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The conference is organised by Institute of Electronics and Telecommunications of Peter the Great St.Petersburg Polytechnic University, Saint Petersburg, Russia

PROGRAM OF THE 2025 IEEE INTERNATIONAL CONFERENCE ON ELECTRICAL ENGINEERING AND PHOTONICS



October 16-17, 2025
Saint Petersburg, Russia

EExPolytech



October 16, 2025

9:45	Opening <i>Alexander Korotkov</i> Join in Zoom: (links to Zoom session are sent to the participants via email)
Session	Plenary lectures Join in Zoom: (links to Zoom session are sent to the participants via email)
Chairs	<i>Dmitry Tkachenko, Viktoria Kapralova, Platon Karasev, Nikolai Ushakov</i>
10:00	Xiangjun Liang, Changyong Pan , Qingjun Zeng 5G NR MBS Mobility Reception Performance Trials
10:25	Mehdi Fardmanesh Degenerium, a new approach to protected symmetrical superconducting qubit
10:50	P. Prem Kiran Pulsed laser ablative plasmas and shockwaves: imaging and applications
11:15	Sergey Alyatkin Realization and control of exciton-polariton system in periodic and aperiodic optically induced potentials
11:40	Anatoliy Pankov , Roman Ponomarev The use of optical fibers with ultra-high numerical aperture in the manufacture of modules for coupling and introducing radiation into photonics integrated circuit chips
12:05	Coffee break

October 16, 2025

Session	Algorithms & Signal Processing Room 347, 2 nd building SPbPU Join in Zoom: (links to Zoom session are sent to the participants via email)
Chairs	<i>Dmitry Tkachenko, Anna Orlova, Changyong Pan, Khuc Thanh Bang</i>
12:15	Aharon Aharonyan, Anahit Nersisyan, Hrachya Stepanyan, Ruben Davtyan, Sergey Volvenko, Vahan Avetisyan Omnidirectional Waveguide Slot Antennas on E01 Mode
12:30	Dmitry Tkachenko Perspective Systems for Mobile Broadcasting
12:45	Dmitry Tkachenko Possible Outlines of 5G Broadcasting Pilot Area
13:00	Lu Tong, Ke Mao, Haidong Fang , Siyuan Li, Hailong Wen, Changyong Pan Single Station Large-scale Coverage Scheme and Field Testing of DTMB-A at Islamabad
13:15	Jiacheng Wang , Ziyang Ji, Binbin Zhu, Jun Wang, Xun Zhang, Jian Song Physics Model Based Novel LED Pre-Compensation Method for Next-Generation OWC Systems
13:30	Shuo Li , Jiacheng Wang, Chengye Li, Chao Zhang, Jun Wang, Jian Song A Digital-Domain Nonlinear Calibration Algorithm for Ultra-Wideband Track-and-Hold Amplifier

13:45	Xiaohan Zhou, Kewu Peng, Dmitry A. Tkachenko, Eugene A. Popov, Sergey B. Makarov, Jian Song The Approximate Universality of LTE-Turbo, NR-LDPC, and SC-LDPC Codes
14:00	Yalong Guo, Jingbo Tan, Rui Zeng, Sufang Yang, Jintao Wang, Changyong Pan CAST-E2E: Enhancing Robustness of Pilot-Free E2E Systems with Channel-Aware Encoding and Feature Shuffling
14:15	Mane Harutyunyan, Eduard Sivolenko, Sergey Makarov, Naira Gasparyan, Hayk Martirosyan Bispectrum-Based RX Using Waterfall Features for Transmitter Identification
14:30	Eduard Sivolenko Autocorrelation-Driven TX/RX Synchronization and Fingerprinting of Unknown Transmitters Using Zadoff-Chu Sequences
14:45	Eduard Sivolenko, Sergey Makarov, Aram Antonyan, Hayk Martirosyan, Naira Gasparyan Development of a Distributed 24 GHz FMCW Radar Architecture for Human Presence and Movement Detection
15:00	Aharon Aharonyan, Tigran Manukyan, Harutyun Hambardzumyan, Hrachya Stepanyan, Gagik Sughyan, Suren Eyramjyan, Billi Minasyan Optimized Parameter Configuration for Multi-Channel Direction-Finding in the 1–6 GHz Band
15:15	Naira Gasparyan Bispectral Analysis as a Diagnostic Tool for Nonlinearities in RF Signal Transmission Using a Modular USRP-LabVIEW Framework

15:30	Babken Hovhannisyan, Eduard Sivolenko, Anna Vardanyan, Alex Mkoyan, Vanand Mkhoyan, Rashich Andrey Detection of Phase Coupling in Radio Frequency Signals Using Bispectral Analysis
15:45	Babken Hovhannisyan, Vanand Mkhoyan, Eduard Sivolenko, Anna Vardanyan, Alex Mkoyan, Andrey Rashich Experimental Verification of Brain-Origin Radio-Frequency Emissions in an RF-Isolated Environment
16:00	Quynh Nguyen, Thanh Dao Minh Stealthy Attack Analysis and Design on Network Control System
16:15	Coffee break
16:30	Anton Korzhov, Vladimir Surin, Petr Lonzinger, Valery Safonov, Yaroslav Bushmelev, Kirill Belov Algorithm for detecting, recognizing the type and parameters of defects in glass parts of high-voltage insulators
16:45	Aleksey Gvozdev, Tatiana Artemova, Roman Manakhov, Andrey Veselkov Numerical Analysis of the Probability of V2V Link in C-V2X System under Lomax Fading
17:00	Aleksey Gvozdev, Tatiana Artemova, Oksana Antipaeva, Ivan Panov Hyper-Rayleigh Analysis of the Modified Fluctuating Nakagami-m Fading Model
17:15	Artem Chilingarov, Aleksandr Gelgor Power Allocation with Limited Feedback for Underwater Acoustic OFDM Communication Systems

17:30	Hoang Van Dung, Pham Xuan Nghia, Nguyen Thi Hong Nhung, Khuc Thanh Bang, Gelgor Aleksandr Performance Evaluation of GBI-Based Interleavers for Serially Block Concatenated Codes
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October 16, 2025

Session	Materials & Nanoscience Room 458, 2 nd building SPbPU Join in Zoom: (links to Zoom session are sent to the participants via email)
Chairs	<i>Mehdi Fardmanesh, Viktoria Kapralova, Platon Karaseov</i>
12:30	Disha Yadav , R. Sai Prasad Goud, S.V.S Nageswara Rao, Amit Dwivedi, Devesh Avasthi Synthesizing Ta-doped Titanium Oxide Thin Films utilizing DC/RF Magnetron Co-sputtering Technique for Resistive Switching Application
12:45	Igor Testov, Elizaveta Gavrishko , Andrey Korlyakov, Oleg Testov, Ivan Khmelnskiy Stand and method for conducting electromagnetic studies at elevated temperatures
13:00	Alexander Arkhipov , Van Tu Anh Nguyen, Felix Zaseev, Pavel Gabdullin Study of Thermoelectric Effect in Nanocontacts with the Use of an Atomic Force Microscope
13:15	Viktoria Kapralova , Liubov Starkova, Nikolay Sudar Composite Film Materials based on Polyvinyl Alcohol and Polyaniline
13:30	Nguyen Van Tu Anh , Svetlana Smirnova, Dmitrii Savin, Sun Haichao, Bui Cong Doan, Alexandr Arkhipov, Pavel Gabdullin Magnetron-Sputtered Ni and ZrTiNiSn Thin Films on Si-Substrate: Thickness Influence on Structural Property and Electrical Conductivity

13:45	Stepan Parfenovich, Sviatoslav Studenovskii, Ivan Khmelnitskiy, Alexey Anisimov, Oleg Bokhov Biocompatible Eco-Friendly Conductive Ink for Printed Electronics and Implantable Sensors
14:00	Abdurakhman Aleroev, Tatiana Kaminskaya, Nikolay Pankratov, Irina Tereshina, Alexey Karpenkov, Alexey Filimonov Magnetostriction in Tb-Dy-Gd-Co Rapidly-Quenched Alloy with Laves Phase Structure
14:15	Viktor Markov, Denis Olkhovskii, Vladislav Chernyavsky, Pavel Vishnyakov, Ksenia Kiseleva, Maxim Maximov Crystallization time control by in-situ impedance spectroscopy for solid electrolyte system LAGP doped with Te
14:30	Coffee break
14:45	Anastasia Kondrateva, Ilya Lazdin, Yakov Enns, Alexey Kazakin, Denis Strizhkin, Kirill Karasev, Ivan Komarevtsev, Maxim Mishin, Platon Karaseov Smart Nose System Based on Single MEMS NiO Gas Sensor
15:00	Kirill Karasev, Denis Strizhkin, Platon Karaseov Brief guide into surface composition analysis methods in MD simulations
15:15	Dmitry Dolzhenko, Egor Letkiman Photoelectric properties of Si(p)/C60/Au structures in an external electric field
15:30	Alexandra Sitnikova, Ekaterina Gasilova, Natalia Saprykina Colloidal Carbon Spheres Derived From Dilute Solutions of Polysaccharides

15:45	Svetlana Smirnova, Rostislav Smerdov , Sergey Davydov Features of the energy analyzer application for studying the Fermi quasi-levels of the prototype low-voltage field-emission cathode
16:00	Dmitry Sannikov , Victor Zaytsev, Ivars Rozhleys Multi-Electrode Emitters Based on Carbon Nanotubes
16:15	Evgeny Taradaev, Sergei Taradaev , Gennadii Sominskii, Mikhail Givargizov, Anna Rukavitsyna, Anastasia Egorova Current Characteristics of a Multi-Tip Cathode for Ribbon Electron Beam Formation
16:30	Maria Kniazeva , Natalia Zhukova, Alexander Vakulenko Effect of mechanical stress on fatigue characteristics of lead zirconate titanate-based thin films
16:45	Aleksandr Astafiev , Aleksandr Altmark, Nikita Lesiv Pulse-synchronized Complex for Microwave Diagnostics of Low-Temperature Atmospheric Plasma Jets
17:00	Anastasia Shirobokova , Tatyana Sedegova, Victor Klinkov, Zakhar Patrakov, Valentina Andreeva, Alexander Semench Luminescent properties and phase composition of Y ₂ .9Al ₅ O ₁₂ :Ce _{0.1} synthesized by wet chemistry methods

Session	Circuits & Systems for Telecommunications Room 347, 2nd building SPbPU Join in Zoom: (links to Zoom session are sent to the participants via email)
Chairs	Alexander Korotkov, Nikita Ivanov
10:00	Sente Ai , Yichen Liu, Yingguang Zhu, Haijun Yang, Hui Yang, Changyong Pan Research on the Application of Wireless Charging Technology in Wearable Therapeutic Devices
10:15	Chengye Li , Jiacheng Wang, Lulu Guo, Shuo Li, Jun Wang, Jian Song A High-Linearity, Wide-Bandwidth Track-and-Hold Amplifier in SiGe BiCMOS Technology
10:30	Ziyang Ji , Jiacheng Wang, Binbin Zhu, Rui Chen, Chijie Zhuang, Jian Song Physics-Based Compact Modeling of Quasi-Saturation Effect in SJMOS
10:45	Pham Thiem , Khanh Tran Huy, Thanh Dao Minh Induced Attack Analysis and Design on Network Control System with Prescribed Trajectory
11:00	Thuan Le, Nam Dinh , Dac Cu Nguyen FPGA Implementation of High-Throughput Pipelined Decoders for Reed–Solomon Codes
11:15	Aharon Aharonyan , Tigran Manukyan, Harutyun Hambardzumyan, Hrachya Stepanyan, Gagik Sughyan, Suren Eyramjyan, Billi Minasyan Design of an FPGA-Based Wideband Frequency-Tunable Generator for RF Jammer Systems

11:30	Nurzhigit Smailov, Zhiger Zhanatayuly, Dmitry Kiese Wetter, Syrym Koblanov, Ainur Kuttybayeva, Zhandos Dosbayev Enhancing the sensitivity of fiber-optic sensors for deformation measurements in structural reliability assessment
11:45	Marsel Sergeenko, Vladislav Chumakov, Nikolay Prokopenko, Dmitriy Kleimenkin Gallium arsenide operational amplifier with two high-impedance nodes for high-temperature applications
12:00	Coffee break
12:15	Evgeniy Ischenko, Evgeniya Egorova, Anton Chernishev, Alexandr Ostankov Comparison of Designs of Cylindrical Antenna Elements for the Implementation of Cantennas
12:30	Evgeniy Ischenko, Evgeniya Egorova, Sergey Fedorov, Aleksey Bashkirov Evaluation of the Bearing Determination Stability of a Wideband Direction Finder Based on SDR
12:45	Mikhail Romashchenko, Roman Sukhomlinov, Dmitry Vasilchenko, Dmitry Pukhov, Evgeniy Ishchenko, Nataliia Samoilenko Influence of 3D-Printing Materials on the Electrodynamic Parameters of Antennas
13:00	Mikhail Romashchenko, Andrej Gudkov, Oleg Makarov, Marina Horoshaylova, Igor Bobylkin, Natalya Tsipina An Approach to Modeling Conducted Emissions in Flyback AC–DC Converters

13:15	Ha Nam Nguyen, Aleksander Sochava, Sergey Bogachev, Konstantin Greshnevikov, Andrey Cherepanov Analysis and experimental validation of an L-shaped slot in a T-junction of rectangular waveguides using equivalent circuit modeling
13:30	Alexander Nikitin, Alexander Stroganov, Ekaterina Khabitueva, Pavel Zhukov Design of a Filter Bank for Decimeter–Centimeter Bands
13:45	Alexander Nikitin, Alexander Stroganov, Ekaterina Khabitueva, Pavel Zhukov Multiline Marchand Baluns Design using GaAs pHEMT Technology
14:00	Andrei Bocharov, Sergey Ermak Contactless interlayer transitions with the possibility of integrating resonant structures in volumetric microwave circuits
14:15	Pham Huu Duc, Vladimir Sorotsky, Roman Zudov, Nikita Treimut, Aleksey Pergushev The Impact of the Capacitance-Voltage Dependence on the Performance of Switched-Mode Power Amplifiers
14:30	Coffee break
14:45	Alexander Gubin, Evgenii Balashov Design and Comparison of Matching Networks for 2.4-2.5 GHz Power Amplifier
15:00	Andrey Davydov, Nikolay Kulikov, Vladimir Sorotsky Evaluation of parasitic parameters effect on losses in antenna matching devices

15:15	Danil Skrebenkov , Dmitry Budanov Methods for Reducing Power Consumption in Hardware Implemented Neural Networks
15:30	Alexander Usanov , Evgeniy Balashov A wideband low phase noise amplifier on GaAs technology
15:45	Daniil Shaposhnikov , Dmitry Budanov Linux SPI Device Driver for a Smart Temperature and Pressure Sensor
16:00	Artem Pyatlin , Dmitry Morozov Pseudo Resistors in 180 nm CMOS Technology
16:15	Kirill Mironov , Dmitry Morozov Self-Biased Nagata Current Source Using 180 nm CMOS Process
16:30	Vitaly Bystrov , Dmitry Morozov The use of a voltage-to-current converter in the construction of an ADC based on VCO
16:45	Natalya Kvashina , Mikhail Yenuchenko Systematic Error Compensation by Switching-Based Calibration of DAC with Elements Redundancy
17:00	Alexander Korotkov, Alexander Kavruk The Method of Rational Interpolation in the Problem of Synthesizing a Prototype of a Frequency-Selective Circuit with a Fractional Order Transfer Function

Session	Photonics Room 257, 2 nd building SPbPU Join in Zoom: (links to Zoom session are sent to the participants via email)
Chairs	<i>Nikolai Ushakov</i>
10:00	Nurzhigit Smailov, Yerlan Tashtay, Akezhan Sabibolda , Ainur Kuttybayeva, Moldir Baigulbayeva, Yerzhan Nussupov Performance Analysis of Fiber-Optic Gyroscopes under Vibration and Temperature Effects
10:15	Yasmeen Ismail , Nikolai Ushakov Theoretical Realization of a Coherent Ising Machine: Splitting Complex Optimization Problems into SubProblems for Enhanced Solving
10:30	Danila Karaulov , Ilya Norvatov, Ratmir Ustimenko, Maksim Vinnichenko, Grigorii Melentev, David Hayrapetyan, Evgeniy Volinsky, Alexey Adler, Dmitry Firsov Electric Field Induced Polarization Anisotropy of Terahertz Absorption in n-InSb
10:45	Anna Khokhlova , Aigul Gilmutdinova, Valeria Ribenek, Yury Saenko, Dmitrii Stoliarov, Dmitriy Korobko, Sergei Sokolovski, Edik Rafailov, Andrei Fotiadi Bystander-Like Effect Triggered by 1265 nm Continuous- Wave Laser Radiation in Normal and Cancer Cell Cultures

11:00	Liubov Zavalishina, Aleksandr Markvart, Olesia Bobyleva, Angelina Grazhdian, Vladimir Filonov, Nikolai Ushakov Speckle Patterns in Real Fiber Optic Axisymmetric Cascade Structures
11:15	Nikita Sedov, Aleksandr Markvart, Leonid Liokumovich, Nikolai Ushakov Algorithmic Errors in Determining the Cavity Length of an External Fiber-Optic Fabry-Pérot Interferometer Using the Discrete Fourier Transform
11:30	Andrew Golovchenko, Aleksandr Petrov, Arseniy Archelkov, Valentina Temkina, Oleg Kotov Effects of Thermal Exposure on Fiber-Optic Polarization Interferometer Performance
11:45	Donghui She, Mingyang Wang, Hongming Zhang, Jian Song A 500 m 1 Mbps Line-of-Sight Ultraviolet Communication System Based on a LED Array
12:00	Coffee break

Session	Posters View posters: https://miro.com/app/board/uXjVJ7cgokQ=/?share_link_id=642444049891 Join in Zoom: (links to Zoom session are sent to the participants via email)
Chairs	<i>Mikhail Pilipko, Sergey Zavjalov, Viktoria Kapralova, Platon Karaseov, Vera Loboda, Nikolay Ushakov</i>
12:30	Circuits & Systems for Telecommunications
P1-01	Alexey Sosunov , Andrey Altynnikov, Roman Platonov, Andrey Komlev Reflector Based on Ferroelectric Material for the Formation of Millimeter Waves with Electrically Tunable Orbital Angular Momentum
P1-02	Jizheng Sun , Chao Zhang, Kewu Peng, Jian Song A Novel 6G Broadcasting System Based on MU-MIMO and Layer Division Multiplexing
P1-03	Maksim Baranov , Faridoddin Shariaty, Ekaterina Medvedeva, Andrey Musorin, Arseniy Alekseev, Mikhail Popov, Oleg Tsybun A Research Toolkit for Biomolecular Components in Post-CMOS Electronics

	Algorithms & Signal Processing
P2-01	Jiangsu Du , Chao Zhang SIMO TDS-OFDM Integrated Sensing and Communication: Modeling and Performance Evaluation
P2-02	Jinyu Wang , Haoning Jiang, Jiachen Wang, Rui Chen, Chijie Zhuang, Jian Song SPECTRUM: Synergistic Precision Extraction and Chart Transformation Tool for Robust Unified Power Semiconductor (IGBT) Datasheet
P2-03	Feng Wu, Hui Yang, Kaifeng Wang, Changyong Pan Simulation of a magnetic induction communication system for tunnel collapse scenarios
P2-04	Ekaterina Medvedeva , Elena Savchenko Comparative Analysis of Classification Algorithms in the Task of Breast Cancer Diagnosis
P2-05	Nadezhda Krasnova , Alexander Berdnikov, Anton Bulyanitsa, Anatoly Evstrapov, Konstantin Solovyev Error Oriented Tau Method For Systems Of Linear Ordinary Differential Equations With Polynomial Coefficients
P2-06	Nadezhda Krasnova , Konstantin Solovyev, Alexander Berdnikov, Anton Bulyanitsa, Sergey Masyukevich, Igor Kurnin Euler Criterion For Discretely Homogeneous Functions Used As A Basis For The Principle Of Limited Similarity Of Trajectories
P2-07	Dmitry Kieseewetter , Sergey Krivosheev, Sergey Magazinov, Ivan Kuznetsov, Victor Malyugin The Specifics of Measuring the Amount of Deformation at Pulsed Mechanical Action on the Object

P2-08	Faridoddin Shariaty, Vitalii Pavlov Comparative Analysis of Multi-Modal Feature Fusion Strategies for Non-Invasive EGFR and KRAS Mutation Classification in NSCLC using Radiomics and Deep Learning
P2-09	Faridoddin Shariaty, Oleg Tsybin, Vitalii Pavlov, Maksim Baranov BioResNet-18: A Deep Learning Framework for Quantitative Analysis of Biomolecular Film Microstructures
P2-10	Alsu Nurtdinova, Elizaveta Budkina, Ekaterina Dolgacheva, Alexander Shatokhin, Nikolay Serov, Andrey Serov Application of the Compensation Method to Reduce the Effect of Amplitude Spectrum Leakage
P2-11	Sergey Podobuev, Viktor Kacahsky, Angelina Chirkova, Petr Makarychev, Nikolay Serov, Andrey Serov Assessment of ADC Instrumental Error Components Influence on Frequency Measurement Accuracy using Amplitude Spectrum Analysis
P2-12	Artem Mardiev, Vladimir Kuptsov Adaptive Operating Baseline Selection and Estimate Fusion in a TDOA Direction Finding System Based on Local Uncertainty Estimation
P2-13	Nikolay Alisultanov, Evgeny Popov GraphSAGE on Superpixel Graphs for Aerial Agricultural Anomaly Analysis
P2-14	Sergey Zavjalov, Anna Orlova, Ilya Lavrenyuk, Sergey Makarov, Alexandra Kuznetsova, Sergey Volvenko Beyond DVB-S2X: Optimal Signals for High-Throughput CubeSat Communications

P2-15	Sergey Melnikov , Sergey Makarov Reducing out-of-band emissions of continuous-phase modulation by employing long-duration phase pulses
P2-16	Pavel Bondarev , Andrey Rashich Low-Complexity FPGA Implementation of 1-D Median Filter with Single Clock Cycle Latency
P2-17	Vsevolod Tsap , Grigoriy Fokin LTE SDR-based Signal Analyzer with Panoramic Scanning Module Based on Machine Learning
P2-18	Sophia Belkova , Georgy Teterin, Ilya Lavrenyuk Software defined radio implementation of OCDM wireless system
P2-19	Vladimir Matveev , Ilya Lavrenyuk A Comparative Analysis of Adaptive Phase Noise Compensation Methods in LTE Uplink
Materials & Nanoscience	
P3-01	Anna Petrovskaya , Alexander Tsyganov The experimental study of carbon micro-nano-layer deposition on a metal substrate fabricated by the ion-plasma technology
P3-02	Alexander Malkin , Oleg Louksha, Bogdan Apaneovich Simulation of Dynamic Processes in Gyrotron Electron Beams with Reflection of Electrons from a Magnetic Mirror
P3-03	Dmitry Kieseewetter , Albert Khripunov, Alexandra Migunova Investigation of the Electrophysical Properties of Electrical Insulating Paper Made from Hogweed Sosnowski Cellulose Modified with Bacterial Cellulose

P3-04	Antonina Bobrovskaya, Aleksandr Butochnikov, Stepan Parfenovich, Ivan Khmelnitskiy, Maksim Palamarchuk, Nikita Sitkov, Oleg Testov Development of Hollow Microneedle Structures Using High-Resolution LCD 3D Printing
P3-05	Kuvondik Dovranov, Nurbek Tuychiyev, Muradulla Normuradov, Dilnavoz Normuminova, Ilkhom Bekpulatov, Isakjon Akbarov, Maksim Vinnichenko, Vera Loboda, Hikmat Turakulov Surface morphology of Ni/GaAs thin films produced by ion-plasma method
P3-06	Kuvondik Dovranov, Muradulla Normuradov, Ilkhom Bekpulatov, Muzaffar Davlatov, Khujamkul Davranov, Nodirabegim Kuziboyeva, Vera Loboda, Valentina Zhurikhina, Maksim Vinnichenko Electrophysical properties and surface characteristics of BaTiO₃ thin films produced by ion-plasma method
P3-07	Anastasia Funtikova, Alexey Mozharov, Vladimir Fedorov, Vladislav Sharov Numerical Study of Second Harmonic Generation in Spherical Mesoporous Si/SiO₂ Nanoparticles
P3-08	Sergey Afanas'ev, Sergey Moiseev, Dmitry Sannikov, Mikhail Saurov, Artem Sysa, Yury Shaman N-shaped Current-Voltage Characteristics of an Array of Disordered Carbon Nanotubes
P3-09	Dmitry Tonkov, Vitaliy Gasumyants, Nataliya Grozova, Ilya Kobychko, Oleg Tolochko Percolation Behavior of Carbon Nanotube–Based Polymer Composites

P3-10	Evgeny Apushkinskiy, Vadim Kozhevnikov Using a linear combination of powers of Laplace-transformed functions to approximate the (0+1)-dimensional inhomogeneous sine-Gordon equation
Photonics	
P4-01	Dmitry Korobko, Valeria Ribenek, Pavel Itrin, Maxim Pribylov, Aleksei Tregubov, Andrei Fotiadi Long-range interpulse attraction in soliton fiber laser
P4-02	Dmitry A. Korobko, Valeria A. Ribenek, Pavel A.Itrin, Galina V. Tertyshnikova, Andrei A. Fotiadi Typical spectral features of multi-soliton complexes in fiber laser
P4-03	Dmitry Korobko, Igor Yavtushenko, Aleksey Trigubov, Aleksei Abanin, Daniil Kachalkin, Andrei Fotiadi Two-Wave Mixing in a Bidirectional Rare-Earth-Doped Fiber Amplifier
P4-04	Aleksei Abramov, Dmitriy Korobko, Viktor Lapin, Andrei Fotiadi Generation of picosecond laser pulses with sub THz tunable frequency in modlock configuration with an active Bragg gratings
P4-05	Timur Maksutov, Sergey Ermak Modeling passive magnetic shielding in nuclear magnetic resonance gyroscopes
P4-06	Sergey Ermak, Roman Kuzmin, Olga Ermak, Eduard Sagitov Magnetometer without “dead zones” for receiving magnetic induction signals

P4-07	Anton Kvasnov Selection of an invariant measure for pattern recognition in the IR band under the influence of climatic factors
P4-08	Kalmukhamed Tazhen , Yerlan Tashtay, Nurzhigit Smailov, Akezhan Sabibolda, Aruzhan Nazarova, Aidana Bazarbay Integration of GNSS and Fiber-Optic Gyroscope: Improving Navigation Robustness under Satellite Signal Loss
P4-09	Dilkhumor Mamadieva, Nosirjon Yuldashev Low-Temperature High-Energy Photoluminescence in CdTe Films for Solar Cells
P4-10	Igor Glukhov , Sergey Moiseev Light Absorption by an Array of Graphene Particles
P4-11	Alexey Kadochkin , Sergey Moiseev, Evgeny Kitsyuk Numerical Modeling of Resonant Amplification of Slow Surface Plasmon Polaritons by Drift Current
P4-12	Sergei Ivanov, Alexander Lavrov Measurement of group delay and chromatic dispersion of single-mode optical fiber in microwave photonic transmission link using vector network analyzer
P4-13	Zoja Erovenko , Maksim Makarenko, Ulyana Makarenko, Aleksandr Markvart, Leonid Liokumovich, Nikolai Ushakov Common-Path Spectral-Domain OCT System with Multiplexed Probes and Modulation-Division Multiplexing

P4-14	Andrei Belov, Artemy Kozlov, Pavel Krinsky, Andrei Medvedev, Aleksandr Petrov, Sergey Rozov, Nikolai Ushakov Free Running Single Photon Detector
P4-15	Ekaterina Medvedeva, Anvar Beisembaev Cold Test Microcirculation Monitoring with a Miniature Optical Sensor
P4-16	Dmitry Kieseewetter, Alexandr Korotkov, Victor Malyugin, Leonid Sverdlik Experimental Setup for Studying the Scattering of Polychromatic Light by Optically Inhomogeneous Objects