy of Communications, Minsk
[1]Vinh University, Hanoi, Vietnam
Studying the elemental composition of human hair using double laser pulses
190. ZUBAREVA S.R., ZYUBIN A.Yu., SAMUSEV I.G
Immanuel Kant Baltic Federal University, Kaliningrad
Method for arranging and processing combination dissexing spectra of multicomponent objects using machine learning
191. RYABOV N.A.[2], SHULEPOV P.V.[2], VOLOVA L.T.[2], TIMCHENKO E.V.[1,2], TIMCHENKO P.E.[1,2], IVANOV S.S.[1]
[1]Samara National Research University
[2]Samara State Medical University
Identification of collagen-containing gel in mesh endoprostheses using Raman spectroscopy
192. VOYTESHONOK Yu.V., SHITZ D.V.
Immanuel Kant Baltic Federal University, Kaliningrad
Led lamp for UV phototherapy of skin diseases

193. CHURSINA J.A.[1,2], EGOROV A.N.[1,2], ASHIKHMIN D.I.[2], SHALENOV A.S.[1,2], MINAEV N.V.[2]
[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[2]Institute of Photonic Technologies of FSRC «Crystallography and Photonics» of the RAS, Troitsk
Development of a method and its hardware implementation for highly efficient laser-induced transfer of live fungal spores and mycelial fragments
194. KHAMINA K.A.[1], TIMCHENKO E.V.[1,2], TIMCHENKO P.E.[1,2], BAZHUTOVA I.V.[2], GLUBOKOV D.G.[2]
[1]Samara National Research University
[2]Samara State Medical University
Raman spectroscopy for diagnosis the condition of femur part of the bone in gangrene and phlegmon
195. SHALENOV A.S.[1,2], MINAEV N.V.[2], ASHIKHMIN D.I.[2], YUSUPOV V.I.[2]
[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[2]Institute of Photonic Technologies of FSRC «Crystallography and Photonics» of the RAS, Troitsk
Technology and hardware complex for precise laser-induced forward transfer of single cells
196. FRANTSUZOVA D.M.[1], TIMCHENKO E.V.[1,2], TIMCHENKO P.E.[1,2], BAZHUTOVA I.V.[2], GLUBOKOV D.G.[2]
[1]Samara National Research University
[2]Samara State Medical University
Raman spectroscopy for assessing the mineral-organic composition of jaw bone tissue after bone graft
197. SHULBAEVA D.S., KOSTROMYKINA V.V., ROGOZHNIKOV G.S.
All-Russian Research Institute of Experimental Physics, Sarov, Nizhny Novgorod region
Application features of spectral fingerprinting in problems of differentiating biological tissues by their optical characteristics
198. TIMCHENKO P.E.[1,2], VOLOV A.D.[2], VOLOVA L.T.[2], TIMCHENKO E.V.[1,2], CHERNUKHIN A.A.[1]
[1]Samara National Research University
[2]Samara State Medical University
Raman spectroscopy for assessing the composition of deionized water
199. KOLESNIK Ya.V., ZIMIN S.I.
Moscow Technical University of Communications and Informatics
Investigation of the radiation resistance of various types of optical fibers and fiber-optic communication line components under simulated nuclear power plant irradiation
200. TORUBKA V.D.
Kuban State University, Krasnodar
Research of modern trends in transition to domestic equipment in packet data networks
201. KOSOVA Yu.A., AVTANDILOV K.Sh. [1]
Russian University of Transport (MIIT), Moscow
[1]Moscow Technical University of Communications and Informatics
Scientometric analysis of the development prospects for hollow and multicore optical fibers for quantum communications
202. GANAKIN N.R., SALEEV A.R., SIMONOV I.M., YARYGIN M.A., PAVLOV S.V.
Moscow Technical University of Communications and Informatics
The effect of transverse point force on fiber optic cable signal transmisson
203. ANPILOV V.S.[1,3], SHAIDULLIN R.I.[1,2], TEZADOV Ya.A.[3], GOLUBEV M.A.[3]
[1]Moscow Institute of Physics and Technology (State University), Dolgoprudny
[2]Fryazino Branch of Kotel'nikov Institute of Radioengineering and Electronics of RAS
[3]LLC «VPG Lazerone», Fryazino
Enchanced GN-model of the impact of nonlinear effects on optical signals in coherent communication systems
204. BAHUS A.V., KAZANTSEV S.Yu., NANIDZANYAN A.K., YARYGIN M.A.
Moscow Technical University of Communications and Informatics
Influence of external magnetic and acoustic fields on quantum key distribution in a multicore optical fiber
205. ZAGIROV T.R., ZLOKAZOV E.Yu., KAZMIN M.I., RYMOV D.A., STARIKOV R.S., SHIFRINA A.V.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Enhancement of signals in directly modulated analog optical links using neural networks
206. GALAKTIONOV I.V.[1,2], LEPILIN A.V.[1], TOPOROVSKY V.V.[1], KOLESNIKOV O.V.[1]
[1]Moscow Technical University of Communications and Informatics
[2]Moscow Polytechnic University
Compensation of atmospheric distortions in optical wireless communication systems
207. EVSIUKHIN Z.D., KAZMIN M.I., NEBAVSKIY V.A., NENASHEV T.D., POCHTAREV I.S., STARIKOV R.S.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Features of characterization of analog optical paths with digital output implemented using various photodiodes
208. BURMISTROV E.R., PCHELKINA N.V.
Moscow Technical University of Communications and Informatics
Investigation of the attenuation spectrum C-band in free-space optics
209. SEMKIV M.T., ZLOKAZOV E.Yu.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Development of a sampling signal stabilization method for systems of passive pulse repetition frequency multiplication of photonic analog-to-digital converters
210. PCHELKINA N.V., CHIZH S.A.
Moscow Technical University of Communications and Informatics
The effect of liquid precipitation on signal attenuation in the atmospheric optical channel
211. GALAKTIONOV I.V.[1,2], MESYATSEV M.A.[1], TOPOROVSKY V.V.[1], KOLESNIKOV O.V.[1]
[1]Moscow Technical University of Communications and Informatics
[2]Moscow Polytechnic University
Adaptive algorithms for distortion correction in atmospheric free-space optical communication links
212. VOLZHANKIN D.V., SVETS N.A., ZIMIN S.I.
Moscow Technical University of Communications and Informatics
Calculation of parameters of an atmospheric-optical communication line using the example of the mountainous area between the villages of Usukhchay and Kurush in the Dokuzparinsky district
213. KHLOPTSEVA D.S., SVETS N.A., ZIMIN S.I.
Moscow Technical University of Communications and Informatics
Design and calculation of parameters of an atmospheric-optical communication line using the example of the chemical enterprise JSC «Sibur-Neftekhim»

214. PAVLOVA E.K., OKATAYA M.A., ZIMIN S.I.
Moscow Technical University of Communications and Informatics
Use of atmospheric optical communication lines in the arctic zone

215. ZLOKAZOV E.Yu., NENASHEV T.D., STARIKOV R.S.
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
Numerical simulation of electro-optical circuits for generating comb signals in microwave photonics systems

216. GALAKTIONOV I.V.[1,2], LYASHENKO A.V.[1], TOPOROVSKY V.V.[1], KOLESNIKOV O.V.[1]
[1]Moscow Technical University of Communications and Informatics
[2]Moscow Polytechnic University
Methods for manual flat polishing of multimode ferrules and mitigation of apex offset in optical connectors

217. POPOV I.A.[1,2], ARTEMOV D.E.[2], KONDAKOV A.A.[2], TRESHIKOV V.N.[2]
[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[2]T8 Ltd, Moscow
Investigation of the temperature dependence of the parameters of high-quality micro-ring resonators on photonic integrated circuits

218. ZHOROV P.V., PETROV V.A., ZIMIN S.I.
Moscow Technical University of Communications and Informatics
Analytical assessment of the application of Li-Fi in hybrid corporate infrastructures

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219. PANTSIALEYEVA Ye.P., MELNIKOVA E.A., GORBACH D.V., TOLSTIK A.L., SLUSSARENKO S.S.[1], KARABCHEVSKY A.[2]
Belarusian State University, Minsk
[1]Griffith University, Brisbane, Australia
[2]Ben-Gurion University of the Negev, Beer-Sheva, Israel
Fresnel liquid crystal zone plate for determining optical vortex phase topology

220. STEPANOV I.G., CHERNYKH A.V., REZTSOV T.V., ORLOVA T.N.[1], PETROV N.V.
ITMO University, Saint-Petersburg
[1]Yerevan State University, Armenia
Study of chromatic properties of topological structures in chiral nematic liquid crystals

221. RAKHIMOVA U.J.[1], YOROV M.N.[1], MAKHSUDOV B.I.[2], EGAMOV M.Kh.[1,3]
[1]Khujand Scientific Center of the Academy of Sciences of the Republic of Tajikistan
[2]Tajik National University, Dushanbe, Republic of Tajikistan
[3]Mining and Metallurgical Institute in Tajikistan, Buston
Concentration dependence of surfactants in liquid-crystalline films with polymer dispersion

222. PROSKURYAKOV D.A., CHUBAROV D.M., ALTUHOV Yu.A., RASTRYGIN D.S., DOLGIREV V.O., SHARANGOVICH S.N.
Tomsk State University of Control Systems and Radioelectronics
Investigation of the holographic formation process of chirped two-layer PDLC diffraction structures

223. MARINICHEVA K.A., IVANOVA A.I., IVANOV A.M., KAPLUNOV I.A.
Tver State University
Effect of electron irradiation on optical properties of silicon and germanium crystals

224. ZLOBIN A.O., FAL'KOV D.Ya., KALIMULLIN E.R., BURIMOV N.I., SHANDAROV S.M., SHMIDT A.A., YUDIN N.N.[1,2], PODZYVALOV S.N.[1], BRYUSHININ M.A.[3], SOKOLOV I.A.[3]
Tomsk State University of Control Systems and Radioelectronics
[1]National Research Tomsk State University
[2]V.E. Zuev Institute of Atmospheric Optics, SB RAS, Tomsk
[3]Ioffe Physical-Technical Institute of the RAS, Saint-Petersburg
Temperature dependence of dark conductivity of $ZnGeP_2$ crystal

225. TOKKO O.V.[1], ZAZULYA E.V.[1], KADETOVA A.V.[1,2], PALATNIKOV M.N.[2], TITOV R.A.[2]
[1]Petrozavodsk State University
[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
Study of structural features of $LiNbO_3$:Zn:B crystals

226. SHANDAROV S.M., KISTENEVA M.G., AKRESTINA A.V., KOLMAKOV A.A., ANISIMOV R.I., KOMOV E.V.
Tomsk State University of Control Systems and Radioelectronics
Approximation of optical absorption spectra in $LiNbO_3$:Cu crystals

227. KOSTRITSKII S.M., FEDOROV V.A., SEVOSTYANOV O.G.[1], CHIRKOVA I.M.[1]
RPC Optolink Ltd, Zelenograd
[1]Kemerovo State University
Study of channel proton-exchanged waveguides in $LiNbO_3$ crystals

228. AKRESTINA A.V., KISTENEVA M.G., KOMOV E.V., APASEVA A.E., BUDUEVA Ch.B., SALCHAK A.H., MICHEL M.
Tomsk State University of Control Systems and Radioelectronics
Relationship between optical absorption spectra and Cu^+ and Cu^{2+} ions concentration in diffusion-doped lithium niobate crystals

229. SMIRNOV M.V.[1], SIDOROV N.V.[1], PALATNIKOV M.N.[1], KADETOVA A.V.[1,2], TOKKO O.V[2], PALATNIKOVA O.V.[1], PYATYSHEV A.Yu.[3]
[1]I.V. Tananaev Institute of Chemistry and Technology of Rare Elements and Mineral Raw Materials of Kola Science Center of the RAS, Apatity, Murmansk region
[2]Petrozavodsk State University
[3]Lebedev Physical Institute of the RAS, Moscow
Structure, defects, luminescent properties and growth features of Er-doped lithium niobate single crystals

230. UMAROV M.F., KAYUMZODA A.K.[1]
Vologda State University
[1]Khujand State University named after Academician B. Gafurov, Tajikistan
Soft fashion in piezoelectric crystal $Pr_3 Sb_5 O_{12}$

231. DUDKA A.P., GOLOVINA T.G., KONSTANTINOVA A.F., BUTASHIN A.V., KASIMOVA V.M.[1], KOZLOVA N.S.[1], ZABELINA E.V.[1]
Shubnikov Institute of Crystallography of NRC «Kurchatov Institute», Moscow
[1]National University of Science and Technology «MISIS», Moscow
Temperature dependence of structure and optical properties of the langasite family crystals $(La_{1-x}Nd_x)_3Ta_{0.5}Ga_{5.5}O_{14}$

232. UMAROV M.F., MAKHMUDZODA A.M.[1]
Vologda State University
[1]Khujand State University named after Academician B. Gafurov, Tajikistan
Superluminescence in pharmaceutical preparations

233. DAVYDOUSKAYA V.V., NAUNYKA V.N., BLOTSKAYA D.S., FEDOROVA A.V., ZAVALEI S.N.
Mozyr State Pedagogical University named after I.P. Shamyakin, Belarus
Conditions for observing effective energy exchange between in-phase two-dimensional light beams in a photorefractive crystal of 4 mm symmetry class

234. BUCHINSKAYA I.I., KARIMOV D.N., SOROKIN N.I.
Shubnikov Institute of Crystallography of NRC «Kurchatov Institute», Moscow
Congruently melting multicomponent single crystals of fluoride solid solutions with fluorite structure as optical media

235. USTINOV K.A., DONSKIH V.K.[1], BOBYLEVA E.A.[1]
Lomonosov Moscow State University
[1]Peoples' Friendship University of Russia (RUDN University), Moscow
Study of the influence of surface defects on the characteristics of optical planar waveguides based on silicon nitride

236. KOCHERGINA O.V., ZENEVICH A.O.., MUKHUROV N.I.[1]
Belarusian Academy of Communications, Minsk
[1]State Scientific and Production Association of Optics, Optoelectronics and Laser Technology of the National Academy of Sciences of Belarus, Minsk
Choice of a phosphor for visualizers

237. DYADENKO M.V.
Belarusian State Technological University, Minsk
Borosilicate glass for fiber optics

238. NIFONTOVA E.V. [1,2], SHEVTSOVA A.D.[1,2], VAKHRUSHEV A.S.[1], SHARONOVA Yu.O.[1], PERMINOV A.V.[2], AZANOVA I.S.[1,2]
[1]Perm Scientific-Industrial Instrument Making Company
[2]Perm National Research Polytechnic University
Radiation-resistance active optical fibers that polarization-maintaining: a brief overview

239. BRAZHNIKOV M.K.[1,2], PAVLOV V.I.[1], KHATYREV N.P.[1]
[1]All-Russian Scientific Research Institute of Physical-Technical and Radiotechnical Measurements, Mendeleevo, Moscow region
[2]Moscow State University of Geodesy and Cartography «MIIGAiK»
Methods for fabricating U-bent optical fiber sensors

240. CHUVYZGALOV A.A.[1,3], SADILOV V.S.[2], MAKSIMENKO V.A.[1], LIVASHVILI A.I.[4], KRISHTOP V.V.[1,2,3]
[1]Perm National Research Polytechnic University
[2]Perm National Research State University
[3]Perm Scientific-Industrial Instrument Making Company
[4]Far Eastern State Transport University, Khabarovsk
Fiber-optic miniature magnetometer based on a ring resonator

241. PAVLOV V.I.[1], BRAZHNIKOV M.K.[1,2], KHATYREV N.P.[1]
[1]All-Russian Scientific Research Institute of Physical-Technical and Radiotechnical Measurements, Mendeleevo, Moscow region
[2]Moscow State University of Geodesy and Cartography «MIIGAiK»
Modeling of a sensor based on a U-shaped fiber with a spectral barcoding function

242. BUSHUEV I.Yu., BOGACHKOV I.V.
Omsk State Technical University
Analysis of the efficiency of using a Brillouin reflectometer for monitoring of optic fiber

243. SOVETOVA A.R.[1,2], KRISHTOP V.V.[1,2,3], PERMINOV A.V.[1]
[1]Perm National Research Polytechnic University
[2]Perm Scientific-Industrial Instrument Making Company
[3]Perm National Research State University
Integrated optical amplitude modulator with digital control for polling an optical data converter

244. VEKSHIN M.M., CULISH O.A.
Kuban State University, Krasnodar
Integrated-optic ring-core waveguides in glass

245. BUSHUEV I.Yu., BOGACHKOV I.V.
Omsk State Technical University
Brillouin reflectometry: application in diagnostics of fiber-optic communication lines

246. SHKURSKAYA Yu.A., POLYAKOV A.V.
Belarusian State University, Minsk
Quasi-distributed fiber-optic temperature sensor based on metallized Bragg gratings

247. BADEEV V.A., SEREBRYAKOV A.D., MURASHKINA T.I.
Penza State University
Two-channel conversion of optical signals in attenuator-reflective fiber-optic pressure microsensors

248. BATRAKOV M.E.[1,2], SHIPITSYN A.V.[2,3], LASKAVYI N.S.[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
Investigation of semiconductor optical amplifier

249. KURILKINA A.N., POLYAKOV A.V.
Belarusian State University, Minsk
Noise immunity of fiber-optic quantum cryptography systems

250. VEKSHIN M.M., POLUTOVA O.E.
Kuban State University, Krasnodar
Wide-band integrated-optic Mach–Zehnder 2 × 2 interferometer modeling

251. BRAZHNIKOV M.K.[1,2]
[1]Moscow State University of Geodesy and Cartography «MIIGAiK»
[2]All-Russian Scientific Research Institute of Physical-Technical and Radiotechnical Measurements, Mendeleevo, Moscow region
Problems and prospects of designing dual-band IR systems for the range of 3 - 12 microns

252. DENISOV D.G.
Bauman Moscow State Technical University
The identification method of purity defects of polished surfaces optical details based on diagnostics of diffracted laser emissions

253. SEMENOV A.P.[1], RUDNEV O.E.[1], KUDRYAVCEV A.V.[1,2]
[1]Lytkarino Optical Glass Factory, Moscow region
[2]Moscow State University of Technology (Stankin)
Manufacture of the main mirror of an IR lens from pressure-free sintered silicon carbide

254. SOLOPOV G.V., PROSOVSKIY Yu.O., PROSOVSKIY O.F., ISAMOV A.N., SMOL'YANINOV V.A.
Obninsk Research and Production Enterprise Technologiya, Kaluga Region
Comparative analysis of optical coatings after operative repair of the target magnetron in laboratory conditions

255. DENISOV D.G., MASHOSHIN D.A.
Bauman Moscow State Technical University
Research of the quality of optical surfaces of parts based on diagnostics of laser radiation scattering taking into account the polarization state

256. VILCHINSKIY D.P.[1], MUKHIN Yu.V.[1,2], KUNDIKOVA N.D.[1,2]
[1]South Ural State University, Chelyabinsk
[2]Institute of Electrophysics, UB RAN, Yekaterinburg
Optical polarization method of determining parameters of thin anisotropic films

257. RYKOV I.E.[1], MAYTAMA M.V.[1], BELOV D.A.[1,2], IKONNIKOV A.V.[1,2], KHABIBULLIN R.A.[1]
[1]Moscow Institute of Physics and Technology (State University), Dolgoprudny
[2]Lomonosov Moscow State University
Measurement of beam divergence angles of terahertz quantum cascade lasers with double-metal waveguides based on the method of second order moments

258. IAKOVLENKO M.M.[1,2], OBRONOV I.V.[2], EVTIKHIEV N.N.[1]
[1]National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)
[2]LLC «VPG Lazerone», Fryazino
Numerical modeling of Yb:YAG waveguide amplifier pumped at 1007 nm

259. STEPANOV M.A.[1], MITETELO N.V.[1], LAVROV S.D.[1], PYATAKOV A.P.[1,2]
[1]MIREA – Russian Technological University, Moscow
[2]Lomonosov Moscow State University
Investigation of local magnetoelectric interaction in the region of magnetic domain walls by nonlinear-optical microscopy

260. SMIRNOV V.V.[1,2], POGOZHEVA A.B.[1], ALYKOVA O.M.[1]
[1]V.N. Tatishchev Astrakhan State University
[2]The Caspian Institute of Marine and River Transport named after Admiral F.M. Apraksin – branch of the FSBEI HE «VGUVT», Astrakhan
Installation for studying the laser communication channel

261. SUSHKO A.S., DENISOV D.G.
Bauman Moscow State Technical University
Mathematical description of the detection of molecular contamination on the surface of a coated silicon wafer

262. PAVLOV V.I., KURCHANOV A.F., KHATYREV N.P.
All-Russian Scientific Research Institute of Physical-Technical and Radiotechnical Measurements, Mendeleevo, Moscow region
Influence of magnetic field gradient on coherent population trapping resonance parameters in cesium atomic cell

263. POLETAEV D.A., SOKOLENKO B.V., BUGASOV I.A.
V.I. Vernadsky Crimean Federal University, Simferopol
The concept of a thin-film quantum computer

264. LIUI, P.Ts., DENISOV D.G., KUDRIASHOV A.V.[1]
Bauman Moscow State Technical University
[1]Sadovsky Institute of Geospheres Dynamics of the RAS, Moscow
The investigation of the operation features of the aperture probe method in laboratory conditions

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265. LETOVA E.Yu., IVANOVA T.V., ZAVGORODNIJ D.S.[1]
ITMO University, Saint-Petersburg
[1]JSC LOMO, Saint-Petersburg
Point test object finite size correction using the inverse filtering method for the encircled energy function calculation in fabrication testing of optical systems

266. CHETVERIN R.S., SHARIPOVA M.I., FEDYANIN A.A.
Lomonosov Moscow State University
Measurement of the refractive index of photoresin used in two-photon laser lithography for manufacturing microsized optical elements

267. BALAN N.N.[1,2], VASIN A.A.[1,2], IVANOV V.V.[1], SOKOLOVA E.V.[1], PANKRATOV A.L.[1]
[1]Molecular Electronics Research Institute, Zelenograd
[2]Moscow Institute of Physics and Technology (State University), Dolgoprudny
The estimation of mask cd mtt, range and linearity for projection lithography near the linear resolution limit

268. KALUGIN P.O.
National Research University «Moscow Power Engineering Institute»
Comparison of methods for modeling optical systems in classical diffraction theory

269. KOROBKOVA A.V., MAKARENKOVA N.A.
Moscow Aviation Institute (National Research University)
Strain monitoring based on bragg gratings

270. SOKOLENKO B.V., LYAKHOVICH N.V., POLETAEV D.A., EGOROV Yu.A.
V.I. Vernadsky Crimean Federal University, Simferopol
Diffraction evolution of singular beams on phase inhomogeneities of reflecting surfaces

271. KUDRYAVCEV A.V.[1,2], TELESHEVSKI V.I.[1]
[1]Lytkarino Optical Glass Factory, Moscow region
[2]Moscow State University of Technology (Stankin)
Modeling of rough surfaces by spectral synthesis method

272. VANIN A.I.[1], PUCHKOV N.I.[1], SOLOVYEV V.G.[1,2], YANIKOV M.V.[1]
[1]Pskov State University
[2]S.M. Budyonny Military Academy of the Signal Corps, Saint-Petersburg
Processing and analysis of optical spectra of opal films

273. GAVRUSHKO V.V., ZAHAROV M.A., KADRIEV O.R., LASTKIN V.A.[1], PETROV A.V.[1]
Yaroslav-the-Wise Novgorod State University
[1]JSK «Planeta-OKB», Veliky Novgorod
Spectral characteristics of silicon phototransistors: peculiarities

274. VOLCOV V.G., GINDIN P.D., KARPOV V.V., KUZNETSOV S.A.
JSC «Moscow Plant «SAPHIR»
Spectral characteristics of silicon phototransistors: peculiarities

275. GALAKTIONOV I.V.[1,2], SHARAFISLAMOV A.A.[1], KOLESNIKOV O.V.[1]
[1]Moscow Technical University of Communications and Informatics
[2]Moscow Polytechnic University
Investigation of the influence of lens system aberrations on the efficiency of light beam focusing

276. VOLCOV V.G., GINDIN P.D., KARPOV V.V., KUZNETSOV S.A.
JSC «Moscow Plant «SAPHIR»
Modular lighting and targeting device

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